RECEIVED
APR 13 2016
WR IR-4

IR-4
FIELD DATA BOOK

RECEIVED
NOV 01 2016
WR IR-4

TITLE: OXATHIAPIPROLIN MAGNITUDE OF THE RESIDUE ON STRAWBERRY

PR# 11719

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

Decline

SPONSOR

IR-4 Project Headquarters
500 College Road East, Suite 201 W
Princeton, NJ 08540
(732) 932-9575, FAX# (609) 514-2612

STUDY DIRECTOR
CAROLYN JOLLY
(732) 932-9575 x4612
jolly@aesop.rutgers.edu

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

Decline

Field ID No. _____

CHAIN OF CUSTODY FOR IR-4 FIELD DATA BOOK

FIELD RESEARCH DIRECTOR: DAVID ENNES

After receipt of this IR-4 Field Data Book, the Field Research Director shall start the chain of custody log by completing the first part. Once raw data entry has begun in the Field Data Book, the data books are to be in the custody of the Field Research Director (or personnel under the Field Research Director's supervision). When the Field Data Book is transferred to another individual (e.g. sending completed Field Data Book to IR-4 Regional Field Coordinator), the sender must note to whom and when the data book is sent. **The recipient must sign the next block and date the form upon receipt.**

Signature of Field Research Director: David Ennes Date: 4-18-16

Printed name: DAVID ENNES Initials: ok

Field Data Book sent/given to: Becky Sisco Date Sent: 10-27-16 ok 10-27-16

Signature of recipient: Jackie Hale for Rebecca Sisco Date Received: 11/1/16

Printed name of recipient: Jackie Hale for Rebecca Sisco Initials: JH

Field Data Book sent/given to: Debbie Carpenter Date Sent: 11/2/16

Signature of recipient: _____ Date Received: _____

Printed name of recipient: _____ Initials: _____

Field Data Book sent/given to: _____ Date Sent: _____

Signature of recipient: _____ Date Received: _____

Printed name of recipient: _____ Initials: _____

Field Data Book sent/given to: _____ Date Sent: _____

Signature of recipient: _____ Date Received: _____

Printed name of recipient: _____ Initials: _____

Field Data Book sent/given to: _____ Date Sent: _____

Field ID No.____________________

Additional Chain of Custody Signature Blocks: **DO NOT LINE OUT THIS PAGE!**

Signature of recipient: ____________________ Date Received: __________

Printed name of recipient: ____________________ Initials: __________

Field Data Book sent/given to: ____________________ Date Sent: __________

Signature of recipient: ____________________ Date Received: __________

Printed name of recipient: ____________________ Initials: __________

Field Data Book sent/given to: ____________________ Date Sent: __________

Signature of recipient: ____________________ Date Received: __________

Printed name of recipient: ____________________ Initials: __________

Field Data Book sent/given to: ____________________ Date Sent: __________

Signature of recipient: ____________________ Date Received: __________

Printed name of recipient: ____________________ Initials: __________

Field Data Book sent/given to: ____________________ Date Sent: __________

Signature of recipient: ____________________ Date Received: __________

Printed name of recipient: ____________________ Initials: __________

Field Data Book sent/given to: ____________________ Date Sent: __________

Signature of recipient: ____________________ Date Received: __________

Printed name of recipient: ____________________ Initials: __________

Field Data Book sent/given to: ____________________ Date Sent: __________

FIELD DATA BOOK REVISIONS FOR TRIAL YEAR 2016

Revisions have been made in response to suggestions made by Field Cooperators, Regional Field Coordinators, Quality Assurance professionals, Study Directors, and EPA Auditors. They are intended to prompt for additional information where needed, to reduce misunderstandings of the data prompts, and to facilitate the transcription of the data into final reports.

Inst.	Additional instructions have been added to the top of the "Pages Added" table (Page 7) because the instructions on Page 6 have been frequently ignored.
3	*INSTRUCTIONS: This section is to be used to document phone calls, fax communications, and e-mails associated with the field trial (e.g.* ***call/email to discuss multi-trial differentiation options with the Study Director****; call/email to inform Study Director of deviation; call/email to the laboratory to notify that samples will be shipped tomorrow), notes on events that relate to the integrity of the research, and data for which there is no specified location in the Field Data Book or for continued entries or explanations to other sections.* (Example added of an appropriate communication to insert in Section 3.)
4A	ANTICIPATED LAST APPLICATION DATE WILL THE TEST SUBSTANCE EXPIRE BEFORE THE ANTICIPATED LAST APPLICATION DATE? *If yes, contact the Study Director immediately.* *It is not required to insert the MSDS/SDS in this FDB, but if it is, it must go at the back of Part 4, after 4F.* The prompt for the identification of the long-term test substance storage location has been moved to 4E from 4A.
4D	Data prompts have been re-organized into table format. Prompts for SOP Utilized and Adjuvant Storage Location have been added.
4E	Relocated prompt for the identification of the long-term test substance storage location.
After 4F	Test substance and adjuvant labels should be inserted at the back of Part 4; also MSDS/SDS (if retained).
5C1	The plot map should be completed prior to the first application in the trial. The information about chemicals on adjacent plots may be added at a later time, either on the same map (with the date of these additions indicated) or on a separate map.
5C2	(After: Are there adjacent plots treated with test substances as described in part 5.C.1? YES_____ NO_____) If YES, when was the adjacent plot information added to this map? Date_____ Initials_____ If a global position system (GPS) was used for plot location, enter GPS-related SOP/**revision#** used _____
5F	For clarity, "Number of Rows/Bed" has been rewritten as "Number of Rows per Bed".
5G	*Include the activity (operation), dates performed, source of information (e.g., farmer), equipment used, and* ***if known and appropriate****, the depth into soil which the practice was performed (e.g., roto-tiller mixed soil to 6 inches) and initials/date of the individual responsible for collecting information.* (Revised from "if appropriate".)
6C(alt)	A prompt for application number has been added to the page with the horizontal output table.
6C + 6D	A prompt has been added for LOCATION WHERE THE CALIBRATION WAS PERFORMED.
6D	*A speed recheck (one run) is required whenever an output recheck is performed,* ***except for multiple applications within a study that are being made on the same day on the same farm.*** A target speed may be used for application calculations, rather than the mean of three runs, *but for each application a full speed calibration must be conducted,* and the mean of the three runs must be within 5% of the target speed.
6F	Describe holding and transport of test substance and adjuvant (if applicable) from storage area to location of tank mixing
6G	Complete a separate form for each application date **and for each treatment on one application date.** BATCH/LOT NUMBER/**Container#*** *If more than one test substance container was received for this trial. If not, only batch or lot number is needed.
6H+6I	Additional signature lines for clarity (because some data may be added on different dates or by different people).
6K	Phytotoxicity section has been reformatted. If phytotoxicity symptoms are not seen, the box for entering a description may be lined out.
7A1	New prompt: Was the crop in all of the trial plots healthy? Yes/No If no, please explain.
7A2	Prompt moved from 7A1: Were harvested crop items collected directly into residue sample bags?
8A	Prompts have been added for date and time that samples are packaged and samples are returned to the freezer(s).
9B	Clarification added after the prompt for "Was Weather Normal?" ***It is not sufficient to simply indicate below the differences from the monthly mean rainfall and temperature; an assessment is needed as to whether the precipitation and temperatures are within the normal range that is experienced in the location of the field trial.***

GENERAL INSTRUCTIONS FOR THE COMPLETION OF THE IR-4 FIELD DATA BOOK

This book is designed for use in collecting data in the course of completing a field trial sponsored by the IR-4 Project that **must** be conducted in compliance with the EPA or OECD Good Laboratory Practice Standards. It has been extensively updated in recent years. **DO NOT USE PAGES FROM FIELD DATA BOOKS FROM PREVIOUS YEARS. DO NOT PASTE "Trial Year 2016" ONTO AN OLD VERSION OF A FIELD DATA BOOK PAGE.** (Inserts such as bills of lading do not need to have the Trial Year; field ID# and page# are sufficient.) This Field Data Book (**FDB**) is an authentic record of your work. The IR-4 FDB is divided into Parts, each containing the following information:

PART NO.	SUBJECT
PART 1	GOOD LABORATORY PRACTICE COMPLIANCE INFORMATION
PART 2	PERSONNEL LOG
PART 3	NOTES AND COMMUNICATION LOG
PART 4	TEST SUBSTANCE RECORDS (Receipt/storage/disposition records, test substance use log)
PART 5	TRIAL SITE INFORMATION (Maps, soil characterization information, crop/pesticide history, and test crop records)
PART 6*	APPLICATION RECORDS (General equipment information, equipment calibration records, delivery rate calibration/calculations, treatment information, and environment records during treatment)
PART 7	SAMPLE COLLECTION AND STORAGE (General sampling information, sample balance calibration, sample log, freezer temperature and inventory)
PART 8	RESIDUE SAMPLE SHIPPING (Residue sample shipping forms)
PART 9	WEATHER AND IRRIGATION RECORDS

PROTOCOL & PROTOCOL CHANGES (formerly Part 10)–This part may be kept in the back of the FDB, or moved to the front of the FDB (ahead of Part 1), or inserted between other FDB Parts.

*Part 6 is available in a version specific for airblast applications. If you intend to apply the test substance in this study via airblast and have not received the pages entitled "PART 6. APPLICATION RECORDS-AIRBLAST SPRAYER", then you should contact the Regional Field Coordinator, or print the pages from the IR-4 website: **http://ir4.rutgers.edu/Fooduse/Fieldbook/index.htm**

If the instructions below are followed, the IR-4 FDB can serve as both a scientific record and a legal document. Failure to comply is not necessarily a protocol deviation, but will result in time-consuming follow-up work by the Study Director, Regional Field Coordinator, QA Officer, and/or the Field Research Director.

1. One copy of each form (template) has been provided. However, some forms require completion of that form on various dates (e.g. Treatment Information Form must be completed for each application date). Prior to entering data, make appropriate number of photocopies of the template(s). Insert the Field ID on each page. If additional templates are needed, contact the Regional Field Coordinator, or print them from the IR-4 website: http://ir4.rutgers.edu/FoodUse/FieldBook/index.htm

2. Some data requested on a form can be applicable to more than one IR-4 field trial. When this occurs, a verified true copy of the completed form can be made and inserted in the proper Part(s) of other IR-4 FDB's. A verified true copy is made by marking on the page which is copied that "THIS IS A TRUE COPY OF ORIGINAL" or similar statement, noting which IR-4 FDB or other documents contain the original and having the person responsible for verifying the copy, initial and date the verification statement. In general, Parts 6G, 6H, 6I, 7A, and 7B should not be copied; they should have original entries. Contact the Study Director if a possible exception exists.

3. Staples and paper clips should not be used on pages in the FDB. Photographs and small pieces of paper with data should be taped to a standard-sized, blank piece of paper.

4. Follow all directions on how to complete the FDB carefully. When completing forms, you should enter all of the requested information, if possible. If a particular form or section of the form does not require a response, make a line-out (diagonal line from the top of the page or field to the bottom), then initial and date the line-out or the bottom of the page. If the requested data are not applicable, give an explanation. Some forms allow the submission of equivalent information versus completion of forms (e.g. verified true copy of recording temperature monitor printout instead of completing the temperature log).

5. All entries should be clear, understandable, legible, and made with a ballpoint pen in **indelible blue or black ink**. Changes to the raw data can only be made by **drawing a single line** through the original entry so as not to obscure it. The date, signature (or initials) and reasons for change (brief description or Error Code) must accompany any change. Acceptable Error Codes include:

AW=Accidental Write-over	**LE=Late Entry**	**SP=Spelling Error**
CE=Calculation Error	**ME=Measurement Error**	**TE=Transcription Error**
EE=Entry Error	**NA=Not Applicable**	**UE=Unnecessary Entry**
IE=Illegible Entry	**NI=New Information**	**NR=Not Recorded**
IW=Inappropriate Word	**PE=Pagination Error**	**WE=Wrong Entry**

Other error codes can be used; however, the codes must be outlined in an approved SOP or noted in this IR-4 FDB. Circling error codes is not required, but may be done for clarity.

6. **Do not write on the back of any page in the FDB. Do not insert 2-sided documents (pages with printing on both sides) in the FDB. If necessary, make one-sided copies of 2-sided documents for the FDB, and save the original in facility files. The MSDS/SDS for the test substance and adjuvant are not needed in the FDB, though copies should be retained by the field personnel at each trial.** The *OBSERVATIONS, EXPLANATIONS AND COMMUNICATION LOG* (Part 3) can be used to record observations, notes, phone calls, correspondence, and other events that have no specific place in the IR-4 FDB. Also, if there is not enough space in a section of a form to record the complete entry, add another page, or make a reference to Part 3 and complete the entry there.

7. If entries are made on a page over more than one day, each day's entry must be initialed and dated. When more than one person enters data on a page in one day, each of the initials (or signatures) must be dated. Data that have been recorded on non-FDB pages that are being inserted into the FDB must be initialed and dated, even if the data are also transcribed onto an FDB page. Multi-page documents, which are themselves paginated, may be inserted into a FDB with initial and date on either the first or last page only.

8. The FDB should be complete when submitted, with the permissible exceptions of laboratory receipt forms, certificates of analysis, and protocol deviation forms that have been signed by the Study Director. Occasionally, additional exceptions may be made with the permission of the Regional Field Coordinator. Do not make a notation that the requested information will be submitted at a future date. Make a certified, true copy that includes each page of the IR-4 FDB for your records. **Send the original to the designated Regional Field Coordinator.**

9. If there are any questions on how to conduct research or capture information in the IR-4 FDB, contact the Study Director and the Regional Field Coordinator. Additionally, the Study Director should be contacted if:
   - ☐ the protocol requires changes
   - ☐ unforeseen or unavoidable circumstances force a change from protocol directions
   - ☐ actual application rate deviates more than - 5% or +10% from the protocol rate

PAGINATION INSTRUCTIONS FOR THE FIELD DATA BOOK

Initial pagination of the Field Data Book:
Pages should be numbered consecutively within each Part, starting each Part with Page 1. Do not paginate sub-parts separately. (There should not be Part 6A, page 1, followed by Part 6B, page 1. Part 6 is paginated as 1, 2, 3... until the last page in Part 6.) **When an FDB Part is initially paginated, the total number of pages in that part is entered at the bottom of page 1 next to the words "Total number of pages in this section at initial pagination".** It is not necessary to enter this total on each page within the section. All pages, including those not originally part of the FDB (such as Bills of Lading), should be paginated and identified with the field ID number. Pages in the Protocol/Protocol Changes section do not need pagination, but should be identified with the field ID number. Pages in Part 6 should be grouped by application#. I.e. all of the pages related to application #1 should come first, followed by all of the pages related to application #2, and so on.

Additional pages inserted into the Field Data Book after it has been paginated:
If a page is added after the FDB has been paginated, number that page with the previous page number and a letter. E.g. a page inserted after Part 6, page 15, would be Part 6, page 15A. If two pages had been added here, the second page would be Part 6, page 15B. The total number of pages that had been entered on page 1 is not revised. The addition of these pages to the Field Data Book must be noted on the table on the next page, with the initials of the person who inserted the pages and the date of entry. **Each row of the table should include only pages entered within one Part on one date (see example below); however all entries made on one date should be initialed and dated as a group. After all new pages have been entered on a particular date, a horizontal line must be drawn across the "Initials" and "Date" column to indicate which entries are confirmed by the initials and date above the line. This page should be kept just in front of the divider for Part 1.** Unused portions of this table should not be lined out.

Example: PAGES ADDED TO THE FIELD DATA BOOK AFTER INITIAL PAGINATION			
FDB Part	**Identity of inserted pages (e.g. 6A-B, 9A)**	**Initials**	**Date**
6	7A, 14A	GrL	8/8/16
7	2A, 14B		
4	3A-C	RS	10/1/16
5	1A	KH	2/28/17
6	7B-F, 14C, 20A		

Field ID No. _____

PAGES ADDED TO THE FIELD DATA BOOK AFTER INITIAL PAGINATION

IMPORTANT: The information below is added by the person who inserts the new pages into the Field Data Book, not the field cooperator who is sending the new pages. Each row of the table should include only pages entered within one Part on one date; all entries made on one date should be initialed and dated once as a group. After all new pages have been entered on a particular date, a horizontal line must be drawn across the "Initials" and "Date" column to indicate which entries are confirmed by the initials and date above the line (see pg. 6 for example).

FDB Part	Identity of inserted pages (e.g. 6A-B, 9A)	Initials	Date

Do not line out unused portions of this table.

(Additional "Pages Added" tables may be inserted if needed.)

GLP Compliance
Part 1

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 1. GOOD LABORATORY PRACTICE COMPLIANCE INFORMATION

A. STANDARD OPERATING PROCEDURES

Provide a verified true copy of the SOP index(s) ***or*** *complete the below section by listing all SOP's used in this research trial.*

SOP IDENTIFICATION *(INCLUDING REVISION NO.)*	DATE APPROVED *(by IR-4 Regional Field Coordinator)*

ABOVE DATA ENTERED BY: _____ *DATE:* _____

Trial Year 2016

Total number of pages in this section at initial pagination: ____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"

THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS_____DATE_____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 1. GOOD LABORATORY PRACTICE COMPLIANCE INFORMATION

B. GOOD LABORATORY PRACTICE STATEMENT

INSTRUCTIONS: The Field Research Director should print his/her name, sign, and date the Good Laboratory Practice statement. Additionally, the GLP compliance status of data in this study should be documented.

I, _____, served as "Field Research Director" for this research trial. I have reviewed the appropriate raw data and I attest that the data accurately reflect the conduct of and the observations made during this trial. All activities associated with this trial were conducted according to *Chapter 40, Code of Federal Regulations, Part 160* or OECD Good Laboratory Practices, except for those noted below (check appropriate GLP status column):

GLP Compliant			DATA CATEGORY **FIELD PERSONNEL SHOULD NOT LINE OUT BLANK CELLS ON THIS PAGE**
YES	NO	NA[1]	
	X		Weather, irrigation, and soil characterization data are not required by the protocol to be compliant with GLP's and are noted as non-compliant in the final report for the study.
			TEST SITE HISTORY (chemical applications prior to the trial year) (FDB Part 5)
			CULTURAL PRACTICES (dating back to harvest of the previous crop), MAINTENANCE FERTILIZERS AND PESTICIDES (current trial year) (FDB Part 5)
			In U.S. trials, GLP-compliant equipment must comply with 40 CFR 160, Subpart D, which includes 160.81 (b) (11). Adjuvants in U.S. trials must comply with 40 CFR 160.83.
			ADJUVANT LABELING AND RECEIPT INFORMATION (check missing items): Receipt of the adjuvant at the field facility (usually the purchase date): _____ Identity and concentration of the adjuvant (on the adjuvant label): _____ Recommended storage conditions (on the adjuvant label): _____ Expiration date (if not on the label, then assigned by field personnel): _____
			ENVIRONMENTAL MONITORING DEVICES for test substance storage (FDB Part 4)
			GLOBAL POSITIONING DEVICE used to determine plot location (FDB Part 5)
			FLOW METERS and similar SPRAYER OUTPUT CALIBRATION EQUIPMENT used to measure water (**excluding** marked, calibrated beakers, graduated cylinders or flasks suitable for scientific research) (FDB Part 6)
			pH METER or STRIP for measuring the acidity of the carrier (water) (FDB Part 6)
			RESIDUE SAMPLE WEIGHING EQUIPMENT (FDB Part 7)
			ENVIRONMENTAL MONITORING DEVICES for sample storage (FDB Part 7)
			List below additional *non*-compliant items (additional pages may be used for more items)

[1]"NA" should be checked for equipment that was not used in this trial and if adjuvants were not used.

_____ _____

SIGNATURE OF FIELD RESEARCH DIRECTOR DATE

Personnel
Part 2

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 2. PERSONNEL INVOLVED IN TRIAL

A. IDENTIFICATION OF INDIVIDUALS

INSTRUCTIONS: Complete this form to document the Field Research Director and other personnel involved in the trial. Also include all individuals who entered data and/or worked on this trial (these include scientists, technicians, summer interns, and their supervisors). General field workers and Quality Assurance Unit personnel should not be included. Upon completion of this section participants may use their initials to verify data. ***Original signatures and initials are preferred on this page, but a true copy is acceptable.***

FIELD RESEARCH DIRECTOR

NAME *(print)*: David Ennes

AFFILIATION: UC Kearney Agricultural Research and Extension

ADDRESS: 9240 South Riverbend Ave

CITY: Parlier

STATE or PROVINCE: CA ZIP (Postal Code): 93648

TELEPHONE: (559) 646-6061 FAX: (559) 646-6015

E-MAIL ADDRESS: dsennes@ucanr.edu

SIGNATURE: David Ennes DATE: 5-26-16

INITIALS: DE

OTHER TRIAL PERSONNEL

PRINT NAME	SIGNATURE	INITIALS	DATE
Keri Skiles	Keri Skiles	KS	10-27-16

PART 2 PAGE ___ Trial Year 2016

Total number of pages in this section at initial pagination: ____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"

THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE _____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55

FIELD ID NO: _ Ennes

IR-4 FIELD DATA BOOK

PART 2. PERSONNEL INVOLVED IN TRIAL

B. QUALIFICATIONS SUMMARY

INSTRUCTIONS: Provide current curriculum vitae containing the education, training and experience records of trial personnel, concentrating on items that are applicable to field research with pesticides and good laboratory practices for every individual listed on Part 2-A. If this is not available complete a copy of this Form.

NAME _____ _____
(PRINTED) (SIGNATURE)

EDUCATION SUMMARY: _____

WORK EXPERIENCE SUMMARY: _____

SPECIAL TRAINING, QUALIFICATIONS OR ACCOMPLISHMENTS: _____

ABOVE DATA ENTERED BY: _____ *DATE:* _____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"

THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 2C. TEMPORARY/SEASONAL PERSONNEL INVOLVED IN TRIAL

C. TRAINING SUMMARY

INSTRUCTIONS: Provide a brief narrative below of instructions given to temporary personnel for completion of tasks within this study. CVs and educational records are NOT required for personnel listed below.

TRAINER NAME: _____ _____
(PRINTED) (SIGNATURE)

INSTRUCTIONS: _____

PRINT NAME	TASK PERFORMED

ABOVE DATA ENTERED BY: _____ *DATE:* _____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"

THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

Notes and Communications Part 3

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 3. NOTES AND COMMUNICATION LOG

INSTRUCTIONS: This section is to be used to document phone calls, fax communications, and e-mails associated with the field trial (e.g. call/email to discuss multi-trial differentiation options with the Study Director; call/email to inform Study Director of deviation; call/email to the laboratory to notify that samples will be shipped tomorrow), notes on events that relate to the integrity of the research, and data for which there is no specified location in the Field Data Book or for continued entries or explanations to other sections. Follow instructions on data entry, error correction, etc. in the General Instructions. Printed communications such as faxes and email messages that are inserted into this section should be initialed and dated. More than one day's entry may be made on one page in the NOTES AND COMMUNICATION LOG. However, each day's entry must be dated and initialed. Additionally, if a day's entry continues on more than one page, both pages must have the day's entry dated. Photocopy and insert additional pages if needed. Draw a line through all unused space to signify that no additional entries will be made on that page. Initial and date the line. ***Several trials within the same study under one Field Research Director may be documented on one form; however SEPARATE STUDIES MUST BE DOCUMENTED ON SEPARATE FORMS. When several trials are documented, true copies of the communication records must be placed in each Field Data Book to which the comments apply. (The original goes in one of the Field Data Books.)***

ENTRY DATE/ INITIALS	NOTES (include date of event described)
5-5-16 DK	Before laying the plastic on beds in the treated plot run two new drip irrigation lines per bed in addition to the two irrigation lines that are already in place. The 8 lines will be used to apply test substance in the treated plot only.

PART 3 PAGE ___ Trial Year 2016

Total number of pages in this section at initial pagination: ____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 3. NOTES AND COMMUNICATION LOG

ENTRY DATE/ INITIALS	NOTES (include date of event described)

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____DATE_____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

UNIVERSITY OF CALIFORNIA, DAVIS

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COLLEGE OF AGRICULTURAL & ENVIRONMENTAL SCIENCES
AGRICULTURAL EXPERIMENT STATION
TEL: (530) 752-7633
FAX: (530) 752-2866
http://wrir4.ucdavis.edu

WESTERN REGION IR-4 CENTER
DEPARTMENT OF ENVIRONMENTAL TOXICOLOGY
ONE SHIELDS AVENUE
4218 MEYER HALL
DAVIS, CALIFORNIA 95616-8588

April 13, 2016

Federal Express

David Ennes
UC Kearney Research and Extension Center
9240 S. Riverbend Ave.
Parlier, CA 93648

Re: 2016 Protocol
Oxathiapiprolin/Strawberry, PR# 11719
Field ID No. 11719.16-CA55 (Decline)

Dear David,

Enclosed is one (1) original IR-4 National Pesticide Clearance Protocol and Field Data Notebook for subject residue research trial. These items contain all the necessary information and forms for conducting IR-4 field research and reporting results in accordance with the EPA's Good Laboratory Practice (GLP) requirements. Please review these items prior to beginning your research. **Note that the complete field and lab protocol is enclosed in accordance with GLP. Disregard Sections 25-34 as they pertain only to laboratory research.**

Carefully read Debbie Carpenter's cover letter attached to the protocol instructing you how to initiate this trial. If the proposed directions meet with your approval, please provide estimated research dates for the Master Timetable and sign the GLP Certification located on the cover letter. **Return the original signed copy of this letter to our office immediately.**

Please use the enclosed **12** residue sample bags for submitting samples to the laboratory. Inside each notebook are small trial identification labels which are to be affixed to all pages of the Field Data Notebook. **We have your 2016 revised Standard Operating Procedures (SOPs) on file. We assume you will be following these SOPs for these trials.**

Thank you for agreeing to conduct this research. If you should have any further questions, please contact me at (530) 752-7634, email: rsisco@ucdavis.edu; Stephen Flanagan at (541) 688-3155, email: srflanagan@ucdavis.edu; or Mika Tolson at (530) 752-7635, email: mptolson@ucdavis.edu.

Sincerely,

Rebecca Sisco

OK 4-18-16

Rebecca (Becky) Sisco
Regional Field Coordinator
Western Region IR-4 Program
University of California
Dept. of Environmental Toxicology
One Shields Avenue, Meyer Hall Room 4218
Davis, CA 95616-8588
530-752-7634 (office)
530-752-2866 (fax)
Email: rsisco@ucdavis.edu

RS/jh
Enclosures

cc: Laura Van der Staay (via email)

David Ennes

From: Mcqueen Debbie USGR <debbie.mcqueen@syngenta.com>
Sent: Monday, February 01, 2016 11:55 AM
To: Horst, Leona (Leona.Horst@ARS.USDA.GOV); sharon.benzen@ars.usda.gov; rrb3 @cornell.edu; pdittmar@ufl.edu; David Ennes; gina.p.koskela@oregonstate.edu; Markus.Clodius@agr.gc.ca; heather.peill@agr.gc.ca; jean-francois.dubuc@agr.gc.ca
Cc: Carolyn Jolly; Paul Schwartz; Marylee Ross; Edith Lurvey; Roxanne Fish; Michelle Samuel-Foo; Rebecca Sisco; Shirley Archambault; Debbie Carpenter; Van Starner
Subject: Certificate of Analysis for Oxathiapiprolin/Strawberry
Attachments: USGR160005 3coa.pdf

Importance: High

Attached is the Certificate of Analysis for oxathiapiprolin to be used with PR# 11719.16/strawberry.

Have a great day.

Debbie McQueen
North America R&D Project Management Team
syngenta

Syngenta Crop Protection, LLC
410 Swing Rd
Greensboro, NC
27410
USA

phone 336-632-7081
fax 336-632-6021

debbie.mcqueen@syngenta.com
www.syngenta.com

10/4
2-2-16

This message may contain confidential information. If you are not the designated recipient, please notify the sender immediately, and delete the original and any copies. Any use of the message by you is prohibited.

The IR-4 Project
Pest Management Solutions for Specialty Crops and Minor Uses

IR-4 Headquarters
Rutgers, The State University of New Jersey
500 College Road East, Suite 201W
Princeton, NJ 08540
732.932.9575 fax 609.514.2612
www.ir4.rutgers.edu

RECEIVED
APR 13 2016
WR IR-4

TO: David Ennes

FROM: Deborah H. Carpenter

SUBJECT: Oxathiapiprolin/Strawberry - soil applications followed by foliar applications DECLINE

Field ID No: 11719.16-CA55

This is an exact copy of the original
DK 4-20-16
Initials Date

original mailed to Becky 5150

Thank you for agreeing to participate in the IR-4 Minor Use Research Program. We have assigned the above unique Field Identification Number for your phase of the study. Please use it on all correspondence, the IR-4 Raw Databook and other forms associated with this research. Please review your phase of the research protocol. **Note, this protocol may be different from prior versions**. Please provide estimated research dates for the Master Timetable and sign the GLP Certification below.

First Application of Test Pesticide:	5-31-16
Residue Samples Collected:	6-21, 22, 24, 28, 7-1-16
Samples Transferred to Analytical Laboratory:	7-15-16
Field Databook Completed by Field Research Director:	9-15-16
Location (Closest Town, State):	Parlier, CA

GLP Certification:

I acknowledge that I have reviewed, and understand, the material contained in Sections 1 to 24 of this IR-4 Protocol. The field research will be conducted in accordance with this protocol which reflects EPA's Good Laboratory Practice Standards. I further acknowledge that written Standard Operating Procedures that have been properly approved by IR-4 management are available. Additionally, I will cooperate with the independent Quality Assurance Unit in scheduling needed inspections and documenting corrective actions taken.

David Ennes 4-20-16
Field Research Director (Date)

Return the original signed copy of this letter to your Regional/ARS Field Research Coordinator. If you have any questions contact your Regional/ARS Field Research Coordinator or me (732) 932-9575 ext 4637 or the study director.

cc: Regional/ARS Field Research Coordinator
IR-4 Quality Assurance Unit (Field)

Major funding for IR-4 is provided by Special Research Grants and Hatch Act Funds from USDA-NIFA, in cooperation with the State Agricultural Experiment Stations, and USDA-ARS.

RUTGERS

David Ennes

From: Carolyn Jolly <jolly@AESOP.Rutgers.edu>
Sent: Thursday, April 21, 2016 9:14 AM
To: David Ennes; Rebecca Sisco; Stephen Flanagan; Mika Pringle Tolson
Subject: RE: 11719 Oxathiapiprolin Strawberry Draft Protocol Review

OK 4-21-16

David,

Syngenta would like the irrigation after the soil-directed application. I'll send in amendment today.

Thanks,
Carolyn

From: Carolyn Jolly [mailto:jolly@aesop.rutgers.edu]
Sent: Tuesday, April 19, 2016 8:42 AM
To: 'David Ennes' <djennes@ucanr.edu>; 'Rebecca Sisco' <rsisco@ucdavis.edu>; 'Stephen Flanagan' <srflanagan@ucdavis.edu>; 'Mika Pringle Tolson' <mptolson@ucdavis.edu>
Subject: RE: 11719 Oxathiapiprolin Strawberry Draft Protocol Review

HI David,

I must have missed that comment. During review nobody from Syngenta mentioned watering it in if done by spraying. But, I'm emailing them and checking with Kathryn so see if it should be. I'll add it by amendment if necessary. I'll let you know when I get an answer

-Carolyn

From: David Ennes [mailto:djennes@ucanr.edu]
Sent: Thursday, April 14, 2016 7:53 AM
To: Carolyn Jolly <jolly@AESOP.Rutgers.edu>; Rebecca Sisco <rsisco@ucdavis.edu>; Stephen Flanagan <srflanagan@ucdavis.edu>; Mika Pringle Tolson <mptolson@ucdavis.edu>
Subject: RE: 11719 Oxathiapiprolin Strawberry Draft Protocol Review

Carolyn: I did not see my comment from the original email in section 15 about irrigation after the application if not doing the drip but spraying next to the plants. The draft only addressed watering for doing the drip application. Does this mean if you spray a band next to the plants it does not have to be watered in with water?

Thanks,
David

From: Carolyn Jolly [mailto:jolly@AESOP.Rutgers.edu]
Sent: Tuesday, April 12, 2016 7:41 AM
To: David Ennes <djennes@ucanr.edu>; Rebecca Sisco <rsisco@UCDAVIS.EDU>; Stephen Flanagan <srflanagan@UCDAVIS.EDU>; Mika Pringle Tolson <mptolson@ucdavis.edu>
Subject: RE: 11719 Oxathiapiprolin Strawberry Draft Protocol Review

Hi David,

Thanks for your comments- see the attached for responses. I made the changes in my copy of the protocol. Also, because this was supposed to be an early study the test substance was ordered already and the amount changed to 450 mL. You should have received it by 2/1/16.

-Carolyn

ok
4-21-16

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

From: David Ennes [mailto:djennes@ucanr.edu]
Sent: Wednesday, April 6, 2016 2:03 PM
To: Carolyn Jolly <jolly@AESOP.Rutgers.edu>
Cc: Rebecca Sisco <rsisco@ucdavis.edu>; Stephen Flanagan <srflanagan@ucdavis.edu>; Mika Pringle Tolson <mptolson@ucdavis.edu>
Subject: 11719 Oxathiapiprolin Strawberry Draft Protocol Review

Carolyn: Attached is the draft protocol that I reviewed with my comments in section 13, 15 and 17. For the test substance I only need 300 ml not 600 ml as stated in the draft.

Thanks,
David

David Ennes

From: Jacqueline Hale
Sent: Monday, May 02, 2016 11:52 AM
To: Julie Coughlin; David Ennes; Keri M Skiles
Subject: Singed IR-4 Protocol Cover Letter HI158, CA55, CA496
Attachments: CARPENTER SPLS 3.pdf

Hell, July, Keri & David. Hope you all had a wonderful weekend. Attached you will find the scanned letter to **Deborah Carpenter** regarding your Signed Protocol Cover Letters received in our office:

Flupyradifurone/Pineapple	Field ID No. 11711.16-HI158	FRD – J Coughlin
Oxathiapiprolin/Strawberry	Field ID No. 11719.16-CA55	FRD – D Ennes
Potassium Phosphite/Caneberry (Blackberry)	Field ID No. 11885.16-CA496	FRD – K Skiles

If you have any questions, please contact Becky Sisco (530) 752-7634. Have an awesome Monday.

Jackie

OK 5-2-16

Jackie Hale
Office Manager
Western Region IR-4 Program
4218 Meyer Hall
One Shields Avenue
Davis, California 95616
Tel: (530)752-7633
Fax: (530)752-2866

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

UNIVERSITY OF CALIFORNIA, DAVIS

BERKELEY • DAVIS • IRVINE • LOSANGELES • MERCED • RIVERSIDE • SANDIEGO • SANFRANCISCO SANTABARBARA • SANTACRUZ

COLLEGE OF AGRICULTURAL & ENVIRONMENTAL SCIENCES
AGRICULTURAL EXPERIMENT STATION
TEL: (530) 752-7633
FAX: (530) 752-2866
http://wrir4.ucdavis.edu

WESTERN REGION IR-4 CENTER
DEPARTMENT OF ENVIRONMENTAL TOXICOLOGY
ONE SHIELDS AVENUE
4218 MEYER HALL
DAVIS, CALIFORNIA 95616-8588

May 2, 2016

Federal Express

Deborah H. Carpenter
IR-4 Project Headquarters
Rutgers, The State University of NJ
500 College Road East, Suite 201 W
Princeton, NJ 08540

DK
5-2-16

RE: Signed IR-4 Protocol Cover Letters

Flupyradifurone/Pineapple	Field ID No. 11711.16-HI158	FRD – J Coughlin
Oxathiapiprolin/Strawberry	Field ID No. 11719.16-CA55	FRD – D Ennes
Potassium Phosphite/Caneberry (Blackberry)	Field ID No. 11885.16-CA496	FRD – K Skiles

Dear Debbie,

We are forwarding three (3) signed protocol cover letters as submitted by the Western Region field research director listed above. Estimated research dates for the Master Timetable have been provided and the GLP Certification signed.

If you should have any additional questions, please contact our office.

Sincerely,

Rebecca Sisco

Rebecca (Becky) Sisco
Regional Field Coordinator
Western Region IR-4 Program
530-752-7634 (office)
Email: rsisco@ucdavis.edu

RS/jh
Enclosures

cc : Julie Coughlin (via email)
David Ennes (via email)
Keri Skiles (via email)

David Ennes

From: David Ennes
Sent: Wednesday, May 11, 2016 12:25 PM
To: 'Lee Meier'
Subject: San AndreasStrawberry Plants

Lee: When you have a chance could I get a list of what pesticides were applied to the strawberry plants that we received this year. The lot number was MTD 01-08-16 Field MT2-8 Ranch Manteca if this helps.

Thanks,
David

ok
5-12-16

David Ennes

From: Lee Meier <lee@lassencanyonnursery.com>
Sent: Wednesday, May 11, 2016 3:29 PM
To: David Ennes
Subject: Pesticide report MT 2-8
Attachments: 20160511152049307.pdf

Ok
5-12-16

David Ennes

From: Carolyn Jolly <jolly@AESOP.Rutgers.edu>
Sent: Monday, June 27, 2016 7:07 AM
To: Rebecca Sisco; 'carpenter@aesop.rutgers.edu'
Cc: bierbrunner@AESOP.Rutgers.edu; David Ennes
Subject: RE: 11719.16-CA55 Oxathiapiprolin Strawberry

Ok 6-27-16

Hi all,

Yes an amendment and new trial number is required since an application has already been made.

David, thanks for trying to get the trial going even though I wasn't able to get the protocol signed sooner.

Susan, please draft an amendment terminating trial 11719.16-CA55 and replacing with another trial. Because of the weather there are not enough strawberries to meet protocol sampling requirements.

Thanks,
Carolyn

From: Rebecca Sisco [mailto:rsisco@ucdavis.edu]
Sent: Wednesday, June 22, 2016 2:04 PM
To: carpenter@aesop.rutgers.edu
Cc: bierbrunner@AESOP.Rutgers.edu; Carolyn Jolly (jolly@AESOP.Rutgers.edu) <jolly@AESOP.Rutgers.edu>; David Ennes <djennes@ucanr.edu>
Subject: RE: 11719.16-CA55 Oxathiapiprolin Strawberry

Debbie:

For the record, I just want all to be aware that David was very diligent at identifying this as an early protocol (it's the very first one on the attached spreadsheet) and trying to get things going early and Carolyn was beating the doors of the registrant to try and get some answers as well, but despite all that things lagged a bit...when we got the signed protocol (April) it was a little late and we punted and took the risk to try and get it done...bad bet apparently in this case, but one doesn't always know what the right decision is at the time we have to make it.

Since it is a bad week for western strawberries, I just wanted to put this situation in perspective.

Thanks,
Becky

Rebecca (Becky) Sisco
Western Region IR-4 Center
Regional Field Coordinator
UC Davis, Dept. of Environmental Toxicology
4218 Meyer Hall
Davis, CA 95616-8588
rsisco@ucdavis.edu
530-752-7634 (phone)
530-867-1664 (cell)

From: Rebecca Sisco
Sent: Wednesday, June 22, 2016 1:44 PM
To: David Ennes; Carolyn Jolly
Cc: Debbie Carpenter; bierbrunner@AESOP.Rutgers.edu
Subject: RE: 11719.16-CA55 Oxathiapiprolin Strawberry

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

Carolyn/Debbie:

Let me know the new field ID number and provide me with the amendment and I will send a new protocol/notebook to David.

Thanks,
Becky

DK
6-27-16

Rebecca (Becky) Sisco
Western Region IR-4 Center
Regional Field Coordinator
UC Davis, Dept. of Environmental Toxicology
4218 Meyer Hall
Davis, CA 95616-8588
rsisco@ucdavis.edu
530-752-7634 (phone)
530-867-1664 (cell)

From: David Ennes
Sent: Monday, June 20, 2016 11:34 AM
To: Carolyn Jolly
Cc: Rebecca Sisco; Debbie Carpenter
Subject: RE: 11719.16-CA55 Oxathiapiprolin Strawberry

Carolyn: I looked at the plots today and I think it would be better if I reran this trial later in the year. I will plant sometime in August and start the trial early October. I think there will be a better chance for success doing it this way than by adding additional applications. I was talking to the strawberry plant supplier and she said that you never want to plant in April, which is what I did. I knew I was pushing it since we usually plant in Feb. Lesson learned. Sorry for the delay but hopefully will be successful later in the year.

Thanks,
David

From: Carolyn Jolly [mailto:jolly@AESOP.Rutgers.edu]
Sent: Wednesday, June 15, 2016 2:45 PM
To: David Ennes <djennes@ucanr.edu>
Cc: Rebecca Sisco <rsisco@ucdavis.edu>; Debbie Carpenter <carpenter@AESOP.Rutgers.edu>
Subject: RE: 11719.16-CA55 Oxathiapiprolin Strawberry

HI David,

Since this is joint with Canada I'd have to check with them if they are okay with 2 additional applications. I know they've approved one additional application for a different trial that ended up not being necessary but I'll want to contact them again.

I'll get back to you,
Carolyn

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

From: David Ennes [mailto:djennes@ucanr.edu]
Sent: Wednesday, June 15, 2016 11:11 AM
To: 'Carolyn Jolly' <jolly@AESOP.Rutgers.edu>
Cc: Rebecca Sisco <rsisco@ucdavis.edu>
Subject: 11719.16-CA55 Oxathiapiprolin Strawberry

Carolyn: I may have missed the timing on my strawberry trial. I just did the third application today and the fourth application and 0 day harvest is next Weds. I am not confident that there will be enough fruit available to do the 0, 1 and 3 DALA harvest. The weather is calling for triple digits all next week. Would it be possible to do an amendment that would allow me to make up to two more foliar applications and then sample. If this is not feasible I could restart the trial again in August if I can still get plants. If not I could plant in early Feb 2017. Please let me know what you want me to do.

Thanks,
David

DK
6-27-16

David Ennes

From: Carolyn Jolly <jolly@AESOP.Rutgers.edu>
Sent: Monday, June 27, 2016 12:23 PM
To: David Ennes
Cc: Rebecca Sisco
Subject: RE: 11719.16-CA55 Oxathiapiprolin Strawberry

That works for me. Let me know if you need additional test substance.

-Carolyn

Ok 6-27-16

From: David Ennes [mailto:djennes@ucanr.edu]
Sent: Monday, June 27, 2016 12:07 PM
To: Carolyn Jolly <jolly@AESOP.Rutgers.edu>
Cc: Rebecca Sisco <rsisco@ucdavis.edu>
Subject: 11719.16-CA55 Oxathiapiprolin Strawberry

Carolyn: With your approval I will transfer the test substance from CA55 to the new assigned strawberry trial.

Thanks,
David

Test Substance
Part 4

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 4. TEST SUBSTANCE RECORDS

A. RECEIPT, STORAGE AND DISPOSITION OF TEST SUBSTANCE--*INSTRUCTIONS:*
Complete a separate form for ***each different*** *batch/lot of test substance that has been received.*
PLEASE INSERT THE LABELS FOR THE TEST SUBSTANCE AND ADJUVANTS AFTER PART 4F.

NAME OF TEST SUBSTANCE ON CONTAINER LABEL *E.g. Darnitall 2 EC or GroundUp or XYZ8-0.*	A20941A OX TP 100 OD		
BATCH/LOT NO.	916099 Batch code GA08-01	DATE OF RECEIPT	2-5-16
Provide the batch/lot number of the test substance as it appears on the test material container label		TEST SUBSTANCE EXPIRATION DATE	1-8-2019
Do not assign an expiration date if none is provided with the test substance—contact the Study Director.			
SOURCE OF EXPIRATION DATE	Test substance container label		
Note the source of the expiration date of the test substance (e.g., expiration date noted on test material container label, expiration date listed on documentation provided by manufacturer, expiration date obtained by IR-4 Headquarters)			
ANTICIPATED LAST APPLICATION DATE		5-31-16	
WILL THE TEST SUBSTANCE EXPIRE BEFORE THE ANTICIPATED LAST APPLICATION DATE? *If yes, contact the Study Director immediately.*		YES___ NO X	

CARRIER THAT TRANSPORTED TEST SUBSTANCE	UPS		
INDIVIDUAL WHO RECEIVED TEST SUBSTANCE	DAVID Ennes		
WAS A BILL OF LADING/WAYBILL RECEIVED?		YES___ NO ✓	
BILL OF LADING/WAYBILL/TRACKING NO. *Insert true copy if a Bill of Lading or Waybill was included in the shipment*		Ok 2-5-16	
APPROXIMATE AMOUNT RECEIVED	450 ml	NUMBER OF CONTAINERS	1
CONTAINER DESCRIPTION (*glass bottles, water soluble packets, etc.*)	Clear plastic bottle		
CONDITION OF CONTAINER ON ARRIVAL *(intact, bags broken, etc.)*	Good, intact		
GLP STATUS KNOWN AT TIME OF RECEIPT *(Check YES if the documentation provided by the manufacturer or information on the test material container claims that the test substance has been characterized per GLP requirements. If NO is checked, contact the Study Director.)*		YES ✓ NO___	
IF "NO", ENTER THE DATE THAT THE STUDY DIRECTOR WAS INFORMED		Ok 2-5-16	
IF "YES", SOURCE OF GLP STATUS INFORMATION	CoA received in email attachment on 2-1-16		
Label, shipping form, etc. Insert label and also Certificate of Analysis (COA) in FDB Part 4 (if a COA has been received). ***It is not required to insert the MSDS/SDS in this FDB, but if it is, please insert it after Part 4F.***			

WAS THE TEST SUBSTANCE HELD TEMPORARILY* IN ANOTHER LOCATION PRIOR TO TRANSFER TO ITS LONG-TERM STORAGE LOCATION DURING THE FIELD TRIAL?		YES___ NO ✓	
**Temperature monitoring should begin within 2 days of receipt of the test substance, regardless of where it is held or stored.*			
IF YES, ENTER LOCATION	Ok 2-5-16		
DATES		ESTIMATED TEMPERATURE prior to monitoring	

ABOVE DATA ENTERED BY: David Ennes *DATE:* 2-5-16

PART 4 PAGE ___ Trial Year 2016

Total number of pages in this section at initial pagination: ____ **(Paginate labels/SDS as belonging to Part 4)**

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

Syngenta Crop Protection, LLC
Analytical and Product Chemistry
Greensboro, NC 27409

Certificate of Analysis

A20941A
Batch ID 916099 (6A08-01)

Test Substance Name:	SYN546539 OD (100)
Common Name:	Oxathiapiprolin OD (100)
Design Code:	A20941A
Batch ID:	916099
Other ID:	6A08-01
Source:	TRI-Rinse, LLC.,US ,1402 South 2nd Street,63104 St. Louis, MO,

Chemical Analysis

AI	% w/w	g/L
oxathiapiprolin	10.2	100

Identity of the Active Ingredients:	Confirmed
Methodology Used for Characterization:	HPLC, Mass Spectrometry and Oscillating Density Meter

The Active Ingredient(s) content is within the FAO limits.

Received as an email attachment
on 2-1-16 OK 2-2-16

Physical Analysis

Property	Value	Units
Density	0.9805	g/cm3

Appearance: Beige liquid

Storage Temperature: <30°C

Re-certification Date:End of Jan/2019

If stored under the conditions given above, this test substance can be considered stable until the recertification date is reached.

The stability of this test substance will be determined concurrently through reanalysis of material held in inventory under GLP conditions at Syngenta Crop Protection, LLC, Greensboro, NC.

This Certificate of Analysis is summarizing data from a study that has been performed in compliance with Good Laboratory Practices per 40 CFR Part 160. Raw data, documentation, protocols, any amendments to study protocols and reports pertaining to this study are maintained in the Syngenta Crop Protection Archives in Greensboro, NC.

Study Number: USGR160005

Authorization: Kirt Durand

Received as an email attachment on 2-1-16 ok 2-2-16

KLD RE 1127/16

Kirt Durand

Jan 26, 2016 27

Date

Analytical and Product Chemistry Department

syngenta

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

Syngenta Crop Protection LLC.
410 Swing Road
Greensboro, NC-27409
Tel. 336-632-6000

Transport Order

Requester :	McQueen Debbie USGR (MCQUEDE1)	**Cost Center :**	SN520000
Identifier :	23114	**Shipment Mode :**	Courier [COUR]
To :	David Ennes	**Date Ordered :**	18-Jan-2016
Phone :	559-791-5309	**Date Needed :**	29-Jan-2016
Delivery Address :		**GLP (Y/N) :**	Y

University of California
Kearney Agricultural Center
9240 S Riverbend Ave
Parlier, CA 93648
United States

DR 2-5-16

Study Number :	TK0256425	**Test Number :**	CA55

External Remarks : IR-4 Field Trials for oxathiapiprolin (OXTP 100OD) on strawberry; PR# 11719.16

COLIS	CONFIG	QTY	UNIT	PRODUCT	DESIGN CODE	BATCH ID	HAZARDOUS MATERIAL
1	1	450.0000	mL	OXTP 100 OD	A20941A	916099	

I 1/29/16

Safety Data Sheet

OXTP 100 OD

Date: 7/27/2015
Replaces: 8/7/2014

1. PRODUCT IDENTIFICATION

Product identifier on label: **OXTP 100 OD**
Product No.: A20941A
Use: Fungicide
Manufacturer: Syngenta Crop Protection, LLC
Post Office Box 18300
Greensboro NC 27419
Manufacturer Phone: 1-800-334-9481

Emergency Phone: 1-800-888-8372

2. HAZARDS IDENTIFICATION

Classifications: Skin Sensitizer: Category 1B
Signal Word (OSHA): Warning
Hazard Statements: May cause an allergic skin reaction

ok
2-5-16

Hazard Symbols:

Precautionary Statements:
Avoid breathing mist, vapors, spray.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves, protective clothing, eye protection.
If on skin: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice.
See Section 4 First Aid Measures.
Wash contaminated clothing before reuse.
Dispose of contents and container in accordance with local regulations.

Other Hazard Statements: None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Common Name	CAS Number	Concentration
Other inert ingredients	Other inert ingredients	Trade Secret	89.9%
Oxathiapiprolin	Oxathiapiprolin	1003318-67-9	10.1%

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

Have the product container, label or Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison contol center or doctor, or going for treatment.

Ingestion: If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Eye Contact: If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Skin Contact: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Inhalation: If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

Most important symptoms/effects:

Allergic skin reaction

Indication of immediate medical attention and special treatment needed:

There is no specific antidote if this product is ingested.

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use dry chemical, foam or CO2 extinguishing media. If water is used to fight fire, dike and collect runoff.

Specific Hazards:

None known.

OK 2-5-16

Special protective equipment and precautions for firefighters:

Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:

Follow exposure controls/personal protection outlined in Section 8.

Methods and materials for containment and cleaning up:

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

Precautions for safe handling:

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Conditions for safe storage, including any incompatibilities:

Not Applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Occupational Exposure Limits:

Chemical Name	OSHA PEL	ACGIH TLV	Other	Source
Other inert ingredients	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Oxathiapiprolin	Not Established	Not Established	Not Established	Not Applicable

Appropriate engineering controls:

Use effective engineering controls to comply with occupational exposure limits (if applicable).

Individual protection measures:

OK 2-5-16

Ingestion:

Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact:

Where eye contact is likely, use splash-proof chemical goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Skin Contact:

Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear.

Inhalation:

A combination particulate/organic vapor respirator should be used until effective engineering controls are installed to comply with occupational exposure limits, or until exposure limits are established. Use a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P or HE filter.

Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White Liquid

Odor: Not determined

Odor Threshold: Not Applicable

pH: Not Available
Melting point/freezing point: Not Available
Initial boiling point and boiling range: Not Applicable
Flash Point (Test Method): >93°C
Flammable Limits (% in Air): NotAvailable
Flammability: Not Available
Vapor Pressure: Oxathiapiprolin Not Available
Vapor Density: Not Available
Relative Density: 1 g/ml
Solubility (ies): Oxathiapiprolin Not Available
Partition coefficient: n-octanol/water: Not Available
Autoignition Temperature: Not Available
Decomposition Temperature: Not Available
Viscosity: Not Available
Other: None

10. STABILITY AND REACTIVITY

OK 2-5-16

Reactivity: Not reactive.
Chemical stability: Stable under normal use and storage conditions.
Possibility of hazardous reactions: Will not occur.
Conditions to Avoid: Elevated temperatures, static electricity, mechanical sparks, open flames
Incompatible materials: None known.
Hazardous Decomposition Products: Not Available

11. TOXICOLOGICAL INFORMATION

Health effects information

Likely routes of exposure: Dermal, Inhalation

Symptoms of exposure: Rash, redness or itching

Delayed, immediate and chronic effects of exposure: Allergic skin reaction

Numerical measures of toxicity (acute toxicity/irritation studies (finished product))

Ingestion:	Oral (LD50 Rat) :	> 5000 mg/kg (calculated based on similar formulations)
Dermal:	Dermal (LD50 Rat) :	> 5000 mg/kg (calculated based on similar formulations)
Inhalation:	Inhalation (LC50 Rat) :	> 5.1 mg/l

Eye Contact:	Non-Irritating (Rabbit)
Skin Contact:	Mildly Irritating (Rabbit)
Skin Sensitization:	May cause sensitization by skin contact.

Reproductive/Developmental Effects

Oxathiapiprolin: Animal testing showed no reproductive toxicity. Slight delays in maturation observed in rats.

Chronic/Subchronic Toxicity Studies

Oxathiapiprolin: No toxicologically significant effects were found in rat, dog or mouse.

Carcinogenicity

Oxathiapiprolin: Animal testing did not show any carcinogenic effects.

Chemical Name	NTP/IARC/OSHA Carcinogen
Other inert ingredients	No
Oxathiapiprolin	No

Other Toxicity Information

Not Available

Toxicity of Other Components

Other inert ingredients

Not Applicable

Target Organs

Active Ingredients

Oxathiapiprolin: Not Applicable

Ok 2-5-16

Inert Ingredients

Other inert ingredients: Not Applicable

12. ECOLOGICAL INFORMATION

Eco-Acute Toxicity

Oxathiapiprolin:

Invertebrate (Water Flea) Daphnia Magna 48-hour EC50 0.67 mg/l

Green Algae 96-hour ErC50 >0.142 mg/l

Fish (Rainbow Trout) 96-hour LC50 >0.69 mg/l

Environmental Fate

Oxathiapiprolin:

Not Available

13. DISPOSAL CONSIDERATIONS

Disposal:

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable

Listed Waste: Not Applicable

14. TRANSPORT INFORMATION

DOT Classification

Ground Transport - NAFTA
Not regulated by DOT unless shipped in bulk package or by water

Comments

Water Transport - International
Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Oxathiapiprolin), Marine Pollutant
Hazard Class: Class 9
Identification Number: UN 3082
Packing Group: PG III

Air Transport
Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Oxathiapiprolin)
Hazard Class: Class 9
Identification Number: UN 3082
Packing Group: PG III

DK 2-5-16

15. REGULATORY INFORMATION

Pesticide Registration:

Not applicable

EPA Registration Number(s):

Not Applicable

EPCRA SARA Title III Classification:

Section 311/312 Hazard Classes: Acute Health Hazard

Section 313 Toxic Chemicals: None

CERCLA/SARA 304 Reportable Quantity (RQ):

Not Applicable

RCRA Hazardous Waste Classification (40 CFR 261):

Not Applicable

TSCA Status:

TSCA R & D Exempt

16. OTHER INFORMATION

NFPA Hazard Ratings		HMIS Hazard Ratings	
Health:	1	Health:	1
Flammability:	1	Flammability:	1
Instability:	0	Reactivity:	0

0	Minimal
1	Slight
2	Moderate
3	Serious
4	Extreme
*	Chronic

Syngenta Hazard Category: C,S

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 8/7/2014
Revision Date: 7/27/2015 Replaces: 8/7/2014
Section(s) Revised:

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

EM
2-5-16

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 4. TEST SUBSTANCE RECORDS

B. USE LOG

*INSTRUCTIONS: Complete a separate form for **each different** container of test substance used. Insert records on form or provide equivalent information. Indicate use of the stated container of the test substance by recording the dates that test substance was removed, the amount of test substance removed on each date, the purpose of the use **(include trial ID# for all uses on IR-4 studies)**, and the initials of the individual responsible for the removal.*

CHEMICAL NAME A20941A OX TP 100 OD

BATCH/LOT NUMBER 916099 CONTAINER ID #1

DESCRIPTION OF TEST SUBSTANCE white liquid
(e.g. brown liquid, white powder. Note any unusual characteristics or changes here.)

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-1-16

DATE REMOVED	AMOUNT (*UNITS*) REMOVED	PURPOSE (include trial ID#) *[e.g. apply treatments, used in other research, etc.]*	INITIALS/DATE
6-1-16	32.8ml	11719.16-CA55 Application 1	DE 6-1-16
6-8-16	32.8ml	11719.16-CA55 Application 2	DE 6-8-16
6-15-16	7.9ml	11719.16-CA55 Application 3	DE 6-15-16

PART 4 PAGE ___ Trial Year 2016

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Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 4. TEST SUBSTANCE RECORDS

C. DISPOSITION OF TEST SUBSTANCE CONTAINERS

INSTRUCTIONS: Complete the appropriate part (PART 1, PART 2 or PART 3) that best explains the disposition of the test substance containers after the completion of applications for the trial or provide equivalent information. Line-out the parts that do not apply to this trial.

PLEASE NOTE: **Test substance containers may not be discarded without prior approval from the Study Director or confirmation that the study has been completed (final report signed by the Study Director) or cancelled. Field Research Directors may contact the Study Director or their Regional Field Coordinator to determine if a waiver from EPA permits proper test substance container disposal, or regarding completion of the final study report (study completion confirmation can also be determined from an IR-4 database search using the "Test Substance Container Disposal Approval" link). Alternatively, some registrants will archive the test substance container(s).**

PART 1

If the container(s) were shipped and are no longer in the Field Research Director's possession, indicate where the containers were shipped (include address and to whose attention), date of shipment, carrier, bill of lading number and the name of the individual responsible for shipment. ***A chain of custody form should be included in the shipment. The Field Research Director may use a form on the letterhead of his/her facility, or the form on the IR-4 website: ir4.rutgers.edu/FoodUse/FieldBook/TSCOC***

SHIPPED CONTAINERS TO_____

_____

DATE SHIPPED_____CARRIER _____BILL OF LADING NO._____

SHIPPED BY_____

PART 2

If the containers will remain in the possession of the Field Research Director, indicate location where the containers are stored.

STORING CONTAINERS AT:

_____

_____

PART 3

If containers were not handled by any of the above methods briefly explain how they were handled.

_____

_____

_____

_____

ABOVE DATA ENTERED BY: _____ *DATE:* _____

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Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 4. TEST SUBSTANCE RECORDS

D. IDENTIFICATION AND RECEIPT OF ADJUVANTS (SPRAY ADDITIVES)

NOTE: The use of adjuvants with the test substance must be approved in the protocol or in a protocol amendment. Adjuvants are considered to be reagents, not test substances. No GLP characterization is expected, but the GLP compliance statement must indicate if information pertaining to the receipt of the adjuvant at the field facility (usually the purchase date), recommended storage conditions (from the adjuvant label or SDS), identity and concentration of the adjuvant (also from the label or SDS), or the expiration date (either from the label or assigned by field personnel) is missing or incomplete.

Place a copy of the label after Part 4F.

NAME OF THE ADJUVANT ON CONTAINER LABEL	Induce	
TYPE OF ADJUVANT (check one or specify other):	CROP OIL CONCENTRATE	
	METHYLATED SEED OIL	
	METHYLATED SPRAY OIL	
	NONIONIC SURFACTANT (NON-SILICONE)	X
	SILICONE SURFACTANT	
	VEGETABLE OIL	
	OTHER:	Pk 5-26-16
DATE OF RECEIPT	5-3-16	
RECEIVED BY	DAVID ENNES	
DOES THE ADJUVANT HAVE A BATCH OR LOT NUMBER?	YES ✓ NO____	
IF YES, ENTER THE BATCH/LOT NO.	KC5I1353GHS	
EXPIRATION DATE	5-3-18	
WAS THE EXPIRATION DATE ASSIGNED BY FIELD PERSONNEL?	YES ✓ NO____	
AMOUNT RECEIVED	2 x 1 Gallon	
SOP UTILIZED	UCKARE 40-1.6	
CONTAINER DESCRIPTION *(e.g. glass bottles)*	white plastic jug	
CONDITION ON ARRIVAL *(e.g. good, bags broken, etc.)*	Good	
ADJUVANT STORAGE LOCATION	UCKARE Bldg 117 Room 11 IR-4 Locker	

ABOVE DATA ENTERED BY: David Ennes *DATE:* 5-26-16

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Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

INDUCE

A Nonionic Low Foam Wetter/Spreader Adjuvant

***ACTIVE INGREDIENTS:**

Alkyl Aryl Polyoxylkane Ethers and Free Fatty Acids	90.0%
Constituents ineffective as spray adjuvants	10.0%
TOTAL	100.0%

*All ingredients are accepted for use under CFR 40, 180.

KEEP OUT OF REACH OF CHILDREN

WARNING

May be harmful if swallowed
May be harmful in contact with skin
May be harmful if inhaled
Causes serious eye irritation
Causes skin irritation

Cal. Reg. No. 5905-50091-AA CASN 020114

NET CONTENTS:

MANUFACTURED FOR
HELENA CHEMICAL COMPANY
225 SCHILLING BOULEVARD, SUITE 300
COLLIERVILLE, TENNESSEE 38017
901-761-0050

OK 5-26-16

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS
BEFORE USING THIS PRODUCT, READ ALL PRECAUTIONS, DIRECTIONS FOR USE, CONDITIONS OF SALE–LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES.

May be harmful if swallowed. May be harmful in contact with skin. May be harmful if inhaled. Causes serious eye irritation. Causes skin irritation. Avoid breathing vapors or spray mist. Do not eat, drink, or smoke when using this product. Wash hands and face thoroughly after handling. Keep out of reach of children. In addition, follow precautionary statements on accompanying pesticide(s) label(s) that are applied with this product.

FIRST AID

IF IN EYES:
- Rinse cautiously with water for several minutes.
- Remove contact lenses, if present and easy to do. Continue Rinsing.
- Immediately call a poison control center or doctor for treatment advice.

IF SWALLOWED:
- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

IF INHALED:
- Move person to fresh air.
- If not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
- Call a poison control center or doctor for further treatment advice.

IF ON SKIN OR CLOTHING:
- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

HOT LINE NUMBER
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical resistant to this product are listed below.
Applicators and other handlers must wear:
- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber or Viton
- Shoes plus socks
- Protective eyewear

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.
STORAGE: Store in original container only. Keep container tightly closed. Do not allow water to be introduced into the contents of this container. Do not store near heat or open flame. Do not store with oxidizing agents or ammonium nitrate.
PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Do not contaminate water sources by runoff from cleaning of equipment, disposal of cleaning equipment wash waters, or spray waste.
CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.
For help in chemical emergencies involving spill, leak, fire or exposure, call toll free 1-800-424-9300.

GENERAL INFORMATION

INDUCE® is a nonionic wetter/spreader surfactant. **INDUCE®** incorporates the properties of a wetter/spreader surfactant when used in pesticidal spray mixtures. **INDUCE®** is designed to quickly wet and spread a more uniform spray deposit over leaf and stem surfaces. **INDUCE®** can positively affect pesticide spray application and pesticide efficacy. **INDUCE®** is recommended for use with those pesticides whose label recommends a non-ionic wetter/spreader-type adjuvant.

DIRECTIONS FOR USE

WITH PRODUCTS REGISTERED FOR: AGRICULTURAL, AQUATIC, FORESTRY, INDUSTRIAL, MUNICIPAL, NON-CROPLAND, ORNAMENTAL, RIGHTS-OF-WAY, AND TURF.

The addition of an adjuvant to some pesticides or pesticide tank mix combinations may cause phytotoxicity to the foliage and/or fruit of susceptible crops. Prior to the addition of **INDUCE®** to spray tank mixes, the user or application advisor must have experience with the combination or must have conducted a phytotoxicity trial or must take the recommendations from the labels of the products to be tank mixed.
INDUCE® may be applied by Ground, CDA, Aerial, or Aquatic spray equipment. For most applications, use enough **INDUCE®** to allow for uniform wetting and deposition of the spray onto leaf surfaces without undue runoff.
Ground, Aerial, CDA: Use ½-3 pints per 100 gallons of spray.
Aquatic: Use ½-4 pints per 100 gallons of spray.
Note: The above use recommendations are considered to be adequate for most uses. Some pesticides however, may require higher or lower rates for optimum effect. Follow the pesticide(s) label(s) directions when this occurs.
For uniform deposition and distribution of applied moisture:
Lawns and Turf: Use INDUCE® at .50% v/v concentration.
Greens and Tees: Use INDUCE® at .125-.25% v/v concentration.
Feeding Trees: Use INDUCE® at .25-.50% v/v concentration.
Application of **INDUCE®** through irrigation systems are possible provided that recommended use rates and dilutions are maintained and local, state, and federal guidelines are followed.

MIXING

Prior to any pesticide application all spray mixing and application equipment must be cleaned. Carefully observe all cleaning directions of the pesticide label.
Fill spray tank one-half full with water and begin agitation. Add pesticides as directed by labeling or in the following sequence:
1. Dry flowables or water dispersible granules.
2. Wettable powders
3. Flowables
4. Solutions
5. Emulsifiable concentrates

and continue filling. Add **INDUCE®** last and continue agitation.

CONDITIONS OF SALE–LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

Read the Conditions of Sale–Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.

The directions on this label are believed to be reliable and must be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application practices, all of which are beyond the control of Helena Chemical Company (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the

Disclaimer: Always refer to the label **on the product** before using Helena or any other product.

directions for use subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product shall be limited to, at Helena Chemical Company's election, one of the following:

1. Refund of the purchase price paid by buyer or user for product bought, or
2. Replacement of the product used

To the extent allowed by law, the Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.

© Copyright Helena Holding Company, 2014
INDUCE® is a registered trademark of Helena Holding Company.

OK
5-26-16

SPECIMEN LABEL

Disclaimer: Always refer to the label **on the product** before using Helena or any other product.

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: __

IR-4 FIELD DATA BOOK

PART 4. TEST SUBSTANCE RECORDS

E. CHEMICAL STORAGE BUILDING TEMPERATURE LOG

INSTRUCTIONS: Use this (or an equivalent) form when chemical storage building temperatures are taken manually. For each day that temperatures are taken, directly record the date, the minimum and maximum air temperature, the degree units (°F or °C) and provide the initials of the person entering the data. When temperature records are monitored automatically, the original or certified true copy of the output (data logger disk, computer printout, etc.) must be placed in the Field Data Book.

STORAGE LOCATION: _____

Provide the location (building name, cabinet numbers, etc.) where the test substance is being stored during the trial.

UNIQUE IDENTIFIER FOR TEMPERATURE RECORDER: _____

Enter Temperature Recorder ID—may be make/model/serial# or assigned identifier.

DATE	TEMP MIN/MAX	INITIALS	DATE	TEMP. MIN/MAX	INITIALS	DATE	TEMP MIN/MAX	INITIALS

Please enter the overall minimum and maximum <u>storage</u> temperatures below, even if temperature printouts are inserted. The overall min/max temperatures should <u>not</u> include temperatures during transportation between storage and field. If there are two or more test substances (or separate shipments of test substance), then enter separate min/max temperatures below for each one, depending on the dates of receipt and application.

Test Substance 1:	
Minimum test substance storage temperature between receipt and last application in this trial:	
Maximum test substance storage temperature between receipt and last application in this trial:	
Test Substance 2:	
Minimum test substance storage temperature between receipt and last application in this trial:	
Maximum test substance storage temperature between receipt and last application in this trial:	

Unless otherwise noted above, all temperature units are in (Check one): °C_____ °F_____

Above data entered by: _____ *Date* _____

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FIELD ID NO: _ Oxathiapiprolin / Strawberry ID No. 11719.16-CA55 Ennes

IR-4 FIELD DATA BOOK

PART 4. TEST SUBSTANCE RECORDS

F. BALANCE CALIBRATION CHECK

INSTRUCTIONS: Complete this form or provide equivalent information when the test substance is a dry formulation. Check balance calibration by weighing standard weights that bracket the desired measurement. Record: date(s) that the balance calibration was checked, the standard weights, and the results. In addition, provide dates and a brief description of maintenance and repair work completed on the balance relevant to the trial. Be sure to initial all entries.

MAKE, MODEL, SERIAL NUMBER OR ASSIGNED IDENTIFIER: _____

Date	Stated Wt.	Recorded Wt.	Stated Wt.	Recorded Wt.	Initials

Stated Wt. = Stated mass of the standard weight(s) used in the calibration check
If more than one weight is used to attain the standard weight, indicate on the lines below the individual weights.
Recorded Wt. = Actual recorded mass of the standard weight(s)

RECORD DATES AND BRIEF DESCRIPTION OF ANY CALIBRATION, MAINTENANCE AND REPAIR WORK DONE ON BALANCE

_____

_____

_____

_____

_____

_____

_____

_____

ABOVE DATA ENTERED BY: _____ *DATE:* _____

INSERT TEST SUBSTANCE LABELS, ADJUVANT LABELS, AND MSDS/SDS (optional) AFTER THIS PAGE, AND PAGINATE THEM WITHIN PART 4.

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Trial Site
Part 5

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 5. TRIAL SITE INFORMATION:

A. DIRECTIONS TO TEST SITE

INSTRUCTIONS: Indicate the name and location (street, town, state) of the test site (e.g. Banana Research Center, Rt. 3, Nenana, AK), the county (e.g. Denali), and provide directions from the nearest city or town ***or*** *provide a map to the test site. The map can be sketched here; otherwise attach a clear photocopy or computer printout of the appropriate section of a state or county map with the test site location marked and the highways, nearest city or town identified.*

NAME AND LOCATION UC Kearney Agricultural Research and Extension
9240 South Riverbend Ave Parlier, CA 93648

COUNTY Fresno

DIRECTIONS FROM NEAREST CITY OR TOWN TO THE TEST SITE Refer to the following pages OK 5-26-16

Refer to the following pages
OK 5-26-16

ABOVE DATA ENTERED BY: David Ennes DATE: 5-26-16

PART 5 PAGE ___ Trial Year 2016

Total number of pages in this section at initial pagination: ____

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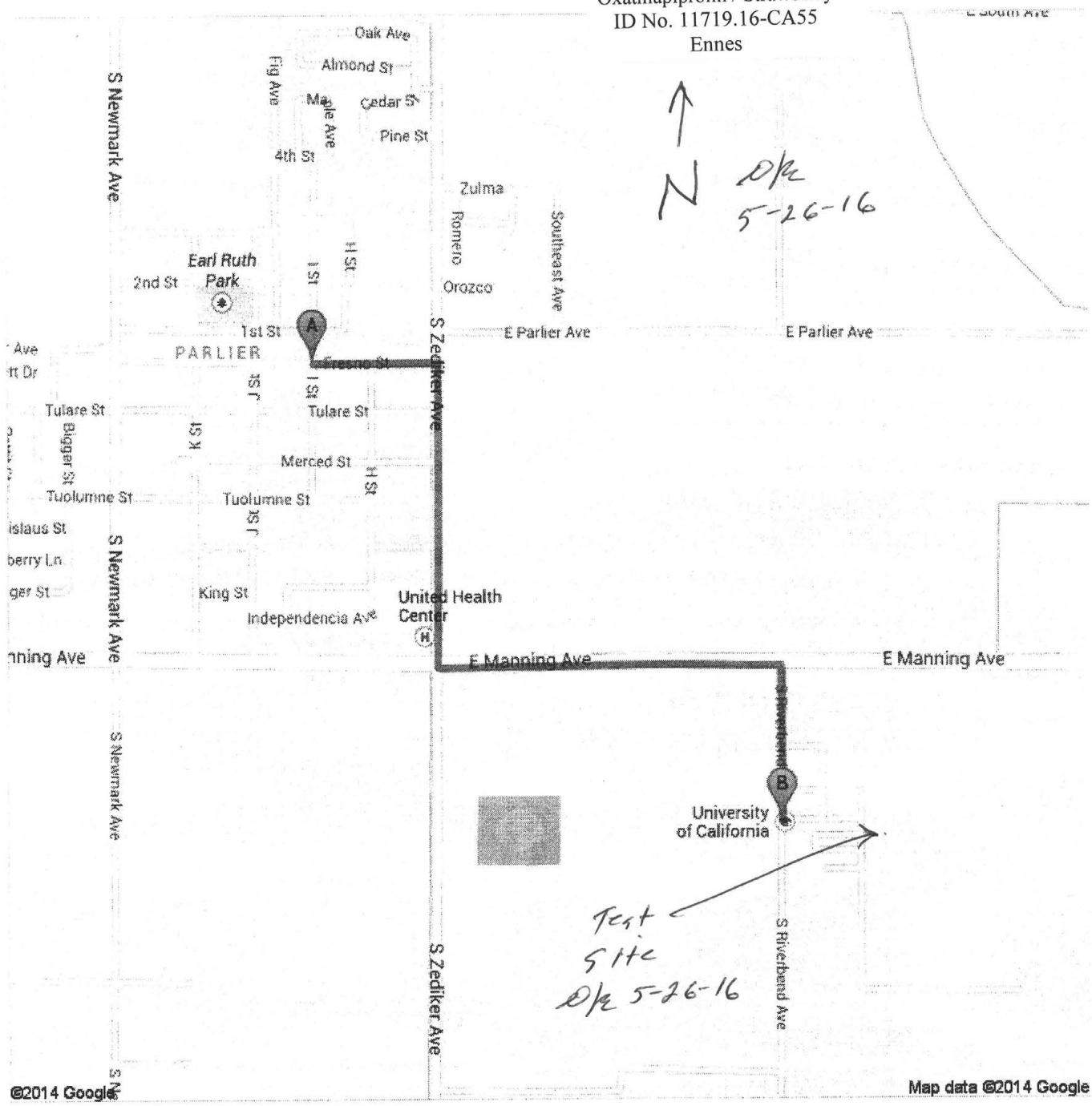
Google

Directions to 9240 S Riverbend Ave, Parlier, CA 93648
1.4 mi – about **4 mins**

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes



Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

Fresno St

1.	Head **east** on **Fresno St** toward **H St**	go 0.2 mi total 0.2 mi
2.	Turn right onto **S Zediker Ave** About 1 min	go 0.5 mi total 0.7 mi
3.	Take the 1st left onto **E Manning Ave** About 51 secs	go 0.5 mi total 1.2 mi
4.	Take the 1st right onto **S Riverbend Ave** Destination will be on the left About 48 secs	go 0.2 mi total 1.4 mi

9240 S Riverbend Ave, Parlier, CA 93648

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Map data ©2014 Google

Directions weren't right? Please find your route on www.google.com and click "Report a problem" at the bottom left.

ok
5-26-16

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: __

IR-4 FIELD DATA BOOK

PART 5. TRIAL SITE INFORMATION:

B. DIRECTIONS TO TEST PLOT AREA

INSTRUCTIONS: Provide the general direction with distances from the entrance of test site to test plot area (indicate North direction) ***or*** *provide a map containing this information. (The entrance must be clearly indicated on the map.) Also indicate the irrigation source location and location of meteorological equipment if they are on site.*

Refer to the following page
Ok 5-26-16

ABOVE DATA ENTERED BY: David Ennes *DATE:* 5-26-16

PART 5 PAGE ___ Trial Year 2016

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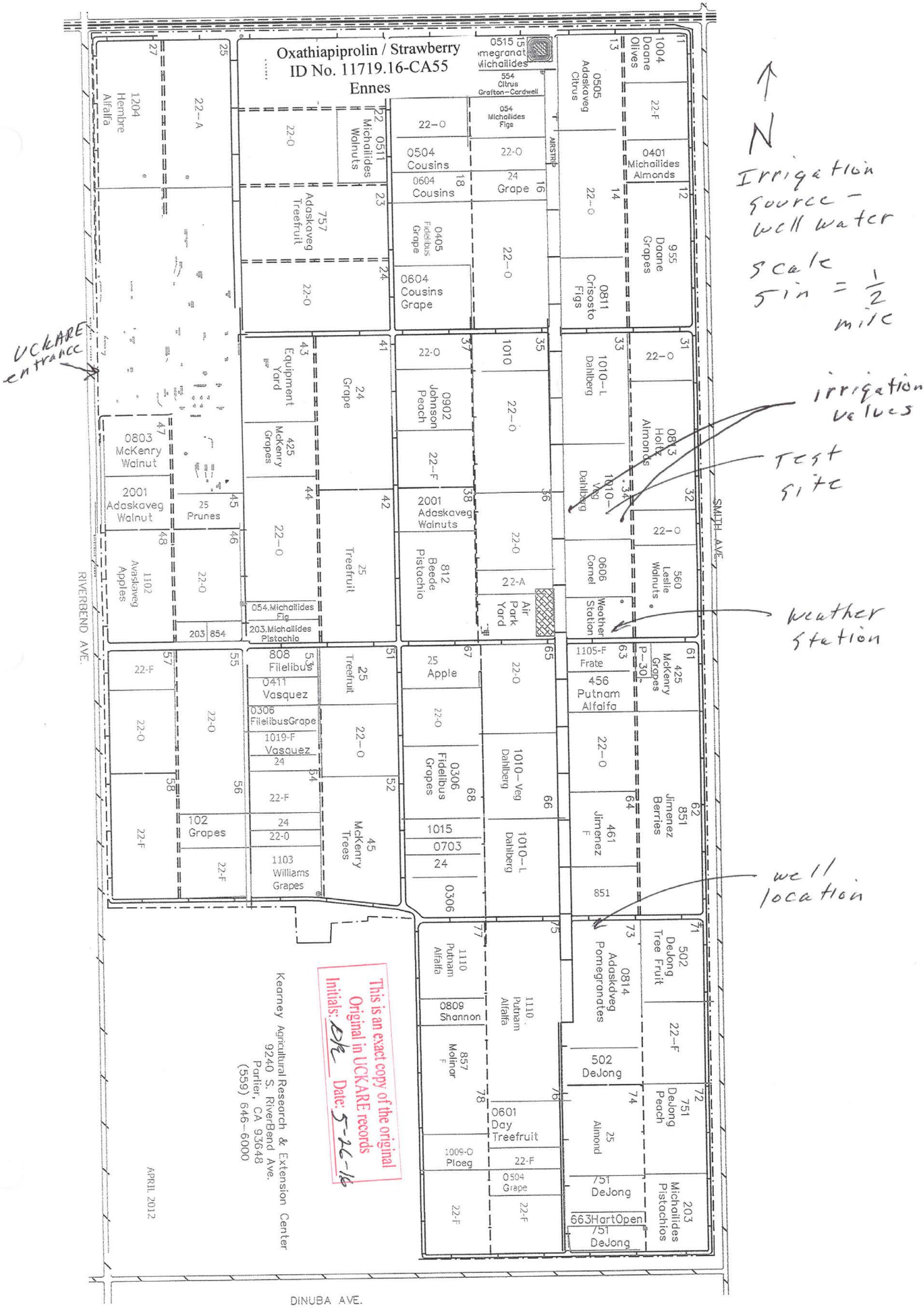

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes
N
Irrigation source – well water
scale 5 in = 1/2 mile
UCKARE entrance
irrigation values
Test site
weather station
well location
SMITH AVE.
RIVERBEND AVE.
DINUBA AVE.
AIRSTRIP
0515 Pomegranates Michailides
554 Citrus Grafton-Cardwell
1004 Daane Olives
0505 Adaskaveg Citrus
0401 Michailides Almonds
955 Daane Grapes
0811 Crisosto Figs
1204 Hembre Alfalfa
0511 Michailides Walnuts
0504 Cousins
0604 Cousins
0405 Fidelibus Grape
0604 Cousins Grape
757 Adaskaveg Treefruit
Equipment Yard
0902 Johnson Peach
1010 Dahlberg
1010-L Dahlberg
0813 Holtz Almonds
1010-L Veg Dahlberg
0803 McKenry Walnut
425 McKenry Grapes
2001 Adaskaveg Walnut
25 Prunes
2001 Adaskaveg Walnuts
812 Beede Pistachio
Air Park Yard
Weather Station
0606 Cornel
560 Leslie Walnuts
1102 Avaskaveg Apples
054 Michailides Fig
203 Michailides Pistachio
854
808 Filelibus
0411 Vasquez
0306 FilelibusGrape
1019-F Vasquez
102 Grapes
1103 Williams Grapes
45 McKenry Trees
25 Treefruit
25 Apple
0306 Fidelibus Grapes
1015
0703
0306
1105-F Frate
P-30
456 Putnam Alfalfa
425 McKenry Grapes
851 Jimenez Berries
461 Jimenez F
851
1110 Putnam Alfalfa
0809 Shannon
857 Molinar F
0601 Day Treefruit
1009-O Ploeg
0504 Grape
0814 Adaskaveg Pomegranates
502 DeJong Tree Fruit
502 DeJong
751 DeJong Peach
25 Almond
751 DeJong
663 HartOpen
751 DeJong
203 Michailides Pistachios
Kearney Agricultural Research & Extension Center
9240 S. RiverBend Ave.
Parlier, CA 93648
(559) 646-6000
APRIL 2012
This is an exact copy of the original
Original in UCKARE records
Initials: DK Date: 5-26-16

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 5. TRIAL SITE INFORMATION:

C.1. PLOT PLAN

INSTRUCTIONS: Legibly sketch on the next page the actual plot plan. Computer-generated plans are acceptable. **The plot map should be completed prior to the first application in the trial. The information about chemicals on adjacent plots may be added at a later time, either on the same map (with the date of these additions indicated) or on a separate map.** ***Check off the required items in the table below to confirm that they have been included in the plot plan:***

Required items in the plot plan	√
The dimensions and locations of treated and untreated plots*	
Dimensions and locations of buffer zones	
Distances to permanent landmarks from at least two plot corners per plot (Optionally from two plot centers per plot for perennial crops) OR GPS coordinates for each corner of the plot	
Distance between the untreated plot and all treated plots in this study	
The north direction	
Slope direction with an arrow pointing down slope	
The number of rows* and/or beds and their direction	
Label plot replicates (if applicable)	
Distances and relative locations of <u>immediately</u> adjacent plots treated with test chemicals that are not part of the trial covered by this Field Data Book. *(Adjacent plots more distant than 50 feet/15 meters for row crops, or 100 feet/30 meters for tree fruits and nuts, from the plots in this trial do not need to be included.)*	
<u>Identity of the test chemical(s) used on the adjacent plots</u> *Exception: Proprietary compounds that cannot be identified because of a secrecy agreement may be labeled as "experimental compound" in this Field Data Book.*	
It is acceptable to have the information for the adjacent plots on a separate map that is inserted in this section behind the plot plan. In that case the plot plan would only have the items indicated for the trial plots. The information for the adjacent plots may alternatively be listed in a table beneath the plot plan; see "Part-5C alternate" on the IR-4 website.	
Initials and date of the person who checked off items above:	

**Items marked with an asterisk are also required in 5F; <u>please enter on both pages for clarity</u>.*

***Global Position System readings are acceptable for permanent reference points only if SOP's kept at the testing facility cover their use, accuracy, and precision. Also provide the date the test plots were measured and staked, the initials of the individual responsible for laying out the plots and the SOPs (include revision number) used in laying out the plots.*

FIELD ID NO: _ Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

IR-4 FIELD DATA BOOK

PART 5. TRIAL SITE INFORMATION:

C.2. PLOT PLAN

UCKARE

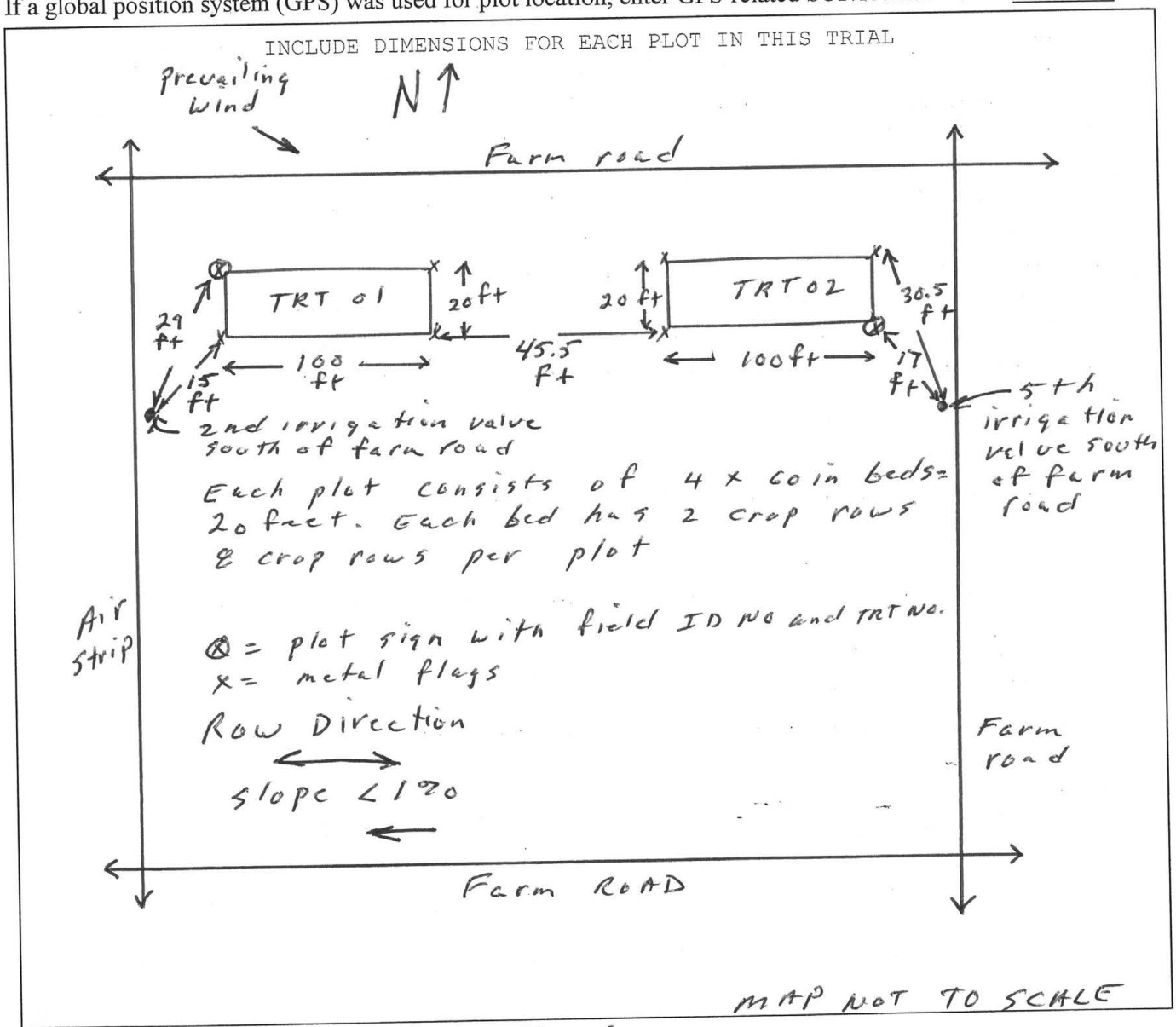
DATE OF PLOT LAYOUT 5-26-16 PERFORMED BY DJE SOP UTILIZED 30-2.4

Are there adjacent plots treated with test substances as described in part 5.C.1? YES ✓ NO ____

If YES, when was the adjacent plot information added to this map? ~~Date~~ ~~Initials~~ DK 5-26-16

If a global position system (GPS) was used for plot location, enter GPS-related SOP/revision# used ~~DK 5-26-16~~

INCLUDE DIMENSIONS FOR EACH PLOT IN THIS TRIAL



ABOVE DATA ENTERED BY: David Ennes *DATE:* 5-26-16

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE _____

FIELD ID NO: _ Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

IR-4 FIELD DATA BOOK

PART 5. TRIAL SITE INFORMATION:

D. SITE AND SOIL INFORMATION CHARACTERISTICS

INSTRUCTIONS: Furnish soil description and classification information for the plot area. This information shall be transcribed from USDA Soil Conservation Service soil maps containing description of the soil series, land class capabilities, and soil characteristics or via soil sampling and laboratory analysis of the soil. ***All supporting information shall be placed in the IR-4 Field Data Book directly following this page.***

SITE IDENTIFIER							
ESTIMATE OF SLOPE PERCENTAGE IN PLOT							
TAXONOMIC NAME OF SOIL IN PLOT							
SOIL TEXTURE/TYPE (e.g., sandy loam)							
SOIL TEXTURE PERCENTAGES		SAND		SILT		CLAY	
ORGANIC MATTER %		pH		CATION EXCHANGE CAPACITY (CEC) in meq/100 g			

IS THIS A GREENHOUSE TRIAL USING SOIL-LESS MEDIA? YES_____ NO_____

IF YES, INCLUDE A LIST OF INGREDIENTS (copy may be inserted): _____

_____

_____

_____

IF SOIL ANALYSIS IS PERFORMED, COMPLETE THE FOLLOWING AND INSERT THE ORIGINAL OR CERTIFIED TRUE COPY OF THE SOIL CHARACTERIZATION REPORT DIRECTLY FOLLOWING THIS PAGE.

SOIL SAMPLE DATE_____PERFORMED BY_____ SOP UTILIZED_____

WAS SOIL SAMPLING REPRESENTATIVE OF SITE? *(Check one)* YES____ NO____

IF NO IS CHECKED, EXPLAIN: _____

_____

_____

_____

DATE SOIL SAMPLE SHIPPED TO LABORATORY FOR ANALYSIS _____

NAME AND ADDRESS OF LABORATORY _____

_____

_____

ABOVE DATA ENTERED BY: _____ *DATE:* _____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____DATE_____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: __

IR-4 FIELD DATA BOOK

PART 5. TRIAL SITE INFORMATION

E. TEST SITE HISTORY FORM

*INSTRUCTIONS: Complete this form **or** provide equivalent information. Enter all pesticide and fertilizer applications for the time period specified in the protocol, a minimum of 1 year prior to planting of an annual crop or 1 year prior to the cropping cycle of a perennial crop (e.g. all chemicals needed to produce that crop of peaches). Note the active ingredient applied, along with the trade name (e.g. carbaryl/SEVIN 80 S), the rate of chemical and the units measured (e.g. lbs active ingredient {ai} per acre or pints {pts} product per acre), the approximate date (at minimum season and year) the pesticide/fertilizer was applied and the crop growing on the plot.*

Active Ingredient	TRADE NAME	RATE *(units)*	Date or season applied	CROP

APPLICABLE TREATMENT(S) _____
If the treated and untreated plots have different histories, then provide the name of the treatment that this form covers. When the histories are the same, enter "ALL".

SOURCE OF DATA _____
(E.g. Facility logbook, farmer's records)

TEST SITE HISTORY DATA ARE (*Check one*): TRUE COPY___ TRANSCRIBED___

IF TEST SITE HISTORY DATA ARE TRANSCRIBED, CHECK APPROPRIATE LINE BELOW

_____DATA WERE VERIFIED BY_____
(Print name above of someone other than transcriber and Quality Assurance)

_____DATA WERE OBTAINED VERBALLY FROM GROWER (THEREFORE, DATA WERE NOT VERIFIED)
Please document this communication in Part 3 of this Field Data Book.

_____DATA WERE TRANSCRIBED FROM WRITTEN RECORDS, BUT WERE NOT VERIFIED

ABOVE DATA ENTERED BY: _____ *DATE:* _____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
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Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 5. TRIAL SITE INFORMATION:

F. TEST CROP RECORDS

CROP	Strawberry	VARIETY	San Andreas
FIELD (TEST PLOT) PLANTING DATE or AGE OF ESTABLISHED CROP	4-20-16	PLANT SPACING *Indicate the distance (with units) between the plants within the row*	12 inches
~~***IF THE NUMBER OF ROWS PER BED = 1 (OR IF BEDS ARE NOT USED), THEN ENTER:***~~			
ROW OR BED WIDTH *Distance (with units) between the centers of the crop row*		~~NUMBER OF ROWS PER PLOT~~ *Each treatment (Untreated, TRT 02, etc.) consists of ~~one plot~~*	pk 4-20-16
IF NUMBER OF ROWS PER BED > 1, THEN ENTER: *Rows per Bed must be 2 or more; otherwise enter data above.*		NUMBER OF ROWS PER BED ***Do not enter '1' in this space.***	2
BED WIDTH *Distance (with units) between the centers of the bed*	60 in	NUMBER OF BEDS PER PLOT *Each treatment (Untreated, TRT 02, etc.) consists of one plot*	4
TRT 01 (UNTREATED) PLOT DIMENSIONS		20ft x 100 ft	ok 5-26-16
TRT 02 (TREATED) PLOT DIMENSIONS		20ft x 100 ft	↓
TRT 03 (TREATED) PLOT DIMENSIONS			~~ok 5-26-16~~
Indicate the dimensions (with units) of each plot (e.g. 6' x 50' or 2m x 15m)			
SOURCE OF SEED/TRANSPLANTS	Lassen Canyon Nursery		
DATE SEEDS/TRANSPLANTS RECEIVED	4-19-16		
LOT NO. OF SEED	MTD 01-08-16 Field MT2-8 Ranch Manteca		
PLANTING METHOD *(Check One)*	SEEDED____ TRANSPLANTED X ESTABLISHED CROP____		
TYPE OF PLANTER OR TRANSPLANTER	Mechanical Transplanter		
~~***IF THIS IS A TREE FRUIT OR NUT TRIAL:***~~		NUMBER OF TREES PER PLOT	
IF THIS IS A FRUIT, NUT, OR ARTICHOKE TRIAL:		ESTIMATED BUSH/~~TREE HEIGHT~~	ok 4-20-16
IS THIS IS A GREENHOUSE TRIAL? *(check one)*		YES ___ NO ←	
Responses that do not fit above (e.g. Trt 04 plot dimensions or differing numbers of rows per plot) may be entered here:			

ABOVE DATA ENTERED BY: David Ennes *DATE:* 4-20-16

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
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Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 5. TRIAL SITE INFORMATION:

G. CULTURAL PRACTICES LOG

INSTRUCTIONS: List all soil preparation and crop maintenance activities (e.g., cultivation, pruning) performed on test site from the harvest of the previous crop until the residue samples are collected. If no crop was grown on the test site, collect data for a period beginning one year prior to planting the current crop. Include the activity (operation), dates performed, source of information (e.g., farmer), equipment used, and if known and appropriate, the depth into soil which the practice was performed (e.g., roto-tiller mixed soil to 6 inches) and initials/date of the individual responsible for collecting information.

OPERATION	DATE	INFO SOURCE	EQUIPMENT	INITIALS/DATE
The strawberry beds were covered with black plastic mulch, poked holes in plastic at each plant. The edge of plastic on each bed was sealed with soil	5-5-16	Direct entry	plastic mulch (black) and shovels	DK 5-5-16
Pulled weeds that had come up around plants through the plastic	5-25-16	Direct entry	Pulled by hand	DK 5-25-16
Harvested all mature fruit in TRT 01 and/or test plots	6-6-16	Direct entry	Harvested by hand	DK 6-6-16

Cultural Practices Data Are (*Check all that apply*): ORIGINAL DATA___ TRUE COPY___ TRANSCRIBED___

IF CULTURAL PRACTICES DATA ARE TRANSCRIBED, CHECK APPROPRIATE LINE BELOW

_____DATA WERE VERIFIED BY_____
(Print name above of someone other than transcriber and Quality Assurance)

_____DATA WERE OBTAINED VERBALLY FROM GROWER (THEREFORE, DATA WERE NOT VERIFIED)
Please document this communication in Part 3 of this Field Data Book.

_____DATA WERE TRANSCRIBED FROM WRITTEN RECORDS, BUT WERE NOT VERIFIED

ABOVE DATA ENTERED BY: _____ *DATE:* _____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
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Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 5. TRIAL SITE INFORMATION:

H. MAINTENANCE FERTILIZERS AND PESTICIDES (INCLUDE ADJUVANTS)

INSTRUCTIONS: Enter all maintenance pesticide and fertilizer applications during the trial. Include all chemicals necessary to produce the crop. (Row crops begin at first fertilizer, plowing and bed formation. Perennial crops include all maintenance materials necessary to produce that crop of fruit.) Note the date the chemical was applied, the ***active ingredient*** *applied, along with the trade name (**e.g. carbaryl/SEVIN 80 S**), the application rate of chemical and the units measured (i.e. lbs active ingredient per acre or pints product per acre), the purpose of the chemical (e.g., fertilizer, weeds, insects) and initials of the person responsible for direct supervision of the application with date of data entry. If two or more chemicals were tank mixed, list them together and bracket the tank mix on the form. If the crop was established from transplants, include all maintenance chemicals applied to the plants prior to transplanting. If treated seed was used, list treatment chemical (Date Applied would be "NA").*

If a facility or grower's list of all maintenance chemical applications is inserted here, the applications to the plots in this trial must be notated in some way to distinguish them from applications made to other areas of the farm or research facility.

DATE APPLIED	Active Ingredient	TRADE NAME	RATE *(units)*	PURPOSE	INITIALS/DATE
5-5-16	Urea	UN-32	20 lbs N per acre	Fertilizer	DK 5-5-16
5-27-16	Urea	UN-32	20 lbs N/A	Fertilizer	DK 5-27-16
6-10-16	Urea	UN-32	20 lbs N/A	Fertilizer	DK 6-10-16

MAINTENANCE FERTILIZERS AND PESTICIDES DATA ARE (*Check all that apply*):

ORIGINAL DATA_____ TRUE COPY_____ TRANSCRIBED_____

IF MAINTENANCE FERTILIZERS AND PESTICIDE DATA ARE TRANSCRIBED, check appropriate line below

_____DATA WERE VERIFIED BY_____
(Print name above of someone other than transcriber and Quality Assurance)

_____DATA WERE OBTAINED VERBALLY FROM GROWER (THEREFORE, DATA WERE NOT VERIFIED)
Please document this communication in Part 3 of this Field Data Book.

_____DATA WERE TRANSCRIBED FROM WRITTEN RECORDS, BUT WERE NOT VERIFIED

ABOVE DATA ENTERED BY: _____ *DATE:* _____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

Cumulative PUR Report

Date Applied 2015-01-01 - 2016-01-14

Operator :
Lassen Canyon Nursery Inc
Po Box 1275
Manteca, CA 95336
Permit No. **3901571**

material is applied to strawberry plants prior to planting at UCKARE ok 5-13-16

Site Info :
Site 2-8
2-8 - N-OUTDOOR TRANSPL - 46 Acres
All Blocks **N-OUTDOOR TRANSPL 45 Acres**
San Joaquin County STR : **14 02S 07E (M)**
Location : **S/PALM E/AUSTIN W/ HWY 99 LEACHING GWPA**

PUR-4332566

Treated Area: 11.25 Acres | Application Method: Ground | Spray Volume: 100 ga/A | Reentry Interval: 24 Hours | Row/Band: 72in/18in | Days to Harvest: 7 Days (Earliest Harvest Date: 2015-07-22)

Applied Date	Product Name & EPA	Active Ingredient	Pest	Rate	Total Product Used
2015-07-15 10:00:00	Loveland Products, Inc. Wrangler (34704-931)	Imidacloprid	Whitefly	1.5 floz/A	16.88 floz
2015-07-15 10:00:00	Loveland Products, Inc. Captan 80 WDG (CA) (34704-1075)	Captan	Spot, Leaf	3.75 lb/A	42.19 lb
2015-07-15 10:00:00	Syngenta Crop Protection, LLC Abound Flowable (100-1098-ZB)	Azoxystrobin	Anthracnose	15.5 floz/A	174.38 floz

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PUR-4466006

Treated Area: 22.5 Acres | Application Method: Ground | Spray Volume: 400 ga/A | Reentry Interval: 12 Days | Row/Band: 72in/36in | Days to Harvest: 12 Days (Earliest Harvest Date: 2015-08-18)

Applied Date	Product Name & EPA	Active Ingredient	Pest	Rate	Total Product Used
2015-08-06 10:00:00	Makhteshim Agan of North America, Inc. d/b/a ADAMA Thionex 50W (66222-62)	Endosulfan	Mite, Cyclamen	2 lb/A	45.00 lb

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PUR-4491991

Treated Area: 30 Acres | Application Method: Ground | Spray Volume: 100 ga/A | Reentry Interval: 24 Hours | Row/Band: 72in/48in | Days to Harvest: 0 Days (Earliest Harvest Date: 2015-08-19)

Applied Date	Product Name & EPA	Active Ingredient	Pest	Rate	Total Product Used
2015-08-19 10:00:00	*Captan 80 WDG (CA) (34704-1075)*	Captan	Spot, Leaf	3.75 lb/A	112.50 lb
2015-08-19 10:00:00	BASF Corporation Cabrio(R) EG Fungicide (7969-187)	Pyraclostrobin	Spot, Leaf	14 oz/A	420.00 oz
2015-08-19 10:00:00	BASF Corporation Pristine(R) Fungicide (7969-199)	Boscalid	Anthracnose	23 oz/A	690.00 oz

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PUR-4526936

Treated Area: 45 Acres | Application Method: Ground | Spray Volume: 100 ga/A | Reentry Interval: 24 Hours | Days to Harvest: 0 Days (Earliest Harvest Date: 2015-09-07)

Applied Date	Product Name & EPA	Active Ingredient	Pest	Rate	Total Product Used
2015-09-07 10:00:00	Chemtura Corporation Acramite 50WS (023/021711) (400-503-ZA)	Bifenazate	Spider Mite, Two-Spotted	1 lb/A	45.00 lb
2015-09-07 10:00:00	Dow AgroSciences Rally 40 WSP (62719-410-ZC)	Myclobutanil	Powdery Mildew	5 oz/A	225.00 oz
2015-09-07 10:00:00	Syngenta Crop Protection, LLC Quadris Top (CA) (100-1313-ZA)	Azoxystrobin	Anthracnose	14 floz/A	630.00 floz

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PUR-4577737

Treated Area: 45 Acres | Application Method: Ground | Spray Volume: 100 ga/A | Reentry Interval: 24 Hours | Days to Harvest: 7 Days (Earliest Harvest Date: 2015-10-08)

Applied Date	Product Name & EPA	Active Ingredient	Pest	Rate	Total Product Used
2015-10-01 10:00:00	Loveland Products, Inc. Wrangler (34704-931)	Imidacloprid	Whitefly	1.5 floz/A	67.50 floz

Received as an email attachment on 5-11-16. Info from grower ok 5-12-16

materials applied to strawberry plants prior to planting at UCKARE ok 5-13-16

2015-10-01 10:00:00	Loveland Products, Inc. Captan 80 WDG (34704-1075)	Captan	Spot, Leaf	3.75 lb/A	168.75 lb
2015-10-01 10:00:00	Micro Flo Company LLC Malathion 8EC (51036-214)	Malathion: O,o-Dimethyl Phosphorodi	Whitefly	2 pt/A	90.00 pt
2015-10-01 10:00:00	United Phosphorus, Inc. Topsin M WSB (73545-16-AA-70506)	Thiophanate-Methyl	Powdery Mildew, Sphaerotheca	1 lb/A	45.00 lb
2015-10-01 10:00:00	Valent U.S.A. Corporation Agricultural Products Danitol(r) 2.4 EC Spray (59639-35)	Fenpropathrin	Whitefly, Strawberry	16 floz/A	720.00 floz

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PUR-4613670 Treated Area: 45 Acres Application Method: Ground Spray Volume: 100 ga/A Reentry Interval: 24 Hours Days to Harvest: 0 Days (Earliest Harvest Date: 2015-10-12)

Applied Date	Product Name & EPA	Active Ingredient	Pest	Rate	Total Product Used
2015-10-12 10:00:00	Dow AgroSciences Rally 40 WSP (62719-410-ZC)	Myclobutanil	Spot, Leaf	5 oz/A	225.00 oz
2015-10-12 10:00:00	Loveland Products, Inc. Captan 80 WDG (34704-1075)	Captan	Spot, Leaf	3.75 lb/A	168.75 lb
2015-10-12 10:00:00	Syngenta Crop Protection, LLC Switch 62.5WG (100-953)	Cyprodinil	Powdery Mildew	14 oz/A	630.00 oz

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PUR-4613708 Treated Area: 45 Acres Application Method: Other Spray Volume: 2 in/A Reentry Interval: 48 Hours Days to Harvest: 0 Days (Earliest Harvest Date: 2015-10-16)

Applied Date	Product Name & EPA	Active Ingredient	Pest	Rate	Total Product Used
2015-10-16 10:00:00	Nufarm Americas Inc. Champ Formula 2 Flowable (55146-64-ZA)	Copper Hydroxide	Spot, Leaf	2 pt/A	90.00 pt

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PUR-4657501 Treated Area: 45 Acres Application Method: Air Spray Volume: 10 ga/A Reentry Interval: 24 Hours Days to Harvest: 0 Days (Earliest Harvest Date: 2015-10-31)

Applied Date	Product Name & EPA	Active Ingredient	Pest	Rate	Total Product Used
2015-10-31 10:00:00	BASF Corporation Pristine(R) Fungicide (7969-199)	Boscalid	Anthracnose	23 oz/A	1035.00 oz
2015-10-31 10:00:00	Dow AgroSciences Rally 40 WSP (62719-410-ZC)	Myclobutanil	Powdery Mildew	5 oz/A	225.00 oz
2015-10-31 10:00:00	Loveland Products, Inc. Captan 80 WDG (34704-1075)	Captan	Spot, Leaf	3.75 lb/A	168.75 lb

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PUR-4676673 Treated Area: 45 Acres Application Method: Air Spray Volume: 10 ga/A Reentry Interval: 24 Hours Days to Harvest: 0 Days (Earliest Harvest Date: 2015-11-21)

Applied Date	Product Name & EPA	Active Ingredient	Pest	Rate	Total Product Used
2015-11-21 17:00:00	BASF Corporation Cabrio(R) EG Fungicide (7969-187)	Pyraclostrobin	Anthracnose	14 oz/A	630.00 oz
2015-11-21 17:00:00	Syngenta Crop Protection, LLC Quadris Top (CA) (100-1313-ZA)	Azoxystrobin	Anthracnose	14 floz/A	630.00 floz
2015-11-21 17:00:00	United Phosphorus, Inc. Topsin M WSB (8033-125-AA-70506)	Thiophanate-Methyl (dimethyl[1,2-Ph	Powdery Mildew	1 lb/A	45.00 lb

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PUR-4754756 Treated Area: 45 Acres Application Method: Other Spray Volume: .5 in/A Reentry Interval: 0 Days Days to Harvest: 0 Days (Earliest Harvest Date: 2015-12-08)

Received as an email attachment on 5-11-16. Info from grower ok 5-12-16

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 5. TRIAL SITE INFORMATION:

I. CROP DESTRUCTION

INSTRUCTIONS: Describe how the remaining crop (after the completion of this field trial) has been destroyed or handled in such a way that it is not consumed as a human food or animal feed. Include the date(s) of destruction or handling activities. If the (leftover) treated crop was not destroyed because the pesticide use in this trial is registered in your state or territory or province, then that should be indicated here:

The fruit that was harvested on 6-6-16 was placed into the crop destruct area at VCKHRE on 6-6-16.
OK 7-1-16 The remaining treated plants and crop were disced into the ground on 7-1-16.

OK 7-1-16

SOURCE OF DATA: Direct entry
(Facility records, grower's records, etc.)

DATA WERE OBTAINED VERBALLY FROM GROWER: YES_____ NO ✓

Please document this communication in Part 3 of this Field Data Book.

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-6-16

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
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Application
Part 6

Application #1

Soil/Irrigation

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

A. EQUIPMENT

*INSTRUCTIONS: Complete a separate form for **each piece** of test substance application equipment used in the trial.*

EQUIPMENT USED FOR **APPLICATION NUMBER(S)** 1, 2 - 00k 6-8-16

EQUIPMENT IDENTIFIER[1] Drip irrigation system with mazzei injector

[1]*Each test substance application equipment must have a unique identifying name or code*

APPLICATION EQUIPMENT TYPE *(Check one)* TRACTOR____ BACKPACK____ GRANULAR____

OTHER X *(Describe)* drip irrigation system with mazzei injector

PROPELLANT *(Check one)* CO_2_____ COMPRESSED AIR_____ PUMP_____

OTHER X *(Describe)* water under pressure

TYPE OF APPLICATION *(Check all that apply)*

1) FOLIAR_____ TO THE GROUND_____

2) BROADCAST_____ BANDED_____ DIRECTED_____ IN-FURROW_____

3) OTHER X *(Describe)* drip irrigation through emitters

NUMBER OF PASSES THAT ARE NEEDED TO TREAT THE PLOT _____

NUMBER OF NOZZLES OR HOPPER OUTLETS USED		880 drip emitters	
MESH SIZE USED IN THE STRAINERS	Does not apply	SPACING BETWEEN NOZZLES OR HOPPER OUTLETS	12 inches between emitters
NOZZLE BRAND/TYPE/SIZE *(e.g. T-JET 8004, even flat fan)*:		Drip lines with drip emitters	

TREATED AREA[2] 20 ft x 110 ft = 2200 ft^2

[2]*Calculated width of nozzle discharge pattern (CWNDP) at proper boom height X length of plot sprayed or treated. For a broadcast application, CWNDP = (# of nozzles X nozzle spacing). For a banded application, CWNDP = # of nozzles X swath per nozzle. If application is foliar or soil directed enter row width X # of rows X length of plot sprayed or treated; treated row width may differ from actual row width when the actual row width is wider or narrower than local commercial practices. In this circumstance, the application rate should be calculated using a local commercial row width, and an explanation should be included on this page or inserted behind this page. Contact the Study Director if guidance is needed.*

DOES TREATED AREA (for application rate calculations) = PLOT AREA (from Parts 5C and 5F)? YES_____ NO ✓

(For foliar directed and soil directed applications, check "YES" above unless local commercial row widths are used instead of the actual row width on the research plot. This prompt is intended to help data reviewers calculate the application rates correctly.)

IF NO, PLEASE EXPLAIN: The actual plot area is 20 ft x 100 ft = 2000 ft^2. The area treated was larger than the actual plot area.

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-1-16

Total number of pages in this section at initial pagination: ____

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Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: __

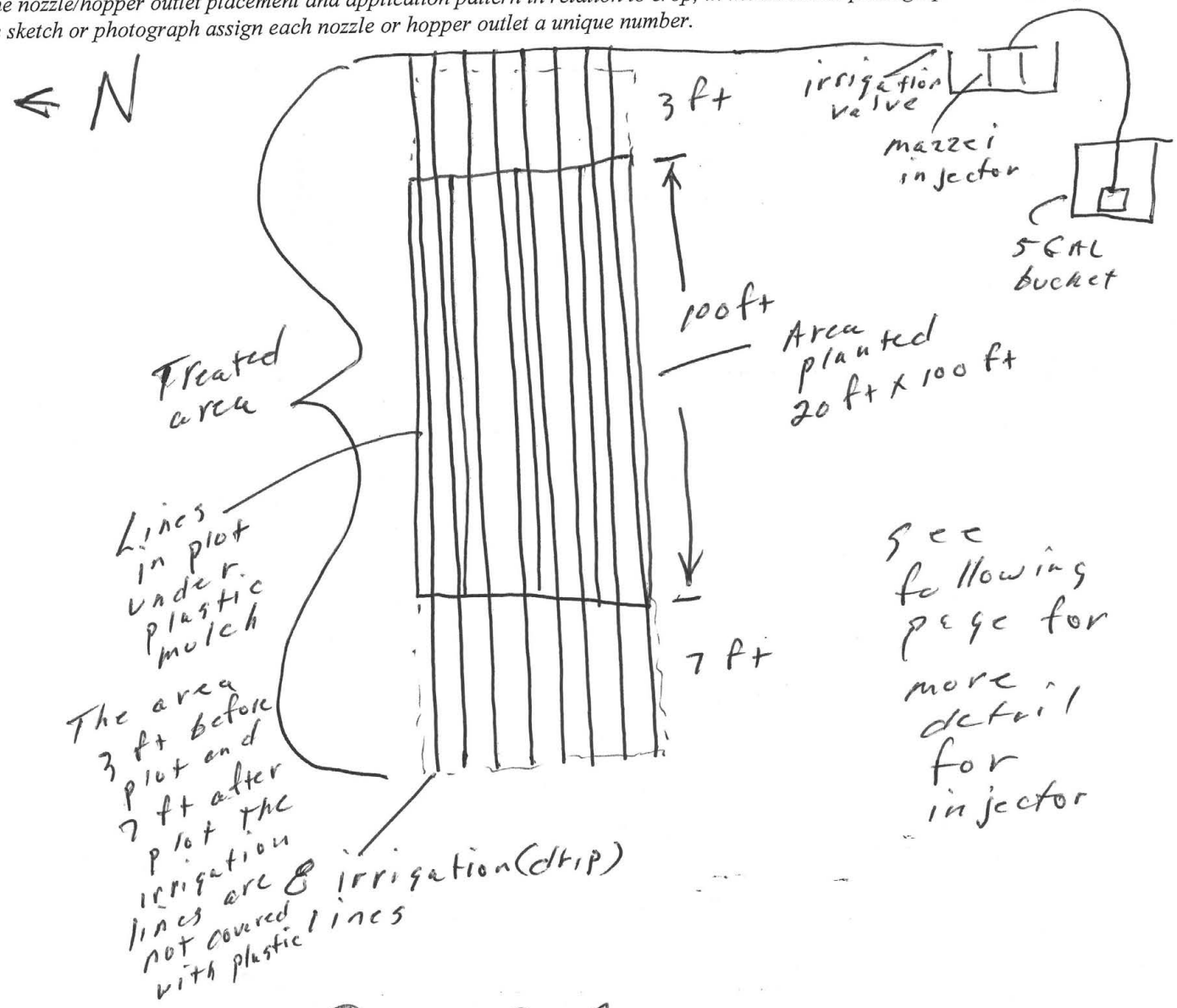
IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

B. DIAGRAM OF APPLICATION EQUIPMENT

EQUIPMENT USED FOR **APPLICATION NUMBER(S)** 1,2- OPC-8-16

*INSTRUCTIONS: Complete a separate form for **each piece** of test substance application equipment used in the trial. Sketch a diagram and/or provide clear photograph of application equipment. Include the relative location and size of the target crop and the nozzle/hopper outlet placement and application pattern in relation to crop, in the sketch or photograph. In addition, on the sketch or photograph assign each nozzle or hopper outlet a unique number.*



ABOVE DATA ENTERED BY: Daniel Ennes *DATE:* 6-1-16

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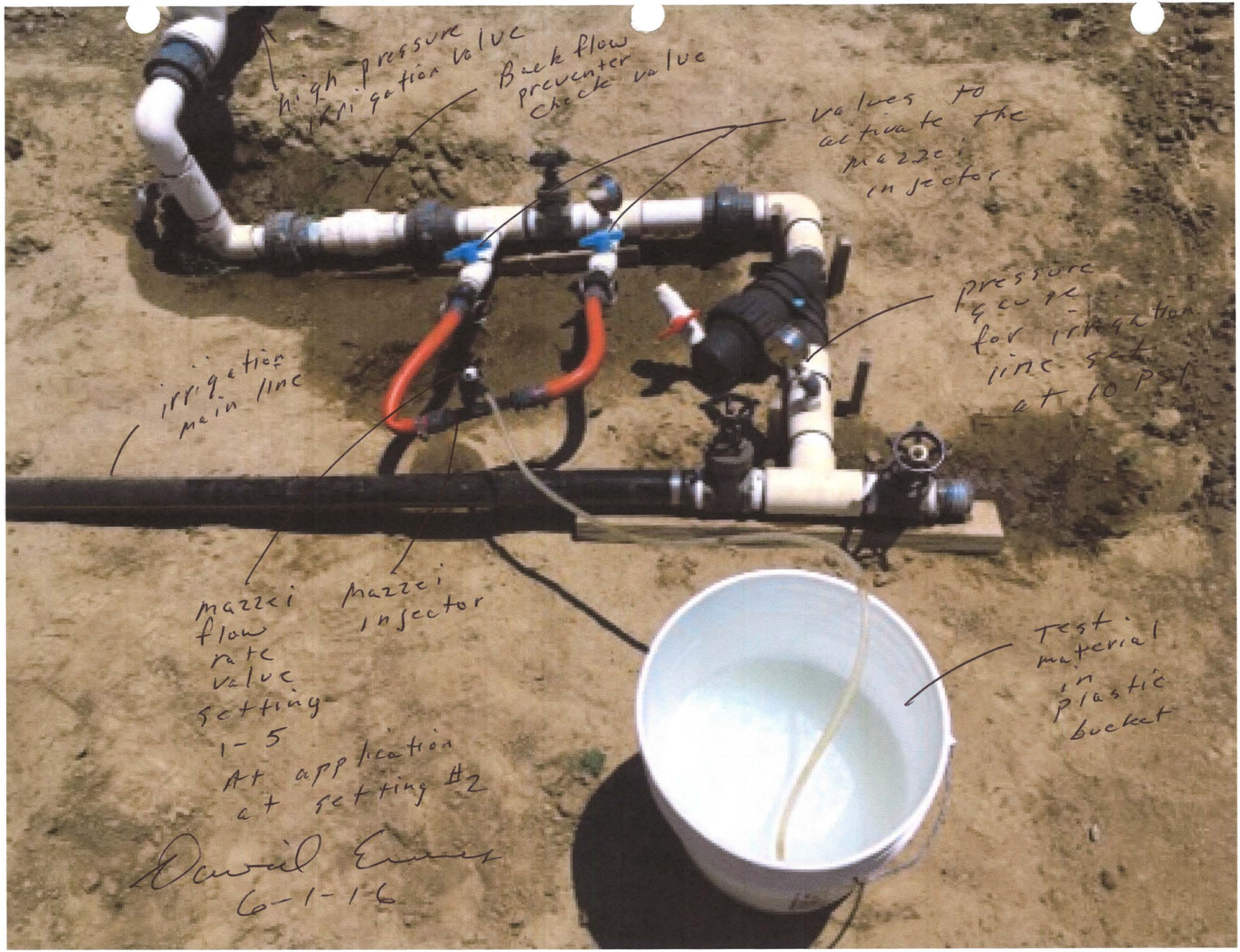
high pressure irrigation valve
Back flow preventer check valve
valves to activate the mazzei injector
pressure gauge for irrigation line set at 10 PSI
irrigation main line
mazzei flow rate valve setting 1-5 At application at setting #2
mazzei injector
test material in plastic bucket
Daniel Emmet
6-1-16

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

Drip irrigation emitters

PART 6. APPLICATION RECORDS

C.1. DISCHARGE CALIBRATION FOR **APPLICATION NUMBER** 1

INSTRUCTIONS: Complete a copy of this form (PHOTOCOPY IF NECESSARY) for additional times when a complete calibration or calibration-recheck of application equipment is required.

EQUIPMENT IDENTIFIER Drip irrigation system with mazzei injector

DISCHARGE CALIBRATION DATE 6-1-16 PERFORMED BY DJE and KS *(INITIALS)*

APPROXIMATE TIME OF DAY THAT THE CALIBRATION WAS PERFORMED 9:35 Am

LOCATION WHERE THE CALIBRATION WAS PERFORMED Drip lines in TRT 02 test plot at UCKARE

DISCHARGE UNITS MEASURED *(e.g. ml, oz., grams)* ml

INSTRUMENT USED TO MEASURE WATER *(e.g. 100 ml graduated cylinder)* 100 ml graduated cylinder - 1 ml increments

BRIEFLY DESCRIBE PROCEDURE USED TO CHECK DISCHARGE CALIBRATION Drip irrigation emitter 1 and 110 were caught three times into plastic trays on each line (8). The volume in trays was measured in a graduated cylinder. The time that each emitter was caught for was measured with a stop watch.

DJE 6-1-16

The table for entering output results is now on 6.C.2 (next page).

CALIBRATION CALCULATIONS:

ABOVE DATA ENTERED BY: David Ennes DATE: 6-1-16

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Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

C.2. DISCHARGE CALIBRATION FOR **APPLICATION NUMBER** 1

INSTRUCTIONS: Complete a copy of this form (PHOTOCOPY IF NECESSARY) for additional times when a complete calibration or calibration-recheck of application equipment is required.

DISCHARGE CALIBRATION *Record time applicator is allowed to discharge. Collect output from each nozzle or hopper. Record this value in "RUN" Column 1 next to the appropriate outlet. Calculate the total and average discharge for all the nozzles/hoppers. Entry prompts have been provided for 3 discharge calibration runs. Calculate sums and averages of each nozzle/hopper outlet AND whether the results are within 5% (if applicable). Enter all calculations on 6.C.1.*

Output Run Number		1	2	3	Total (Required)	Average (Optional)
Pressure (psi)						
Time (seconds)						
Nozzle/Hopper Outlet Number Along Boom (These numbers should match those shown in the equipment diagram in 6.B)	1					
	2		Refer to	the fo	llowing pa	ge
	3		Ok	6-1-16		
	4					
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
Total						
Output per Nozzle or Outlet						
Output per Second						

Was this a recheck of discharge calibration or a target output? *(Check one)* YES_____ NO_____

If yes, were results within 5% of original calibration or target output? *(Check one)* YES_____ NO_____

If this is a 3-discharge calibration run, is each "output per second" (bottom row in Columns 1, 2, and 3) within 5% of the mean? *(Check one)* YES_____ NO_____

An output consisting of an average of three runs or a target output may be used when calculating the sprayer output and amount of test substance to use. If this is a recheck (one run) then the results of the original calibration must be used. If the output result of the recheck is more than 5% different than the original calibration result, then two more runs are needed to produce a new, full calibration. The original calibration data, or a true copy, must be in this field data book.

ABOVE DATA ENTERED BY: David Ennes DATE: 6-1-16

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Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

Drip Irrigation Emitter Output

① (EE) DK 6-1-16

Irrigation Line	1	Catch Time (sec)	2	Catch Time (sec)	3	Catch Time (sec)	4	Catch Time (sec)
First Emitter		① ~~60.19~~						
Run 1 ml	32	60.19	36	60.13	34	60.07	35	60.28
Run 2 ml	32	60.06	40	60.22	34	60.16	35	59.97
Run 3 ml	34	60.09	38	60.19	34	60.09	36	60.06
Last Emitter						①		
Run 1 ml	28	60.19	28	60.13	38	~~3~~60.07	38	60.28
Run 2 ml	30	60.06	32	60.22	36	60.16	38	59.97
Run 3 ml	32	60.09	32	60.19	38	60.09	38	60.06
Total	188	360.68	206	361.08	214	360.64	220	360.62

Irrigation Line	5	Catch Time (sec)	6	Catch Time (sec)	7	Catch Time (sec)	8	Catch Time (sec)
First Emitter								
Run 1 ml	33	60.10	34	60.09	36	60.16	36	60.34
Run 2 ml	33	60.09	34	60.07	38	60.19	36	60.19
Run 3 ml	32	60.03	34	60.16	38	60.07	36	60.18
Last Emitter								
Run 1 ml	35	60.10	33	60.09	32	60.16	31	60.34
Run 2 ml	33	60.09	34	60.07	34	60.19	32	60.19
Run 3 ml	33	60.03	34	60.16	34	60.07	34	60.18
Total	199	360.44	203	360.64	212	360.84	205	361.42
Total ml Line 1-8	1647							
Total sec Line 1-8	2886.36							

1647 ml ÷ 48 catches = 34.31 ml/emitter average

2886.36 sec ÷ 48 catches = 60.13 sec average catch time

Signature David Ennes **Date** 6-1-16

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

Mazzei injector

C.1. DISCHARGE CALIBRATION FOR **APPLICATION NUMBER** 1

INSTRUCTIONS: Complete a copy of this form (PHOTOCOPY IF NECESSARY) for additional times when a complete calibration or calibration-recheck of application equipment is required.

EQUIPMENT IDENTIFIER Drip irrigation system with mazzei injector

DISCHARGE CALIBRATION DATE 6-1-16 PERFORMED BY DJE *(INITIALS)*

APPROXIMATE TIME OF DAY THAT THE CALIBRATION WAS PERFORMED 10:53 AM

LOCATION WHERE THE CALIBRATION WAS PERFORMED Irrigation valve south of plot at UCKARE

DISCHARGE UNITS MEASURED *(e.g. ml, oz., grams)* ml

INSTRUMENT USED TO MEASURE WATER *(e.g. 100 ml graduated cylinder)* 4000 ml graduated cylinder 50 ml increments

BRIEFLY DESCRIBE PROCEDURE USED TO CHECK DISCHARGE CALIBRATION The mazzei injector was set up and operational. Then filled a 4000 ml graduated cylinder to the 4000 ml mark and timed how long required to draw water down to the 3000ml mark with a stop watch. Filled the cylinder back to the 4000 ml mark and repeated the same steps. This was done a total of three times.

The table for entering output results is now on 6.C.2 (next page).

CALIBRATION CALCULATIONS: Mazzei unit #2 Setting #2

$$\frac{1000 \text{ ml}}{117.15 \text{ sec}} \therefore \frac{X \text{ ml}}{1718.4 \text{ sec}} = 14668.0 \text{ ml}$$

1718.4 sec time to deliver 1/3 of irrigation water

ABOVE DATA ENTERED BY: David Ennes DATE: 6-1-16

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Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
FIELD ID NO: _ Ennes

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

C.2. DISCHARGE CALIBRATION FOR **APPLICATION NUMBER** 1

INSTRUCTIONS: Complete a copy of this form (PHOTOCOPY IF NECESSARY) for additional times when a complete calibration or calibration-recheck of application equipment is required.

DISCHARGE CALIBRATION *Record time applicator is allowed to discharge. Collect output from each nozzle or hopper. Record this value in "RUN" Column 1 next to the appropriate outlet. Calculate the total and average discharge for all the nozzles/hoppers. Entry prompts have been provided for 3 discharge calibration runs. Calculate sums and averages of each nozzle/hopper outlet AND whether the results are within 5% (if applicable). Enter all calculations on 6.C.1.*

Output Run Number		1	2	3	Total (Required)	Average (Optional)
Pressure (psi)		10	10	10		
Time (seconds)		114.84	118.03	118.59	351.46	117.15
Nozzle/Hopper Outlet Number Along Boom (These numbers should match those shown in the equipment diagram in 6.B)	1	1000 ml	1000 ml	1000 ml	3000 ml	1000 ml
	2					
	3					
	4					
	5					
	6			DK	6-1-16	
	7					
	8					
	9					
	10					
	11					
	12	1000 ml	1000 ml	1000 ml	3000 ml	1000 ml
Total		↓	↓	↓	↓	↓
Output per Nozzle or Outlet						
Output per Second						DK 6-1-16

Was this a recheck of discharge calibration or a target output? *(Check one)* YES_____ NO ✓

If yes, were results within 5% of original calibration or target output? *(Check one)* ~~YES_____~~ NO DK 6-1-16

If this is a 3-discharge calibration run, is each "output per second" (bottom row in Columns 1, 2, and 3) within 5% of the mean? *(Check one)* YES ✓ NO_____

An output consisting of an average of three runs or a target output may be used when calculating the sprayer output and amount of test substance to use. If this is a recheck (one run) then the results of the original calibration must be used. If the output result of the recheck is more than 5% different than the original calibration result, then two more runs are needed to produce a new, full calibration. The original calibration data, or a true copy, must be in this field data book.

ABOVE DATA ENTERED BY: David Ennes DATE: 6-1-16

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Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: __

IR-4 FIELD DATA BOOK

MEMO to the FILE

Treated area 20ft x 110ft = 2200 ft^2

34.31 m/s / 60.135ec Average output and time

34.31 m/s x 280 emitters in treated area =

3608.8 m/s ÷ 3785 ml/GAL = 7.98 GAL

$\frac{7.98\ GAL}{2200\ ft^2}$ :: $\frac{X\ GAL}{43560\ ft^2/A}$ = 158.00 GAL/A

60.13 sec Average catch time = 1.00 min
60 sec/min

1 min :: X min = 85.93 min.
158.00 GAL 13577 GAL
(0.5 Acre in)

85.93 min ÷ 1/3 of irrigation water = 28.64 min

28.64 min x 60 sec/min = 1718.4 sec

PART _____ PAGE _____

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Trial Year 2015

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ID No. 11719.16-CA55
Ennes

FIELD ID NO:

IR-4 FIELD DATA BOOK

MEMO to the FILE

27154 GAL ÷ 2 = 13577 GAL

1 Acre inch water = 0.5 Acre in. water

Irrigation started at 12:12 PM

Irrigation stopped at 1:38 PM

output of the irrigation system

7.98 GAL / min per 2200ft²

Irrigation system ran for 1 hr 26 min =

86 min

$\frac{7.98\ GAL}{1\ min} \therefore \frac{X\ GAL}{86\ min} = 686.28\ GAL/2200ft^2$

$\frac{686.28\ GAL}{2200ft^2} \therefore \frac{X\ GAL}{43560ft^2/A} = 13588.34\ GAL/Acre$

13588.34 GAL/Acre = 0.50 in of water

OR ~~(EE) 13577 GAL (0.5 acre in)~~ applied to plot

6-1-16 27154 GAL / Acre in

PART _____ PAGE _____

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Trial Year 2015

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Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

D. SPEED CALIBRATION FOR **APPLICATION NUMBER(S)** 1

INSTRUCTIONS: Complete a separate form for additional times when a complete calibration or calibration- recheck of application equipment is required.

EQUIPMENT IDENTIFIER Drip irrigation system with Mazzei injector

SPEED CALIBRATION DATE _____ PERFORMED BY _____ *(INITIALS)*

TERRAIN OF CALIBRATION TRACK *(e.g. tilled field)* _____

LOCATION WHERE THE CALIBRATION WAS PERFORMED _____

BRIEFLY DESCRIBE PROCEDURE USED FOR SPEED CALIBRATION _____

Speed calibration not needed
DK 6-1-16

SPEED CALIBRATION: *Calculate the speed of the application equipment. If appropriate, note the gear setting and /or RPM setting used in the speed calibration. Indicate the distance (in feet) of the track on which the application equipment was tested to determine speed (e.g. speed of application equipment tested for 100 ft.). The speed is calculated by dividing the length of test track (in feet or meters) by the time needed to cover that length (in seconds). Entry prompts have been provided for 2 additional runs. If this is a recheck, calculate the result is within 5% of the original calibration. Show all calculations.* ***A speed recheck (one run) is required whenever an output recheck is performed, except for multiple applications within a study that are being made on the same day on the same farm.***

RUN	GEAR	RPM	Length of test track (include units)	TIME (sec)	CALCULATED SPEED (include units)
1					
2					
3					
Total of test run times (sec)			Average time (sec)		Average speed

CALCULATIONS:

WAS THIS A RECHECK OF SPEED CALIBRATION? *(Check one)* YES_____ NO_____
IF YES, WERE RESULTS WITHIN 5% OF ORIGINAL CALIBRATION? *(Check one)* YES_____ NO_____
The original calibration data, or a true copy, must be in this field data book.

NOTE: A target speed may be used for application calculations, rather than the mean of three runs, but for each application a full speed calibration must be conducted, and the mean of the three runs must be within 5% of the target speed.
WAS THIS A CHECK OF A TARGET SPEED? *(Check one)* YES_____ NO_____
IF YES, WERE RESULTS WITHIN 5% OF TARGET SPEED? *(Check one)* YES_____ NO_____

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Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

E. DELIVERY RATE CALIBRATION FOR **APPLICATION NUMBER(S)** 1

INSTRUCTIONS: Complete a separate form for each application, unless the same parameters are used-- you are using the same equipment, and have performed a recheck to confirm the result of the full calibration. Determine the rate of delivery from the application equipment. Briefly describe the procedure, including formulas used to determine delivery rate calibration. Show all calculations and units. Equations used in electronic (computer software) calculations in this trial must be transcribed or printed out and attached here. Computer-generated values (as opposed to those entered by the field cooperators) must be reviewed and clearly delineated by circling, initialing, and dating.

PROCEDURE/FORMULA:

Form not needed
Ok 6-1-16

CALCULATIONS:

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-1-16

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Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

F. VOLUME, MIXING AND DILUTION CALCULATIONS FOR **APPLICATION NUMBER(S)** 1

INSTRUCTIONS: Complete a separate form for each application, unless there are no changes in multiple applications. Show all calculations, formulas, and results below, define units of measure, and cite the initials of the person performing the calculations. Equations used in electronic (computer software) calculations in this trial must be transcribed or printed out and attached here. Computer-generated values (as opposed to those entered by the field cooperators) must be reviewed and clearly delineated by circling, initialing, and dating.

Treated area 20 ft x 110 ft = 2200 ft²

Test substance rate 0.143 lb a.i./A 0.834 lb a.i. per GAL

$$\frac{0.143 \text{ lb ai}}{\text{Acre}} \times \frac{2200 \text{ ft}^2}{43560 \text{ ft}^2/\text{A}} \times \frac{1.0 \text{ GAL}}{0.834 \text{ lb ai}} \times \frac{3785 \text{ ml}}{\text{GAL}} = 32.8 \text{ ml}$$

DESCRIBE HOLDING AND TRANSPORT OF TEST SUBSTANCE AND ADJUVANT (if applicable) FROM STORAGE AREA TO LOCATION OF TANK MIXING *(E.g.: "Test substance held securely in an insulated cooler during transport to field site in the bed of a pickup truck" or "Tank mix prepared within walking distance of the chemical storage building")*

The test substance was transported ambient in a plastic tray inside a utility box on the back of a pickup truck OK 6-1-16

ABOVE DATA ENTERED BY: David Ennes DATE: 6-1-16

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Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

G. APPLICATION INFORMATION FOR **APPLICATION NUMBER** 1 APPLICATION DATE 6-1-16

HAS THE APPLICATION EQUIPMENT BEEN USED SINCE THE LAST CALIBRATION/RECHECK WAS PERFORMED? *(Check one)* YES_____ NO ✓ (If you are about to check YES, then a recheck is usually required.)

INSTRUCTIONS: **Complete a separate form for each application date and for each treatment on one application date (use the Treatment Number as indicated in the protocol).** *Provide the name of the test substance (common chemical name or chemical code number); the batch or lot number of the test substance; the approximate time the test substance was mixed with the carrier and the approximate time the mixture was applied to the plots, along with* ***the initials of the person(s) mixing and spraying the tank mix****; the time of additional agitation (if any); the unique name or code for the application equipment used to apply this treatment; the placement of the test substance (e.g. broadcast, in-furrow, directed, knifed-in, banded); the amount of carrier, formulated product and other additives in the mix; the measuring equipment with increments; the distance (include units) of the nozzles above the canopy or ground (indicate which); the pressure in pounds per square inch at the boom; if treatment(s) were incorporated, the method and/or equipment used to incorporate the test substance mix (e.g. disked, rotovator, irrigated, etc.), depth to which the test substance was incorporated* ***or*** *the amount of water used to move the test substance into the soil; the time after treatment the incorporation activity was performed; and the carrier (normally water), its source (e.g. farm pond, city water), pH of the carrier and its temperature, and the equipment used to measure the carrier pH.*

	TRT Number 02	
NUMBER OF DAYS SINCE PREVIOUS APPLICATION	NA	TIME OF ADDITIONAL AGITATION/INITIALS (if applicable) e.g. "10:00" or "continuous" or "just prior to application"
TEST SUBSTANCE	A20941A OX TP 100 OD	
BATCH/LOT NUMBER/Container#[1]	916099 Batch code GA08-01	
TIME MIXED/INITIALS	12:07 pm DK	The spray solution was stirred occasionally during the application
TIME APPLIED/INITIALS	12:12pm DK	
EQUIPMENT IDENTIFIER	Drip irrigation system with mazzei injector	
PLACEMENT OF TEST SUBSTANCE	Drip irrigation water to soil in test plot	
TANK MIX AMOUNTS		MEASURING EQUIPMENT with INCREMENTS*
CARRIER (starting volume of water)	14668ml	See following page
VOLUME of WATER REMOVED from starting volume (if applicable)	32.8 ml	DK 6-1-16
TEST SUBSTANCE (formulated product)	32.8 ml	
ADJUVANT OR SURFACTANT	None	
TOTAL VOLUME OF TANK MIX	14668 ml	*e.g. 1000 mL grad. cylinder/10 ml incr.
NOZZLE DISTANCE from TARGET	8 lines of drip emitters in plot at soil	ORDER IN WHICH ITEMS WERE ADDED TO SPRAY MIXTURE* W=Water, TS=Test Substance, A=Adjuvant *e.g. 1-W, 2-TS, 3-A, 4-W
PSI AT BOOM	10 PSI at Irrigation	
INCORPORATION - Methodology and/or Equipment - DEPTH - TIME	Drip irrigation system depth not known 12:12 - 1:38 pm	1-W 2-TS
CARRIER SOURCE/TYPE	UCKARE well water	
CARRIER pH/TEMPERATURE	7.0 94°F	
EQUIPMENT used to MEASURE pH	Ph strip	

[1] *If more than one test substance container was received for this trial. If not, only batch or lot number is needed.*

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-1-16

Description of Equipment Used to Measure Test Substances, Adjuvant and Carrier Water

Oxathiapiprolin / Strawberry
FIELD ID No. ID No. 11719.16-CA55 **Application No.** 1
Ennes

The following equipment was used in this study:

To remove volume of water: 25 ml pipette

Scale for solid Test Substance:

____ Mettler Toledo Scale, Model PL 303 (0.001gr increments)
____ Ohaus Portable Advanced Scale, Serial No. 16625 (0.01 gr increments)

Pipettes:*

Test Sub. (Liquid)	Adjuvant
____ 5 ml	____ 5 ml
____ 10 ml	____ 10 ml
X 25 ml	____ 25 ml

Cylinders:**

Test Substance	Adjuvant	Carrier Water
____ 50 ml	____ 50 ml	____ 50 ml
OR 6-1-16		
____ 100 ml	____ 100 ml	X 100 ml
____ 250 ml	____ 250 ml	____ 250 ml
____ 500 ml	____ 500 ml	____ 500 ml
____ 1000 ml	____ 1000 ml	X 1000 ml
____ 4000 ml	____ 4000 ml	X 4000 ml
		____ Scienco Flow meter

*The pipettes used to measure test substances or adjuvants are 5 ml, 10 ml and 25 ml (TD) plastic pipettes. The 5 ml and 10 ml pipettes measure in 0.1 ml increments and the 25 ml pipette measures in 0.2 ml increments.

**The graduated cylinders used to measure test substance, adjuvant or carrier water are 50,100, 250, 500, 1000 and 4000 mls. The 50 and 100 ml cylinders measure in increments of 1 ml, 250 ml cylinder in 2 ml increments, 500 ml cylinder in 5 ml increments, 1000 ml cylinder in 10 ml increments and the 4000 ml cylinder in 50 ml increments. Carrier water for airblast sprays is measured with a Scienco flow meter which measures water out to hundredths (i.e. 1.00)

Signature: David Ennes **Date:** 6-1-16

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

H. ADDITIONAL INFORMATION FROM **APPLICATION NUMBER** 1

APPLICATION DATE 6-1-16 *(Complete a separate form for each application date)* V6-1-16

PLANT GROWTH & ENVIRONMENTAL DATA AT THE TIME OF APPLICATION	Enter data in this column
CROP HEIGHT *(Measure or estimate crop height, include units of measurements)*	6-9 inches
CROP GROWTH STAGE *(e.g. seed, vegetative, bud, bloom, fruiting, #true leaves)*	fruiting
CROP VIGOR *(e.g. poor, fair, good, variable)**	Good
PLANT SURFACE MOISTURE *(Check one)*	**SATURATED**___ **DAMP**___ **DRY** X **NA**___
ESTIMATED % OF SOIL AREA COVERED BY CROP CANOPY	30
MEASURED AIR TEMPERATURE *(Check F or C)* (E.g. 75 °F √ °C___)	98.1 °F X °C___
MEASURED WIND SPEED *(Check MPH or Km/Hr)* (E.g. 0.5 MPH √ Km/Hr___)	0.9-4.1 **MPH** X **Km/Hr**___
WIND DIRECTION FROM *(Check one)*	**N**___ **NE**___ **E**___ **SE**___ **S** X **SW**___ **W**___ **NW**___ or **NO WIND**___
ESTIMATED % OF CLOUDS IN THE SKY	0
MEASURED RELATIVE HUMIDITY%	23
DEW *(heavy, light, none, etc.)*	none
DESCRIPTION OF SOIL TILTH *(smooth, firm, packed, cloddy, etc.)*	Smooth
ESTIMATE OF SOIL SURFACE MOISTURE *(wet, moist, dry, etc.)*	Moist
SOIL TEMPERATURE *(Check F or C)*	82 °F X °C___
DEPTH OF MEASUREMENT OF SOIL TEMPERATURE *(Check INCHES or cm)*	4 **INCHES** X **cm**___

*IF CROP VIGOR IS POOR OR VARIABLE, EXPLAIN: _____

DM 6-1-16

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-1-16

BRIEFLY DESCRIBE PROCEDURE USED TO CLEAN APPLICATION EQUIPMENT AND IDENTIFY WHO CLEANED IT:

After all of the T.S. had been injected from the 5 gallon bucket the bucket was rinsed out three times. The rinsate was injected into the irrigation system. Clean water was then placed into the 5 gallon bucket ~5 gallons and injected into the irrigation system with the mazzei injector until the irrigation system was shut off. Cleaned by DJE.

CLEANING DESCRIPTION ENTERED BY: David Ennes *DATE:* 6-1-16

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

I. PASS TIMES FOR **APPLICATION NUMBER** 1

APPLICATION DATE 6-1-16 *(COMPLETE A SEPARATE FORM FOR EACH APPLICATION DATE)*

RECORD PASS TIME AND PASS DIRECTION - *Complete the table by providing the time required to make each pass of the application equipment through the plot and direction of that pass (e.g. NE).*

	TREATMENT 02		TREATMENT __		
PASS NUMBER	TIME	DIRECTION	PASS NUMBER	TIME	DIRECTION
1	29 min 45 sec	E-W	1		
2			2		
3			3		
4			4	DR	6-1-16
5			5		
6		DR	6		
7		6-1-16	7		
8			8		
9			9		
10			10		
11			11		
12			12		
TOTAL PASS TIME	29 min 45 sec				

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-1-16

PROVIDE A BRIEF NARRATIVE SUMMARY OF THE APPLICATION

(E.g. *"Test substance was applied to the treated test plot in two passes; one pass down each side of the row. Each pass was applied to the soil, in a 3 ft. band out from the tree, with the spray boom 24 inches above the soil."*)

The test substance was applied to the treated test plot through 8 drip irrigation lines. There are 116 emitters spaced 12 inches apart per line. The test substance was applied in the first $\frac{1}{3}$ of the irrigation set. As the test substance was being injected the solution was stirred occasionally with a plastic pipette. After the test substance application the irrigation system ran until the remaining $\frac{2}{3}$ of the irrigation set was completed Applied 0.50 acre of water to the treated test plot

NARRATIVE ENTERED BY David Ennes *DATE:* 6-1-16

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

J. POST APPLICATION RATE CONFIRMATION FOR **APPLICATION NUMBER** 1

APPLICATION DATE 6-1-16 *(COMPLETE A SEPARATE FORM FOR EACH APPLICATION DATE)*

CALCULATION OF ACTUAL APPLICATION RATE - *Using information such as total pass time, plot size, tank mix amounts, and discharge rate (average of 3 outputs) determine the actual amount of formulated test substance applied to treated plots. Even if a target rate was used for the pre-application calculations, the data from the calibration (average of 3 outputs) must be used for calculating the application rate. (If the protocol does not include a rate of formulated product, then the amount of active ingredient should be determined.) Convert this amount to the amount applied per acre (or hectare), and determine deviation from target application in the protocol, rounded to the nearest whole percent. Show all calculations and label all units.* ***It is not sufficient to merely compare the actual pass times to the "practice" pass times.*** *The example formulas listed at the bottom of* 6J *may be used to calculate the application rate.* ***Calculations may be entered on a separate page placed after this one, if there is not enough space below.***

EXAMPLE FORMULAS: The formulas below may be used to calculate the amount of test substance (TS) applied per acre as required in Part 6I. Other formulas may be used instead; however, it is not sufficient to merely compare the actual pass times to the "practice" pass times.

1) Total Pass Time x Discharge Rate/Nozzle x #Nozzles = Volume of Tank Mix applied to Plot

2) Volume of Tank Mix applied to Plot x $\frac{\text{Amount of TS in Tank Mix}}{\text{Total Volume of Tank Mix}}$ = Amount of TS applied to Plot

3) Amount of TS applied to Plot x $\frac{\text{43,560 sq ft per acre}}{\text{Plot area treated in sq ft}}$ = Amount of TS applied per acre

%DEVIATION FROM THE PROTOCOL RATE SHOULD BE ROUNDED LIKE THIS: -5% OR THIS: +8%,
NOT LIKE THIS: -5.4% *OR* THIS: +8.29% *OR* THIS: +3.14159265358979323846264338327950288419716939 9%

****

DISCHARGE RATE (ml/sec or g/sec): 34.31 ml/60.13sec drip emitters

ACTUAL AREA TREATED (*swath width or treated row or bed width x # of passes x length of plot*): 20 ft x 110 ft = 2200 ft²
Note: *Use bed width for plots with multi-row beds.*

Applied 32.8 ml of T.S. onto 2200 ft²

$$\frac{32.8\ ml \times 43560\ ft^2/A}{2200\ ft^2\ \text{Treated area}} = 649.44\ ml/Acre$$

$$\frac{649.44\ ml/Acre\ (Actual\ rate)}{649\ ml/Acre\ (protocol\ rate)} \times 100 = 100.07\%$$ of target rate, 0% deviation from target

WAS ACTUAL APPLICATION RATE WITHIN -5% TO +10% OF PROTOCOL RATE?
(Check one) YES ✓ NO ___ IF NO, **Contact the Study Director immediately.**

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-1-16

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

K. POST TREATMENT RECORDS FOR **APPLICATION NUMBER** 1

APPLICATION DATE 6-1-16 *(Complete a separate form for each application date)*

Was There Any Visible Phytotoxicity Damage? *(Check one)* YES___ NO ✓

Date Crop Was Observed: 6-8-16 *Initials/date:* DK 6-8-16

If YES, then contact the Study Director, fill in the box below, and if a digital camera is available, email digital photograph(s) to the Study Director along with a detailed explanation of the damage. If NO, then line out the entire box with initials and date.

~~DESCRIPTION OF PHYTOXICITY SYMPTOMS:~~ DK 6-8-16
PHYTOTOXICITY DESCRIBED BY: *(Initials/date)*
DATE STUDY DIRECTOR WAS CONTACTED: CONTACTED BY: ~~*(Initials/date)*~~

Enter the requested information below for both the first rainfall and first irrigation after each application, regardless of whether subsequent applications were made prior to the first rainfall or irrigation. The rainfall/irrigation data entered below should be transcribed from the data included in Part 9 unless otherwise indicated on this page. **If irrigation is required by the protocol to incorporate the test substance, or if the test substance is applied by irrigation, then that event should be recorded below. "NONE BEFORE HARVEST" OR "NONE BEFORE SAMPLING" MAY BE ENTERED, IF APPLICABLE.**

DATE OF FIRST RAIN *(Note the date of first rainfall after this application.)*	
TIME AFTER APPLICATION THAT PLOTS WERE EXPOSED TO FIRST RAINFALL *(Check DAYS or HOURS) (Enter #hours if first rainfall was on the date of application.)*	**DAYS**___ **HOURS**___
AMOUNT OF WATER *(Check INCHES or mm)*	**INCHES**___ **mm**___
RAIN INFORMATION RECORDED BY *(Initials/date)*	
TYPE OF IRRIGATION *(e.g. overhead, trickle, flood)*	Drip
DATE OF FIRST IRRIGATION *(Note the date of first irrigation after this application.)*	6-3-16
TIME AFTER APPLICATION THAT PLOTS WERE EXPOSED TO FIRST IRRIGATION *(Check DAYS or HOURS) (Enter #hours if first irrigation was on the date of application.)*	2 **DAYS** X **HOURS**___
AMOUNT OF WATER *(Check INCHES, mm, or mL)*	~0.58 **INCHES** X **mm**___ **mL**___
IRRIGATION INFORMATION RECORDED BY *(Initials/date)*	DK 6-3-16

If the data entered above differ from the rainfall/irrigation data included in Part 9, explain: _____

_____

_____ *Initials/date:* _____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN FIELD DATA BOOK NO. _____ INITIALS _____ DATE _____

Application #2

Soil/Irrigation

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

Drip irrigation emitters

PART 6. APPLICATION RECORDS

C.1. DISCHARGE CALIBRATION FOR **APPLICATION NUMBER** 2

INSTRUCTIONS: Complete a copy of this form (PHOTOCOPY IF NECESSARY) for additional times when a complete calibration or calibration-recheck of application equipment is required.

EQUIPMENT IDENTIFIER Drip irrigation system with mazzei injector

DISCHARGE CALIBRATION DATE 6-8-16 PERFORMED BY DJE and KS *(INITIALS)*

APPROXIMATE TIME OF DAY THAT THE CALIBRATION WAS PERFORMED 7:58 AM

LOCATION WHERE THE CALIBRATION WAS PERFORMED drip lines in TRT02 plot UCKARE

DISCHARGE UNITS MEASURED *(e.g. ml, oz., grams)* ml

INSTRUMENT USED TO MEASURE WATER *(e.g. 100 ml graduated cylinder)* 100 ml graduated cylinder 1 ml increments

BRIEFLY DESCRIBE PROCEDURE USED TO CHECK DISCHARGE CALIBRATION Followed the same procedure as on Part 6.C.1 dated 6-1-16

DK 6-8-16

The table for entering output results is now on 6.C.2 (next page).

CALIBRATION CALCULATIONS:

ABOVE DATA ENTERED BY: David Ennes DATE: 6-8-16

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE _____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
FIELD ID NO: _ Ennes

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

C.2. DISCHARGE CALIBRATION FOR **APPLICATION NUMBER** 2

INSTRUCTIONS: Complete a copy of this form (PHOTOCOPY IF NECESSARY) for additional times when a complete calibration or calibration-recheck of application equipment is required.

DISCHARGE CALIBRATION *Record time applicator is allowed to discharge. Collect output from each nozzle or hopper. Record this value in "RUN" Column 1 next to the appropriate outlet. Calculate the total and average discharge for all the nozzles/hoppers. Entry prompts have been provided for 3 discharge calibration runs. Calculate sums and averages of each nozzle/hopper outlet AND whether the results are within 5% (if applicable). Enter all calculations on 6.C.1.*

Output Run Number		1	2	3	Total (Required)	Average (Optional)
Pressure (psi)						
Time (seconds)						
Nozzle/Hopper Outlet Number Along Boom (These numbers should match those shown in the equipment diagram in 6.B)	1					
	2					
	3		Refer	to the	following page	
	4		OK	6-8-16		
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
Total						
Output per Nozzle or Outlet						
Output per Second						

Was this a recheck of discharge calibration or a target output? *(Check one)* YES_____ NO_____

If yes, were results within 5% of original calibration or target output? *(Check one)* YES_____ NO_____

If this is a 3-discharge calibration run, is each "output per second" (bottom row in Columns 1, 2, and 3) within 5% of the mean? *(Check one)* YES_____ NO_____

An output consisting of an average of three runs or a target output may be used when calculating the sprayer output and amount of test substance to use. If this is a recheck (one run) then the results of the original calibration must be used. If the output result of the recheck is more than 5% different than the original calibration result, then two more runs are needed to produce a new, full calibration. The original calibration data, or a true copy, must be in this field data book.

ABOVE DATA ENTERED BY: David Ennes DATE: 6-8-16

PART 6 PAGE ___ Trial Year 2016

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

Drip Irrigation Emitter Output

Irrigation Line	1	Catch Time (sec)	2	Catch Time (sec)	3	Catch Time (sec)	4	Catch Time (sec)
First Emitter								
Run 1 ml	32	60.28	36	60.31	35	60.03	36	60.03
Run 2 ml	32	60.09	36	59.97	34	59.93	35	60.16
Run 3 ml	32	60.09	36	60.12	35	60.28	36	60.15
Last Emitter								
Run 1 ml	30	60.28	34	60.31	35	60.03	30	60.03
Run 2 ml	32	60.09	34	59.97	36	59.93	31	60.16
Run 3 ml	30	60.09	34	60.12	38	60.28	32	60.15
Total	188	360.92	210	360.80	213	360.48	200	360.68
Irrigation Line	5	Catch Time (sec)	6	Catch Time (sec)	7	Catch Time (sec)	8	Catch Time (sec)
First Emitter								
Run 1 ml	36	60.25	36	60.03	36	60.06	35	60.09
Run 2 ml	36	60.33	36	60.28	35	60.22	35	60.09
Run 3 ml	36	60.12	36	60.03	35	60.10	36	60.31
Last Emitter								
Run 1 ml	32	60.25	32	60.03	35	60.06	30	60.09
Run 2 ml	35	60.33	32	60.28	35	60.22	32	60.09
Run 3 ml	34	60.12	32	60.03	34	60.10	32	60.31
Total	209	361.40	204	360.68	210	360.76	200	360.98
Total ml Line 1-8	1634							
Total sec Line 1-8	2886.70							

1634 ml ÷ 48 catches = 34.04 ml/emitter average

2886.70 sec ÷ 48 catches = 60.14 sec average catch time

Signature David Ennes **Date** 6-8-16

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

mazzei injector

C.1. DISCHARGE CALIBRATION FOR **APPLICATION NUMBER** 2

INSTRUCTIONS: Complete a copy of this form (PHOTOCOPY IF NECESSARY) for additional times when a complete calibration or calibration-recheck of application equipment is required.

EQUIPMENT IDENTIFIER Drip irrigation system with mazzei injector

DISCHARGE CALIBRATION DATE 6-8-16 PERFORMED BY DJE *(INITIALS)*

APPROXIMATE TIME OF DAY THAT THE CALIBRATION WAS PERFORMED 8:52 AM

LOCATION WHERE THE CALIBRATION WAS PERFORMED Irrigation valve South of plot at UCKARE

DISCHARGE UNITS MEASURED *(e.g. ml, oz., grams)* ml

INSTRUMENT USED TO MEASURE WATER *(e.g. 100 ml graduated cylinder)* 4000 ml graduated cylinder 50 ml increments

BRIEFLY DESCRIBE PROCEDURE USED TO CHECK DISCHARGE CALIBRATION Followed the same procedure as on Part 6.C.1 dated 6-1-16

DK 6-8-16

The table for entering output results is now on 6.C.2 (next page).

CALIBRATION CALCULATIONS: mazzei unit #2 setting #2

$\frac{1000\ ml}{111.35\ sec} \quad \frac{x\ ml}{1734\ sec} = 15572.52$

1734 sec Time to deliver 1/3 of irrigation water

round to 15575 ml

ABOVE DATA ENTERED BY: David Ennes DATE: 6-8-16

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE _____

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

MEMO to the FILE

Treated area 20 ft x 110 ft = 2200 ft²

34.04 ml / 60.14 sec Average output and time

34.04 ml/s x 880 emitters in treated area =

29955.2 ml/s ÷ 3785 ml/GAL = 7.91 GAL

7.91 GAL / 2200 ft² :: x GAL / 43560 ft²/A = 156.62 GAL/A

60.14 sec Ave Catch time = 1.00 minute

60 sec/min

1 min : x min = 86.69 min

156.62 GAL : 13577 GAL

(0.5 Acre in)

86.69 min ÷ 1/3 of irrigation water = 28.90 min

28.90 min x 60 sec/min = 1734 sec

PART _____ PAGE _____

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-8-16

Trial Year 2016

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
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Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55

FIELD ID NO: _ Ennes

IR-4 FIELD DATA BOOK

MEMO to the FILE

27154 GAL/Acre in ÷ 2 = 13577 GAL
(0.5 Acre in)

Irrigation started at 9:50 AM

Irrigation stopped at 11:17 AM

Output of the irrigation system

7.91 GAL / min per 2200 ft²

Irrigation system ran for 1 hr 27 min =
87 min

$\frac{7.91\ GAL}{1\ min} \therefore \frac{x\ Gal}{87\ min} = 688.17\ GAL/2200ft^2$

$\frac{688.17\ GAL}{2200ft^2} \therefore \frac{x\ GAL}{43560ft^2/A} = 13625.77\ GAL$ per Acre

$\frac{13625.77\ GAL/Acre}{27154\ GAL/Acre\ inch} = 0.50$ inch of water applied to plot

PART _____ PAGE _____

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-8-15

Trial Year 2015

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
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Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
FIELD ID NO: _ Ennes

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

C.2. DISCHARGE CALIBRATION FOR **APPLICATION NUMBER** 2

INSTRUCTIONS: Complete a copy of this form (PHOTOCOPY IF NECESSARY) for additional times when a complete calibration or calibration-recheck of application equipment is required.

DISCHARGE CALIBRATION *Record time applicator is allowed to discharge. Collect output from each nozzle or hopper. Record this value in "RUN" Column 1 next to the appropriate outlet. Calculate the total and average discharge for all the nozzles/hoppers. Entry prompts have been provided for 3 discharge calibration runs. Calculate sums and averages of each nozzle/hopper outlet AND whether the results are within 5% (if applicable). Enter all calculations on 6.C.1.*

Output Run Number		1	2	3	Total (Required)	Average (Optional)
Pressure (psi)		10	10	10		
Time (seconds)		111.03	112.03	111.00	334.06	111.35
Nozzle/Hopper Outlet Number Along Boom (These numbers should match those shown in the equipment diagram in 6.B)	1	1000 ml	1000 ml	1000 ml	3000 ml	1000 ml
	2					
	3					
	4					
	5			ok		
	6			C-8-16		
	7					
	8					
	9					
	10					
	11					
	12					
Total		1000 ml	1000 ml	1000 ml	3000 ml	1000 ml
Output per Nozzle or Outlet						
Output per Second						ok C-8-16

Was this a recheck of discharge calibration or a target output? *(Check one)* YES_____ NO ✓

If yes, were results within 5% of original calibration or target output? *(Check one)* YES_____ NO_____

If this is a 3-discharge calibration run, is each "output per second" (bottom row in Columns 1, 2, and 3) within 5% of the mean? *(Check one)* YES ✓ NO_____

An output consisting of an average of three runs or a target output may be used when calculating the sprayer output and amount of test substance to use. If this is a recheck (one run) then the results of the original calibration must be used. If the output result of the recheck is more than 5% different than the original calibration result, then two more runs are needed to produce a new, full calibration. The original calibration data, or a true copy, must be in this field data book.

ABOVE DATA ENTERED BY: David Ennes DATE: 6-8-16

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

D. SPEED CALIBRATION FOR **APPLICATION NUMBER(S)** 2

INSTRUCTIONS: Complete a separate form for additional times when a complete calibration or calibration- recheck of application equipment is required.

EQUIPMENT IDENTIFIER Drip irrigation system with mazzei injector

SPEED CALIBRATION DATE _____ PERFORMED BY _____ *(INITIALS)*

TERRAIN OF CALIBRATION TRACK *(e.g. tilled field)* _____

LOCATION WHERE THE CALIBRATION WAS PERFORMED _____

BRIEFLY DESCRIBE PROCEDURE USED FOR SPEED CALIBRATION _____

Speed calibration not needed
on 6-8-16

SPEED CALIBRATION: *Calculate the speed of the application equipment. If appropriate, note the gear setting and /or RPM setting used in the speed calibration. Indicate the distance (in feet) of the track on which the application equipment was tested to determine speed (e.g. speed of application equipment tested for 100 ft.). The speed is calculated by dividing the length of test track (in feet or meters) by the time needed to cover that length (in seconds). Entry prompts have been provided for 2 additional runs. If this is a recheck, calculate the result is within 5% of the original calibration. Show all calculations.* ***A speed recheck (one run) is required whenever an output recheck is performed, except for multiple applications within a study that are being made on the same day on the same farm.***

RUN	GEAR	RPM	Length of test track (include units)	TIME (sec)	CALCULATED SPEED (include units)
1					
2					
3					
Total of test run times (sec)			Average time (sec)		Average speed	

CALCULATIONS:

WAS THIS A RECHECK OF SPEED CALIBRATION? *(Check one)* YES_____ NO_____
IF YES, WERE RESULTS WITHIN 5% OF ORIGINAL CALIBRATION? *(Check one)* YES_____ NO_____
The original calibration data, or a true copy, must be in this field data book.

NOTE: A target speed may be used for application calculations, rather than the mean of three runs, but for each application a full speed calibration must be conducted, and the mean of the three runs must be within 5% of the target speed.
WAS THIS A CHECK OF A TARGET SPEED? *(Check one)* YES_____ NO_____
IF YES, WERE RESULTS WITHIN 5% OF TARGET SPEED? *(Check one)* YES_____ NO_____

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-8-16

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

E. DELIVERY RATE CALIBRATION FOR **APPLICATION NUMBER(S)** 2

INSTRUCTIONS: Complete a separate form for each application, unless the same parameters are used-- you are using the same equipment, and have performed a recheck to confirm the result of the full calibration. Determine the rate of delivery from the application equipment. Briefly describe the procedure, including formulas used to determine delivery rate calibration. Show all calculations and units. Equations used in electronic (computer software) calculations in this trial must be transcribed or printed out and attached here. Computer-generated values (as opposed to those entered by the field cooperators) must be reviewed and clearly delineated by circling, initialing, and dating.

PROCEDURE/FORMULA:

Form not needed
DK 6-8-16

CALCULATIONS:

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-8-16

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
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IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

F. VOLUME, MIXING AND DILUTION CALCULATIONS FOR **APPLICATION NUMBER(S)** 2

INSTRUCTIONS: Complete a separate form for each application, unless there are no changes in multiple applications. Show all calculations, formulas, and results below, define units of measure, and cite the initials of the person performing the calculations. Equations used in electronic (computer software) calculations in this trial must be transcribed or printed out and attached here. Computer-generated values (as opposed to those entered by the field cooperators) must be reviewed and clearly delineated by circling, initialing, and dating.

Treated area 20 ft × 110 ft = 2200 ft²

Test substance rate 0.143 lb ai/A 0.834 lb ai/GAL

$$\frac{0.143 \text{ lb ai}}{\text{Acre}} \times \frac{2200 \text{ ft}^2}{43560 \text{ ft}^2/\text{A}} \times \frac{1.0 \text{ GAL}}{0.834 \text{ lb ai}} \times \frac{3785 \text{ ml}}{\text{GAL}} =$$

32.8 ml

DESCRIBE HOLDING AND TRANSPORT OF TEST SUBSTANCE AND ADJUVANT (if applicable) FROM STORAGE AREA TO LOCATION OF TANK MIXING *(E.g.: "Test substance held securely in an insulated cooler during transport to field site in the bed of a pickup truck" or "Tank mix prepared within walking distance of the chemical storage building")*

The test substance was transported ambient in a plastic tray inside a utility box on the back of a pickup truck.

DK 6-8-16

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-8-16

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE _____

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

G. APPLICATION INFORMATION FOR **APPLICATION NUMBER** 2 APPLICATION DATE 6-8-16

HAS THE APPLICATION EQUIPMENT BEEN USED SINCE THE LAST CALIBRATION/RECHECK WAS PERFORMED? *(Check one)* YES_____ NO ✓ (If you are about to check YES, then a recheck is usually required.)

INSTRUCTIONS: **Complete a separate form for each application date and for each treatment on one application date (use the Treatment Number as indicated in the protocol).** *Provide the name of the test substance (common chemical name or chemical code number); the batch or lot number of the test substance; the approximate time the test substance was mixed with the carrier and the approximate time the mixture was applied to the plots, along with* ***the initials of the person(s) mixing and spraying the tank mix****; the time of additional agitation (if any); the unique name or code for the application equipment used to apply this treatment; the placement of the test substance (e.g. broadcast, in-furrow, directed, knifed-in, banded); the amount of carrier, formulated product and other additives in the mix; the measuring equipment with increments; the distance (include units) of the nozzles above the canopy or ground (indicate which); the pressure in pounds per square inch at the boom; if treatment(s) were incorporated, the method and/or equipment used to incorporate the test substance mix (e.g. disked, rotovator, irrigated, etc.), depth to which the test substance was incorporated* ***or*** *the amount of water used to move the test substance into the soil; the time after treatment the incorporation activity was performed; and the carrier (normally water), its source (e.g. farm pond, city water), pH of the carrier and its temperature, and the equipment used to measure the carrier pH.*

	TRT Number 02	
NUMBER OF DAYS SINCE PREVIOUS APPLICATION	7	TIME OF ADDITIONAL AGITATION/INITIALS (if applicable) e.g. "10:00" or "continuous" or "just prior to application"
TEST SUBSTANCE	A20941A OX TP 100 OD	
BATCH/LOT NUMBER/Container#[1]	916099 Batch code CA08-01	
TIME MIXED/INITIALS	9:43 AM DK	The spray solution was stirred occasionally during the application
TIME APPLIED/INITIALS	9:50 AM DK	
EQUIPMENT IDENTIFIER	Drip irrigation system with mazzei injector	
PLACEMENT OF TEST SUBSTANCE	Drip irrigation water to soil in test plot	
TANK MIX AMOUNTS		MEASURING EQUIPMENT with INCREMENTS*
CARRIER (starting volume of water)	15575ml	See following page DK 6-8-16
VOLUME of WATER REMOVED from starting volume (if applicable)	32.8ml	
TEST SUBSTANCE (formulated product)	32.8ml	
ADJUVANT OR SURFACTANT	None	
TOTAL VOLUME OF TANK MIX	15575ml	*e.g. 1000 mL grad. cylinder/10 ml incr.
NOZZLE DISTANCE from TARGET	8 lines of drip emitters in plot at soil	ORDER IN WHICH ITEMS WERE ADDED TO SPRAY MIXTURE* W=Water, TS=Test Substance, A=Adjuvant *e.g. 1-W, 2-TS, 3-A, 4-W
PSI AT BOOM	10 psi at irrigation valve	
INCORPORATION - Methodology and/or Equipment - DEPTH - TIME	Drip irrigation system Depth not known 9:50 AM - 11:17 AM	1-W 2-TS
CARRIER SOURCE/TYPE	VCKARE well water	
CARRIER pH/TEMPERATURE	7.0 86°F	
EQUIPMENT used to MEASURE pH	ph strip	

[1] *If more than one test substance container was received for this trial. If not, only batch or lot number is needed.*

ABOVE DATA ENTERED BY: Daniel Ennes *DATE:* 6-8-16

Description of Equipment Used to Measure Test Substances, Adjuvant and Carrier Water

Oxathiapiprolin / Strawberry
FIELD ID No. ___ ID No. 11719.16-CA55 _ **Application No.** 2
Ennes

The following equipment was used in this study:

To remove volume of water: 25 ml pipette

Scale for solid Test Substance:

___ Mettler Toledo Scale, Model PL 303 (0.001gr increments)
X Ohaus Portable Advanced Scale, Serial No. 16625 (0.01 gr increments)
OK 6-8-16

Pipettes:*

Test Sub. (Liquid)	Adjuvant
___ 5 ml	___ 5 ml
___ 10 ml	___ 10 ml
X 25 ml	___ 25 ml

Cylinders:**

Test Substance	Adjuvant	Carrier Water
___ 50 ml	___ 50 ml	___ 50 ml
OK 6-8-16		
___ 100 ml	___ 100 ml	___ 100 ml
___ 250 ml	___ 250 ml	___ 250 ml
___ 500 ml	___ 500 ml	X 500 ml
___ 1000 ml	___ 1000 ml	___ 1000 ml
___ 4000 ml	___ 4000 ml	X 4000 ml
		___ Scienco Flow meter

*The pipettes used to measure test substances or adjuvants are 5 ml, 10 ml and 25 ml (TD) plastic pipettes. The 5 ml and 10 ml pipettes measure in 0.1 ml increments and the 25 ml pipette measures in 0.2 ml increments.

**The graduated cylinders used to measure test substance, adjuvant or carrier water are 50,100, 250, 500, 1000 and 4000 mls. The 50 and 100 ml cylinders measure in increments of 1 ml, 250 ml cylinder in 2 ml increments, 500 ml cylinder in 5 ml increments, 1000 ml cylinder in 10 ml increments and the 4000 ml cylinder in 50 ml increments. Carrier water for airblast sprays is measured with a Scienco flow meter which measures water out to hundredths (i.e. 1.00)

Signature: David Ennes **Date:** 6-8-16

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
FIELD ID NO: _ Ennes

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

H. ADDITIONAL INFORMATION FROM **APPLICATION NUMBER** 2 ① Entry error 6-6-16

APPLICATION DATE 6-8-16 *(Complete a separate form for each application date)* 6-8-16

PLANT GROWTH & ENVIRONMENTAL DATA AT THE TIME OF APPLICATION	Enter data in this column
CROP HEIGHT *(Measure or estimate crop height, include units of measurements)*	7-11 inches
CROP GROWTH STAGE *(e.g. seed, vegetative, bud, bloom, fruiting, #true leaves)*	fruiting
CROP VIGOR *(e.g. poor, fair, good, variable)**	Good
PLANT SURFACE MOISTURE *(Check one)*	**SATURATED**___ **DAMP**___ **DRY** X **NA**___
ESTIMATED % OF SOIL AREA COVERED BY CROP CANOPY	35
MEASURED AIR TEMPERATURE *(Check F or C)* (*E.g.* 75 °F √ °C___)	81.2 **°F** X **°C**___
MEASURED WIND SPEED *(Check MPH or Km/Hr)* (*E.g.* 0.5 MPH √ Km/Hr___)	0.0 **MPH** X **Km/Hr**___
WIND DIRECTION FROM *(Check one)*	**N**___ **NE**___ **E**___ **SE**___ **S**___ **SW**___ **W**___ **NW**___ or **NO WIND** X
ESTIMATED % OF CLOUDS IN THE SKY	70
MEASURED RELATIVE HUMIDITY%	35
DEW *(heavy, light, none, etc.)*	None
DESCRIPTION OF SOIL TILTH *(smooth, firm, packed, cloddy, etc.)*	Smooth
ESTIMATE OF SOIL SURFACE MOISTURE *(wet, moist, dry, etc.)*	Moist
SOIL TEMPERATURE *(Check F or C)*	80 **°F** X **°C**___
DEPTH OF MEASUREMENT OF SOIL TEMPERATURE *(Check INCHES or cm)*	4 **INCHES** X **cm**___

*IF CROP VIGOR IS POOR OR VARIABLE, EXPLAIN: _____

DK 6-8-16

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-8-16

BRIEFLY DESCRIBE PROCEDURE USED TO CLEAN APPLICATION EQUIPMENT AND IDENTIFY WHO CLEANED IT:
Followed the same procedure as on Part 6.H dated 6-1-16. Cleaned by DAVID Ennes

DK 6-8-16

CLEANING DESCRIPTION ENTERED BY: David Ennes *DATE:* 6-8-16

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

I. PASS TIMES FOR **APPLICATION NUMBER** 2

APPLICATION DATE 6-8-16 *(COMPLETE A SEPARATE FORM FOR EACH APPLICATION DATE)*

RECORD PASS TIME AND PASS DIRECTION - *Complete the table by providing the time required to make each pass of the application equipment through the plot and direction of that pass (e.g. NE).*

	TREATMENT 02		TREATMENT __		
PASS NUMBER	TIME	DIRECTION	PASS NUMBER	TIME	DIRECTION
1	29 min 27 sec	E-W	1		
2			2	O/R	
3			3	6-8-16	
4	O/R 6-8-16		4		
5			5		
6			6		
7			7		
8			8		
9			9		
10			10		
11			11		
12			12		
TOTAL PASS TIME	29 min 27 sec				

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-8-16

PROVIDE A BRIEF NARRATIVE SUMMARY OF THE APPLICATION

(E.g. *"Test substance was applied to the treated test plot in two passes; one pass down each side of the row. Each pass was applied to the soil, in a 3 ft. band out from the tree, with the spray boom 24 inches above the soil."*)

Followed the same narrative as on Part 6.I dated 6-1-16

O/R 6-8-16

NARRATIVE ENTERED BY David Ennes *DATE:* 6-8-16

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

J. POST APPLICATION RATE CONFIRMATION FOR **APPLICATION NUMBER** 2

APPLICATION DATE 6-8-16 *(COMPLETE A SEPARATE FORM FOR EACH APPLICATION DATE)*

CALCULATION OF ACTUAL APPLICATION RATE - *Using information such as total pass time, plot size, tank mix amounts, and discharge rate (average of 3 outputs) determine the actual amount of formulated test substance applied to treated plots. Even if a target rate was used for the pre-application calculations, the data from the calibration (average of 3 outputs) must be used for calculating the application rate. (If the protocol does not include a rate of formulated product, then the amount of active ingredient should be determined.) Convert this amount to the amount applied per acre (or hectare), and determine deviation from target application in the protocol, rounded to the nearest whole percent. Show all calculations and label all units.* ***It is not sufficient to merely compare the actual pass times to the "practice" pass times.*** *The example formulas listed at the bottom of 6J may be used to calculate the application rate.* ***Calculations may be entered on a separate page placed after this one, if there is not enough space below.***

EXAMPLE FORMULAS: The formulas below may be used to calculate the amount of test substance (TS) applied per acre as required in Part 6I. Other formulas may be used instead; however, it is not sufficient to merely compare the actual pass times to the "practice" pass times.

1) Total Pass Time x Discharge Rate/Nozzle x #Nozzles = Volume of Tank Mix applied to Plot

2) Volume of Tank Mix applied to Plot x $\frac{\text{Amount of TS in Tank Mix}}{\text{Total Volume of Tank Mix}}$ = Amount of TS applied to Plot

3) Amount of TS applied to Plot x $\frac{\text{43,560 sq ft per acre}}{\text{Plot area treated in sq ft}}$ = Amount of TS applied per acre

%DEVIATION FROM THE PROTOCOL RATE SHOULD BE ROUNDED LIKE THIS: -5% OR THIS: +8%,
NOT LIKE THIS: -5.4% *OR* THIS: +8.29% *OR* THIS: +3.14159265358979323846264338327950288419716939 9%

****

DISCHARGE RATE (ml/sec or g/sec): 34.64 ml / 60.145cc drip emitters

ACTUAL AREA TREATED (*swath width or treated row or bed width x # of passes x length of plot*): 20ft x 110 ft = 2200 ft²

Note: *Use bed width for plots with multi-row beds.*

Applied 32.8 ml of T.S. onto 2200 ft²

$$\frac{32.8\ ml \times 43560\ ft^2/A}{2200\ ft^2} = 649.44\ ml/Acre$$

2200 ft² Treated area

$$\frac{649.44\ ml/A\ (Actual\ rate)}{649\ ml/A\ (protocol\ rate)} \times 100 = 100.07\%$$

100.07% of target rate

0% deviation from target

WAS ACTUAL APPLICATION RATE WITHIN -5% TO +10% OF PROTOCOL RATE?

(Check one) YES ✓ NO ___ IF NO, **Contact the Study Director immediately.**

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-8-16

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

K. POST TREATMENT RECORDS FOR **APPLICATION NUMBER** 2

APPLICATION DATE 6-8-16 *(Complete a separate form for each application date)*

Was There Any Visible Phytotoxicity Damage? *(Check one)* YES___ NO ✓

Date Crop Was Observed: 6-17-16 *Initials/date:* DR 6-17-16

If YES, then contact the Study Director, fill in the box below, and if a digital camera is available, email digital photograph(s) to the Study Director along with a detailed explanation of the damage. If NO, then line out the entire box with initials and date.

~~DESCRIPTION OF~~ PHYTOXICITY SYMPTOMS:
DR 6-17-16
PHYTOTOXICITY DESCRIBED BY: *(Initials/date)*
DATE STUDY DIRECTOR WAS CONTACTED: CONTACTED BY: *(Initials/date)*

Enter the requested information below for both the first rainfall and first irrigation after each application, regardless of whether subsequent applications were made prior to the first rainfall or irrigation. The rainfall/irrigation data entered below should be transcribed from the data included in Part 9 unless otherwise indicated on this page. **If irrigation is required by the protocol to incorporate the test substance, or if the test substance is applied by irrigation, then that event should be recorded below. "NONE BEFORE HARVEST" OR "NONE BEFORE SAMPLING" MAY BE ENTERED, IF APPLICABLE.**

DATE OF FIRST RAIN *(Note the date of first rainfall after this application.)*	
TIME AFTER APPLICATION THAT PLOTS WERE EXPOSED TO FIRST RAINFALL (*Check DAYS or HOURS*) *(Enter #hours if first rainfall was on the date of application.)*	**DAYS**___ **HOURS**___
AMOUNT OF WATER (*Check INCHES or mm*)	**INCHES**___ **mm**___
RAIN INFORMATION RECORDED BY *(Initials/date)*	
TYPE OF IRRIGATION *(e.g. overhead, trickle, flood)*	Drip
DATE OF FIRST IRRIGATION *(Note the date of first irrigation after this application.)*	6-10-16
TIME AFTER APPLICATION THAT PLOTS WERE EXPOSED TO FIRST IRRIGATION (*Check DAYS or HOURS*) *(Enter #hours if first irrigation was on the date of application.)*	2 **DAYS** X **HOURS**___
AMOUNT OF WATER (*Check INCHES, mm, or mL*)	~0.58 **INCHES** X **mm**___ **mL**___
IRRIGATION INFORMATION RECORDED BY *(Initials/date)*	DR 6-10-16

If the data entered above differ from the rainfall/irrigation data included in Part 9, explain: _____

_____

_____ *Initials/date:* _____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN FIELD DATA BOOK NO. _____ INITIALS _____ DATE _____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

M. APPLICATION EQUIPMENT MAINTENANCE AND REPAIR LOG

INSTRUCTIONS: Complete this form or provide equivalent information. Provide dates and a brief description of maintenance and repair work completed on the application equipment relevant to this trial. Be sure to date and initial all entries.

APPLICATION EQUIPMENT IDENTIFIER_____

EQUIPMENT USED FOR **APPLICATION NUMBERS**_____

INITIALS/DATE_____

RECORD DATES AND BRIEF DESCRIPTION OF ANY CALIBRATION, MAINTENANCE AND REPAIR WORK DONE ON THE APPLICATION EQUIPMENT, OR ATTACH TRUE COPIES OF THE LOGS.
ALSO RECORD SOP# FOLLOWED, IF APPLICABLE.

Initials and Date	Was Maintenance or Repair routine? (Check one)		SOP#	Description
	Yes	No		

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____DATE_____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

A. EQUIPMENT

*INSTRUCTIONS: Complete a separate form for **each piece** of test substance application equipment used in the trial.*

EQUIPMENT USED FOR **APPLICATION NUMBER(S)** _____

EQUIPMENT IDENTIFIER[1] Tractor mounted R&D Backpack sprayer Boom #4 Regulator #1

[1]*Each test substance application equipment must have a unique identifying name or code*

APPLICATION EQUIPMENT TYPE *(Check one)* TRACTOR X BACKPACK X GRANULAR ___

OTHER ___ *(Describe)* _____ ok 6-15-16

PROPELLANT *(Check one)* CO_2 X COMPRESSED AIR _____ PUMP _____

OTHER ___ *(Describe)* _____ ok 6-15-16

TYPE OF APPLICATION *(Check all that apply)*

1) FOLIAR X TO THE GROUND _____

2) BROADCAST X BANDED _____ DIRECTED _____ IN-FURROW _____

3) OTHER ___ *(Describe)* _____ ok 6-15-16

NUMBER OF PASSES THAT ARE NEEDED TO TREAT THE PLOT 4

NUMBER OF NOZZLES OR HOPPER OUTLETS USED		3	
MESH SIZE USED IN THE STRAINERS	50	SPACING BETWEEN NOZZLES OR HOPPER OUTLETS	20 in
NOZZLE BRAND/TYPE/SIZE *(e.g. T-JET 8004, even flat fan)*:	T-Jet 8003 VS Flat Fan		

TREATED AREA[2] 3 nozzle x 20in spacing = 60in ÷ 12 in/foot = 5 ft x 400 feet length of plot sprayed = 2000 ft2

[2]*Calculated width of nozzle discharge pattern (CWNDP) at proper boom height X length of plot sprayed or treated. For a broadcast application, CWNDP = (# of nozzles X nozzle spacing). For a banded application, CWNDP = # of nozzles X swath per nozzle. If application is foliar or soil directed enter row width X # of rows X length of plot sprayed or treated; treated row width may differ from actual row width when the actual row width is wider or narrower than local commercial practices. In this circumstance, the application rate should be calculated using a local commercial row width, and an explanation should be included on this page or inserted behind this page. Contact the Study Director if guidance is needed.*

DOES TREATED AREA (for application rate calculations) = PLOT AREA (from Parts 5C and 5F)? YES ✓ NO ___

(For foliar directed and soil directed applications, check "YES" above unless local commercial row widths are used instead of the actual row width on the research plot. This prompt is intended to help data reviewers calculate the application rates correctly.)

IF NO, PLEASE EXPLAIN: _____ ok 6-15-16

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-15-16

Total number of pages in this section at initial pagination: ____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE _____

FIELD ID NO: _

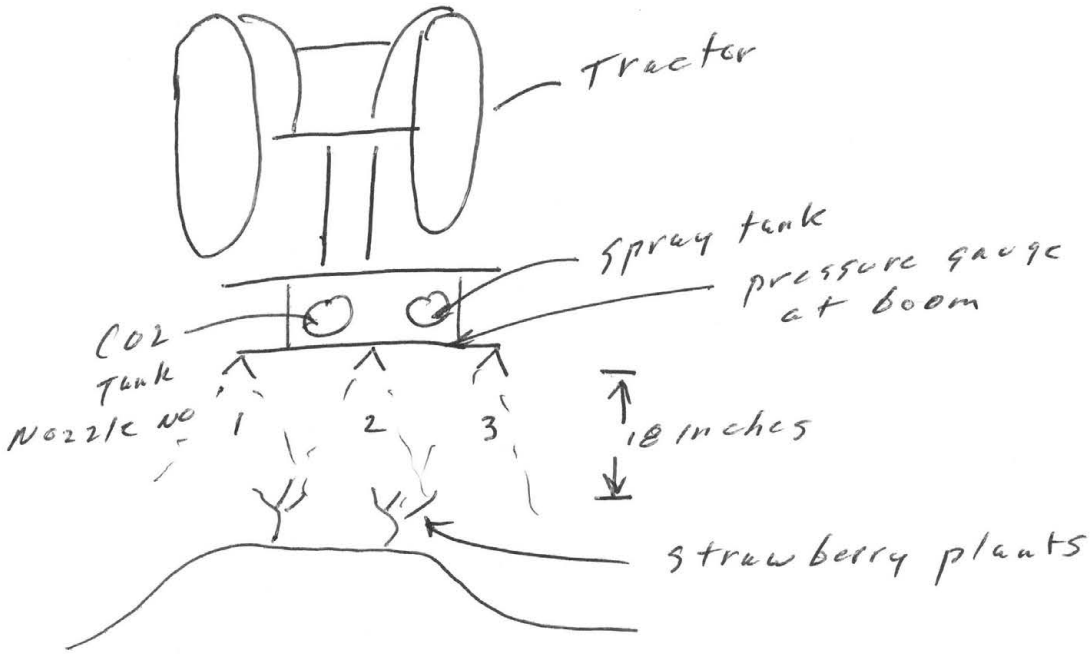
IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

B. DIAGRAM OF APPLICATION EQUIPMENT

EQUIPMENT USED FOR **APPLICATION NUMBER(S)** _____

*INSTRUCTIONS: Complete a separate form for **each piece** of test substance application equipment used in the trial. Sketch a diagram and/or provide clear photograph of application equipment. Include the relative location and size of the target crop and the nozzle/hopper outlet placement and application pattern in relation to crop, in the sketch or photograph. In addition, on the sketch or photograph assign each nozzle or hopper outlet a unique number.*



Rear view of sprayer

Target crop ht. 7-12 inches

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-15-16

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

Application #3

Foliar

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

C.1. DISCHARGE CALIBRATION FOR **APPLICATION NUMBER** 3

INSTRUCTIONS: Complete a copy of this form (PHOTOCOPY IF NECESSARY) for additional times when a complete calibration or calibration-recheck of application equipment is required.

EQUIPMENT IDENTIFIER Tractor mounted R&D Backpack sprayer Boom #4 Regulator #1

DISCHARGE CALIBRATION DATE 6-15-16 PERFORMED BY DJGandks *(INITIALS)*

APPROXIMATE TIME OF DAY THAT THE CALIBRATION WAS PERFORMED 9:32 Am

LOCATION WHERE THE CALIBRATION WAS PERFORMED UCKARE

DISCHARGE UNITS MEASURED *(e.g. ml, oz., grams)* ml

INSTRUMENT USED TO MEASURE WATER *(e.g. 100 ml graduated cylinder)* 1000 ml graduated cylinder - 10ml increments

BRIEFLY DESCRIBE PROCEDURE USED TO CHECK DISCHARGE CALIBRATION The output of each nozzle was caught three times into plastic pitchers. The volume in each pitcher was measured with a graduated cylinder

DK 6-15-16

The table for entering output results is now on 6.C.2 (next page).

CALIBRATION CALCULATIONS:

Total Boom Output 5100 mls ÷ Total Catch Time 90.12 Sec = 56.59 mls/sec

ABOVE DATA ENTERED BY: David Ennes DATE: 6-15-16

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

C.2. DISCHARGE CALIBRATION FOR **APPLICATION NUMBER** 3

INSTRUCTIONS: Complete a copy of this form (PHOTOCOPY IF NECESSARY) for additional times when a complete calibration or calibration-recheck of application equipment is required.

DISCHARGE CALIBRATION *Record time applicator is allowed to discharge. Collect output from each nozzle or hopper. Record this value in "RUN" Column 1 next to the appropriate outlet. Calculate the total and average discharge for all the nozzles/hoppers. Entry prompts have been provided for 3 discharge calibration runs. Calculate sums and averages of each nozzle/hopper outlet AND whether the results are within 5% (if applicable). Enter all calculations on 6.C.1.*

Output Run Number		1	2	3	Total (Required)	Average (Optional)
Pressure (psi)		40	40	40		
Time (seconds)		29.97	30.03	30.12	90.12	
Nozzle/Hopper Outlet Number Along Boom (These numbers should match those shown in the equipment diagram in 6.B)	1	570	570	570	1710	
	2	560	560	560	1680	ok
	3	570	570	570	1710	6-15-16
	4					
	5					
	6					
	7					
	8			ok	6-15-16	
	9					
	10					
	11					
	12					
Total		1700	1700	1700	5100	
Output per Nozzle or Outlet		566.67	566.67	566.67	1700	
Output per Second		18.91	18.87	18.81	56.59	18.86

Was this a recheck of discharge calibration or a target output? *(Check one)* YES_____ NO ✓

If yes, were results within 5% of original calibration or target output? *(Check one)* YES_____ NO_____

If this is a 3-discharge calibration run, is each "output per second" (bottom row in Columns 1, 2, and 3) within 5% of the mean? *(Check one)* YES ✓ NO_____

An output consisting of an average of three runs or a target output may be used when calculating the sprayer output and amount of test substance to use. If this is a recheck (one run) then the results of the original calibration must be used. If the output result of the recheck is more than 5% different than the original calibration result, then two more runs are needed to produce a new, full calibration. The original calibration data, or a true copy, must be in this field data book.

ABOVE DATA ENTERED BY: David Ennes DATE: 6-15-16

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
FIELD ID NO: _ Ennes

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

D. SPEED CALIBRATION FOR **APPLICATION NUMBER(S)** 1

INSTRUCTIONS: Complete a separate form for additional times when a complete calibration or calibration- recheck of application equipment is required.

EQUIPMENT IDENTIFIER Tractor mounted R&D Backpack sprayer Regulator #1 Boom #4

SPEED CALIBRATION DATE 6-15-16 PERFORMED BY DJE and RS *(INITIALS)*

TERRAIN OF CALIBRATION TRACK *(e.g. tilled field)* Dirt ROAD

LOCATION WHERE THE CALIBRATION WAS PERFORMED UCKARE

BRIEFLY DESCRIBE PROCEDURE USED FOR SPEED CALIBRATION The tractor and sprayer were driven three times over a distance of 100 feet. The time required to travel 100 feet was measured with a stop watch.

SPEED CALIBRATION: *Calculate the speed of the application equipment. If appropriate, note the gear setting and /or RPM setting used in the speed calibration. Indicate the distance (in feet) of the track on which the application equipment was tested to determine speed (e.g. speed of application equipment tested for 100 ft.). The speed is calculated by dividing the length of test track (in feet or meters) by the time needed to cover that length (in seconds). Entry prompts have been provided for 2 additional runs. If this is a recheck, calculate the result is within 5% of the original calibration. Show all calculations.* ***A speed recheck (one run) is required whenever an output recheck is performed, except for multiple applications within a study that are being made on the same day on the same farm.***

KG 6-15-16

RUN	GEAR	RPM	Length of test track (include units)	TIME (sec)	CALCULATED SPEED (include units)
1	L3	2100	100 ft	36.22	2.76 ft/sec
2	L3	2100	100 ft	36.28	2.76 ft/sec
3	L3	2100	100 ft	36.25	2.76 ft/sec
Total of test run times (sec)		108.75	Average time (sec)	36.25	Average speed 2.76 ft/sec

CALCULATIONS:
100 ft ÷ 36.22 seconds = 2.76 ft/sec
100 ft ÷ 36.28 seconds = 2.76 ft/sec
100 ft ÷ 36.25 seconds = 2.76 ft/sec

Target Pass Time = 36.25 Seconds x 100 ft / 100 ft = 36.25 Seconds/ 100 ft

WAS THIS A RECHECK OF SPEED CALIBRATION? *(Check one)* YES_____ NO ✓
IF YES, WERE RESULTS WITHIN 5% OF ORIGINAL CALIBRATION? *(Check one)* ~~YES~~_____ ~~NO~~ ok 6-15-16
The original calibration data, or a true copy, must be in this field data book.

NOTE: A target speed may be used for application calculations, rather than the mean of three runs, but for each application a full speed calibration must be conducted, and the mean of the three runs must be within 5% of the target speed.
WAS THIS A CHECK OF A TARGET SPEED? *(Check one)* YES_____ NO ✓
IF YES, WERE RESULTS WITHIN 5% OF TARGET SPEED? *(Check one)* ~~YES~~_____ ~~NO~~ ok 6-15-16

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-15-16

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

E. DELIVERY RATE CALIBRATION FOR **APPLICATION NUMBER(S)** 3

INSTRUCTIONS: Complete a separate form for each application, unless the same parameters are used-- you are using the same equipment, and have performed a recheck to confirm the result of the full calibration. Determine the rate of delivery from the application equipment. Briefly describe the procedure, including formulas used to determine delivery rate calibration. Show all calculations and units. Equations used in electronic (computer software) calculations in this trial must be transcribed or printed out and attached here. Computer-generated values (as opposed to those entered by the field cooperators) must be reviewed and clearly delineated by circling, initialing, and dating.

PROCEDURE/FORMULA:

GPA =

$$\frac{\text{Total Boom Output (mls)}}{\text{Total Catch Time (sec)}} \times \frac{\text{Average seconds to travel 100 ft.}}{\text{Boom Swath Width (5 ft)} \times \text{Calibrated Distance (100 ft)} = \text{ft}^2} \times \frac{\text{ft}^2}{\text{acre}} \times \frac{1 \text{ Gallon}}{3785 \text{ ml}} =$$

CALCULATIONS:

$$\frac{5100 \text{ mls}}{90.12 \text{ sec.}} \times \frac{36.25 \text{ sec}}{500 \text{ ft}^2} \times \frac{43560 \text{ ft}^2}{\text{Acre}} \times \frac{1 \text{ Gallon}}{3785 \text{ mls}} = 47.22 \text{ GPA}$$

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-15-16

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

F. VOLUME, MIXING AND DILUTION CALCULATIONS FOR **APPLICATION NUMBER(S)** 3

INSTRUCTIONS: Complete a separate form for each application, unless there are no changes in multiple applications. Show all calculations, formulas, and results below, define units of measure, and cite the initials of the person performing the calculations. Equations used in electronic (computer software) calculations in this trial must be transcribed or printed out and attached here. Computer-generated values (as opposed to those entered by the field cooperators) must be reviewed and clearly delineated by circling, initialing, and dating.

Treated Area = 20 ft x 100 ft = 2000 ft^2

47.22 GPA x $\frac{2000\ ft^2}{43560\ ft^2}$ x $\frac{3785\ mls}{Gallon}$ = 8206.05 mls Required Volume

Overage factor = $\frac{10000\ mls\ (Total\ Volume)}{8206.05\ mls\ (Required\ Volume)}$ = 1.2186131

8206.05 mls x Overage Factor 1.2186131 = 10000 mls Total Volume

Test Substance Rate 0.03125 lbs ai/Acre 0.834 lbs ai/Gallon

$\frac{0.03125\ lbs\ ai}{Acre}$ x $\frac{2000\ ft^2}{43560\ ft^2/Acre}$ x $\frac{1.0\ gallon}{0.834\ lb\ ai}$ x $\frac{3785\ mls}{Gallon}$ = 6.51 mls

6.51 mls x $\frac{1.2186131}{Overage\ Factor}$ = 7.9 mls T.S.

Surfactant rate 1 pt/100 GAL spray 1 pt = 473.125 ml

100 GAL x 3785 ml/GAL = 378500 ml

$\frac{473.125\ ml \times 10000\ ml}{378500\ ml}$ = 12.5 ml

DESCRIBE HOLDING AND TRANSPORT OF TEST SUBSTANCE AND ADJUVANT (if applicable) FROM STORAGE AREA TO LOCATION OF TANK MIXING *(E.g.: "Test substance held securely in an insulated cooler during transport to field site in the bed of a pickup truck" or "Tank mix prepared within walking distance of the chemical storage building")*

The test substance was transported ambient in a plastic tray inside a utility box on the back of a pickup truck.

Ok 6-15-16

ABOVE DATA ENTERED BY: Daniel Ennes DATE: 6-15-16

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

G. APPLICATION INFORMATION FOR **APPLICATION NUMBER** 3 APPLICATION DATE 6-15-16

HAS THE APPLICATION EQUIPMENT BEEN USED SINCE THE LAST CALIBRATION/RECHECK WAS PERFORMED? *(Check one)* YES_____ NO ✓ (If you are about to check YES, then a recheck is usually required.)

INSTRUCTIONS: **Complete a separate form for each application date and for each treatment on one application date (use the Treatment Number as indicated in the protocol).** *Provide the name of the test substance (common chemical name or chemical code number); the batch or lot number of the test substance; the approximate time the test substance was mixed with the carrier and the approximate time the mixture was applied to the plots, along with* ***the initials of the person(s) mixing and spraying the tank mix****; the time of additional agitation (if any); the unique name or code for the application equipment used to apply this treatment; the placement of the test substance (e.g. broadcast, in-furrow, directed, knifed-in, banded); the amount of carrier, formulated product and other additives in the mix; the measuring equipment with increments; the distance (include units) of the nozzles above the canopy or ground (indicate which); the pressure in pounds per square inch at the boom; if treatment(s) were incorporated, the method and/or equipment used to incorporate the test substance mix (e.g. disked, rotovator, irrigated, etc.), depth to which the test substance was incorporated* ***or*** *the amount of water used to move the test substance into the soil; the time after treatment the incorporation activity was performed; and the carrier (normally water), its source (e.g. farm pond, city water), pH of the carrier and its temperature, and the equipment used to measure the carrier pH.*

	TRT Number 02	
NUMBER OF DAYS SINCE PREVIOUS APPLICATION	7	TIME OF ADDITIONAL AGITATION/INITIALS (if applicable) e.g. "10:00" or "continuous" or "just prior to application"
TEST SUBSTANCE	A20941A OXTP 100 OD	
BATCH/LOT NUMBER/Container#[1]	916099 Batch code GA08-01	
TIME MIXED/INITIALS	10:19 AM OK	OK 6-15-16
TIME APPLIED/INITIALS	10:28 AM OK	
EQUIPMENT IDENTIFIER	Tractor mounted R&D Back pack Sprayer Regulator #1 Boom #4	
PLACEMENT OF TEST SUBSTANCE	Foliar Broadcast	
TANK MIX AMOUNTS		MEASURING EQUIPMENT with INCREMENTS* See following page OK 6-15-16
CARRIER (starting volume of water)	10000 ml	
VOLUME of WATER REMOVED from starting volume (if applicable)	20.4 ml	
TEST SUBSTANCE (formulated product)	7.9 ml	
ADJUVANT OR SURFACTANT	12.5 ml	
TOTAL VOLUME OF TANK MIX	10000 ml	*e.g. 1000 mL grad. cylinder/10 ml incr.
NOZZLE DISTANCE from TARGET	18	ORDER IN WHICH ITEMS WERE ADDED TO SPRAY MIXTURE* W=Water, TS=Test Substance, A=Adjuvant *e.g. 1-W, 2-TS, 3-A, 4-W
PSI AT BOOM	40	
INCORPORATION - Methodology and/or Equipment - DEPTH - TIME	OK 6-15-16	1-W 2-TS 3-A
CARRIER SOURCE/TYPE	UCMARE well water	
CARRIER pH/TEMPERATURE	7.0 84°F	
EQUIPMENT used to MEASURE pH	pH strip	

[1] *If more than one test substance container was received for this trial. If not, only batch or lot number is needed.*

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-15-16

Description of Equipment Used to Measure Test Substances, Adjuvant and Carrier Water

FIELD ID No. Oxathiapiprolin / Strawberry ID No. 11719.16-CA55 Ennes **Application No.** 3

The following equipment was used in this study:

To remove volume of water: 10 ml pipette

Scale for solid Test Substance:

___ Mettler Toledo Scale, Model PL 303 (0.001gr increments)
OK 6-15-16 Ohaus Portable Advanced Scale, Serial No. 16625 (0.01 gr increments)

Pipettes:*

Test Sub. (Liquid)	Adjuvant
___ 5 ml	___ 5 ml
X 10 ml	X 10 ml
___ 25 ml	___ 25 ml

Cylinders:**

Test Substance	Adjuvant	Carrier Water
___ 50 ml	___ 50 ml	___ 50 ml
OK 6-15-16		
___ 100 ml	___ 100 ml	___ 100 ml
___ 250 ml	___ 250 ml	___ 250 ml
___ 500 ml	___ 500 ml	___ 500 ml
___ 1000 ml	___ 1000 ml	___ 1000 ml
___ 4000 ml	___ 4000 ml	X 4000 ml
		___ Scienco Flow meter

*The pipettes used to measure test substances or adjuvants are 5 ml, 10 ml and 25 ml (TD) plastic pipettes. The 5 ml and 10 ml pipettes measure in 0.1 ml increments and the 25 ml pipette measures in 0.2 ml increments.

**The graduated cylinders used to measure test substance, adjuvant or carrier water are 50,100, 250, 500, 1000 and 4000 mls. The 50 and 100 ml cylinders measure in increments of 1 ml, 250 ml cylinder in 2 ml increments, 500 ml cylinder in 5 ml increments, 1000 ml cylinder in 10 ml increments and the 4000 ml cylinder in 50 ml increments. Carrier water for airblast sprays is measured with a Scienco flow meter which measures water out to hundredths (i.e. 1.00)

Signature: David Ennes **Date:** 6-15-16

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

H. ADDITIONAL INFORMATION FROM **APPLICATION NUMBER** 3

APPLICATION DATE 6-15-16 *(Complete a separate form for each application date)* DE 6-15-16

PLANT GROWTH & ENVIRONMENTAL DATA AT THE TIME OF APPLICATION	Enter data in this column
CROP HEIGHT *(Measure or estimate crop height, include units of measurements)*	7-12"
CROP GROWTH STAGE *(e.g. seed, vegetative, bud, bloom, fruiting, #true leaves)*	fruiting
CROP VIGOR *(e.g. poor, fair, good, variable)**	Good
PLANT SURFACE MOISTURE *(Check one)*	**SATURATED**__ **DAMP**__ **DRY** X **NA**__
ESTIMATED % OF SOIL AREA COVERED BY CROP CANOPY	35
MEASURED AIR TEMPERATURE *(Check F or C) (E.g. 75 °F √ °C__)*	75.2 °F X °C__
MEASURED WIND SPEED *(Check MPH or Km/Hr) (E.g. 0.5 MPH √ Km/Hr__)*	1.2-4.1 **MPH** X **Km/Hr**__
WIND DIRECTION FROM *(Check one)*	~~**N** X~~ DE 6-15-16 **NE**__ **E**__ **SE**__ **S**__ **SW**__ **W**__ **NW** X or **NO WIND**__
ESTIMATED % OF CLOUDS IN THE SKY	0
MEASURED RELATIVE HUMIDITY%	26
DEW *(heavy, light, none, etc.)*	None
DESCRIPTION OF SOIL TILTH *(smooth, firm, packed, cloddy, etc.)*	Smooth
ESTIMATE OF SOIL SURFACE MOISTURE *(wet, moist, dry, etc.)*	Moist
SOIL TEMPERATURE *(Check F or C)*	70 °F X °C__
DEPTH OF MEASUREMENT OF SOIL TEMPERATURE *(Check INCHES or cm)*	4 **INCHES** X **cm**__

*IF CROP VIGOR IS POOR OR VARIABLE, EXPLAIN:

DE 6-15-16

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-15-16

BRIEFLY DESCRIBE PROCEDURE USED TO CLEAN APPLICATION EQUIPMENT AND IDENTIFY WHO CLEANED IT:

The spray tank and spray system were rinsed with water, rinsed with soap and water, then rinsed with water. Cleaned by Keri Skiles.

DE 6-15-16

CLEANING DESCRIPTION ENTERED BY: David Ennes *DATE:* 6-15-16

FIELD ID NO: Ennes

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

I. PASS TIMES FOR **APPLICATION NUMBER** 3

APPLICATION DATE 6-15-16 *(COMPLETE A SEPARATE FORM FOR EACH APPLICATION DATE)*

RECORD PASS TIME AND PASS DIRECTION - *Complete the table by providing the time required to make each pass of the application equipment through the plot and direction of that pass (e.g. NE).*

	TREATMENT 02		TREATMENT __		
PASS NUMBER	TIME	DIRECTION	PASS NUMBER	TIME	DIRECTION
1 6-15-16	37.31 Sec	W→E	1		
2	37.25 Sec		2		
3	37.59 Sec		3		
4	37.31 Sec		4		
5			5		
6			6		o/k
7		o/k	7		6-15-16
8		6-15-16	8		
9			9		
10			10		
11			11		
12			12		
TOTAL PASS TIME	149.46 Sec				

Practice Pass time 37.13 Sec / 100 ft 6-15-16

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-15-16

PROVIDE A BRIEF NARRATIVE SUMMARY OF THE APPLICATION

(E.g. *"Test substance was applied to the treated test plot in two passes; one pass down each side of the row. Each pass was applied to the soil, in a 3 ft. band out from the tree, with the spray boom 24 inches above the soil."*)

The test substance was applied to the treated test plot in four passes, one pass down each bed in plot. The test substance was applied with a spray boom that has a five foot wide swath width and the nozzles were 18 inches above the crop canopy for each pass.

o/k 6-15-16

NARRATIVE ENTERED BY David Ennes *DATE:* 6-15-16

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

J. POST APPLICATION RATE CONFIRMATION FOR **APPLICATION NUMBER** 3

APPLICATION DATE 6-15-16 *(COMPLETE A SEPARATE FORM FOR EACH APPLICATION DATE)*

CALCULATION OF ACTUAL APPLICATION RATE - *Using information such as total pass time, plot size, tank mix amounts, and discharge rate (average of 3 outputs) determine the actual amount of formulated test substance applied to treated plots. Even if a target rate was used for the pre-application calculations, the data from the calibration (average of 3 outputs) must be used for calculating the application rate. (If the protocol does not include a rate of formulated product, then the amount of active ingredient should be determined.) Convert this amount to the amount applied per acre (or hectare), and determine deviation from target application in the protocol, rounded to the nearest whole percent. Show all calculations and label all units.* ***It is not sufficient to merely compare the actual pass times to the "practice" pass times.*** *The example formulas listed at the bottom of* 6J *may be used to calculate the application rate.* ***Calculations may be entered on a separate page placed after this one, if there is not enough space below.***

EXAMPLE FORMULAS: The formulas below may be used to calculate the amount of test substance (TS) applied per acre as required in Part 6I. Other formulas may be used instead; however, it is not sufficient to merely compare the actual pass times to the "practice" pass times.

1) Total Pass Time x Discharge Rate/Nozzle x #Nozzles = Volume of Tank Mix applied to Plot

2) Volume of Tank Mix applied to Plot x $\frac{\text{Amount of TS in Tank Mix}}{\text{Total Volume of Tank Mix}}$ = Amount of TS applied to Plot

3) Amount of TS applied to Plot x $\frac{\text{43,560 sq ft per acre}}{\text{Plot area treated in sq ft}}$ = Amount of TS applied per acre

%DEVIATION FROM THE PROTOCOL RATE SHOULD BE ROUNDED LIKE THIS: -5% OR THIS: +8%,
NOT LIKE THIS: -5.4% *OR* THIS: +8.29% *OR* THIS: +3.14159265358979323846264338327950288419716939 9%

****

DISCHARGE RATE (ml/sec or g/sec): 56.59 ml/sec

ACTUAL AREA TREATED (*swath width or treated row or bed width x # of passes x length of plot*): 20 ft x 100 ft = 2000 ft²

Note: *Use bed width for plots with multi-row beds.*

149.46 seconds (Total Pass Time) x 56.59 mls/sec (Discharge Rate) = 8457.9414 mls Carrier Applied to Plot

8457.9414 mls (Carrier Applied to Plot) x 7.9 mls (T.S. in Tank Mix) / 10000 mls (Volume of Tank Mix) = 6.681773706 mls T.S. Applied to Plot

6.681773706 mls (T.S. applied to plot) x $\frac{43560 \text{ ft}^2/\text{A}}{2000 \text{ ft}^2 \text{ (Treated Area)}}$ = 145.53 mls T.S Applied Per Acre

$\frac{145.53 \text{ mls T.S./Acre (Actual Rate)}}{142 \text{ mls T.S./Acre (Protocol Rate)}}$ x 100 = 102.49 % of Target rate

+2 % Deviation From Target

WAS ACTUAL APPLICATION RATE WITHIN -5% TO +10% OF PROTOCOL RATE?

(Check one) YES ✓ NO ___ IF NO, **Contact the Study Director immediately.**

ABOVE DATA ENTERED BY: David Ennes *DATE:* 6-15-16

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO.: _____ DATE: 6-15-16

FIELD NOTES FOR: Actual Gallons Per Acre Applied

TRT NO: 02 APPLICATION NO.: 3

149.46 (Total Pass Time (sec)) x 56.59 (Discharge Rate (mls/sec)) = 8457.9414 (Carrier Applied to Plot(mls)) / 2000 ft² (Treated Area)

8457.9414 Carrier Applied to Plot(mls) x 43560 ft²/Acre

2000 ft² Treated Area
= 184213.9637 mls Applied Per Acre

184213.9637 mls Applied Per Acre

3785 mls/Gallon
= 48.67 GPA

Signature: David Ennes

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

K. POST TREATMENT RECORDS FOR **APPLICATION NUMBER** _____

APPLICATION DATE_____ *(Complete a separate form for each application date)*

Was There Any Visible Phytotoxicity Damage? *(Check one)* YES___ NO___

Date Crop Was Observed: _____ *Initials/date*: _____

If YES, then contact the Study Director, fill in the box below, and if a digital camera is available, email digital photograph(s) to the Study Director along with a detailed explanation of the damage. If NO, then line out the entire box with initials and date.

DESCRIPTION OF PHYTOXICITY SYMPTOMS:
PHYTOTOXICITY DESCRIBED BY: *(Initials/date)*
DATE STUDY DIRECTOR WAS CONTACTED: CONTACTED BY: *(Initials/date)*

Enter the requested information below for both the first rainfall and first irrigation after each application, regardless of whether subsequent applications were made prior to the first rainfall or irrigation. The rainfall/irrigation data entered below should be transcribed from the data included in Part 9 unless otherwise indicated on this page. **If irrigation is required by the protocol to incorporate the test substance, or if the test substance is applied by irrigation, then that event should be recorded below. "NONE BEFORE HARVEST" OR "NONE BEFORE SAMPLING" MAY BE ENTERED, IF APPLICABLE.**

DATE OF FIRST RAIN *(Note the date of first rainfall after this application.)*	
TIME AFTER APPLICATION THAT PLOTS WERE EXPOSED TO FIRST RAINFALL *(Check DAYS or HOURS) (Enter #hours if first rainfall was on the date of application.)*	**DAYS**___ **HOURS**___
AMOUNT OF WATER *(Check INCHES or mm)*	**INCHES**___ **mm**___
RAIN INFORMATION RECORDED BY *(Initials/date)*	
TYPE OF IRRIGATION *(e.g. overhead, trickle, flood)*	Drip
DATE OF FIRST IRRIGATION *(Note the date of first irrigation after this application.)*	6-15-16 1:00pm
TIME AFTER APPLICATION THAT PLOTS WERE EXPOSED TO FIRST IRRIGATION *(Check DAYS or HOURS) (Enter #hours if first irrigation was on the date of application.)*	~2.5 **DAYS**___ **HOURS** X
AMOUNT OF WATER *(Check INCHES, mm, or mL)*	~0.58 **INCHES** X **mm**___ **mL**___
IRRIGATION INFORMATION RECORDED BY *(Initials/date)*	DR 6-15-16

If the data entered above differ from the rainfall/irrigation data included in Part 9, explain: _____

_____

_____ *Initials/date*: _____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

Application #4

Foliar

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

C.1. DISCHARGE CALIBRATION FOR **APPLICATION NUMBER ____**

INSTRUCTIONS: Complete a copy of this form (PHOTOCOPY IF NECESSARY) for additional times when a complete calibration or calibration-recheck of application equipment is required.

EQUIPMENT IDENTIFIER_____

DISCHARGE CALIBRATION DATE_____ PERFORMED BY_____ *(INITIALS)*

APPROXIMATE TIME OF DAY THAT THE CALIBRATION WAS PERFORMED_____

LOCATION WHERE THE CALIBRATION WAS PERFORMED_____

DISCHARGE UNITS MEASURED *(e.g. ml, oz., grams)* _____

INSTRUMENT USED TO MEASURE WATER *(e.g. 100 ml graduated cylinder)* _____

BRIEFLY DESCRIBE PROCEDURE USED TO CHECK DISCHARGE CALIBRATION _____

_____

_____

_____

_____

_____

_____

The table for entering output results is now on 6.C.2 (next page).

CALIBRATION CALCULATIONS:

Total Boom Output _____ mls ÷ Total Catch Time _____Sec = _____ mls/sec

ABOVE DATA ENTERED BY: _____ DATE: _____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____DATE_____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

C.2. DISCHARGE CALIBRATION FOR **APPLICATION NUMBER** ____

INSTRUCTIONS: Complete a copy of this form (PHOTOCOPY IF NECESSARY) for additional times when a complete calibration or calibration-recheck of application equipment is required.

DISCHARGE CALIBRATION *Record time applicator is allowed to discharge. Collect output from each nozzle or hopper. Record this value in "RUN" Column 1 next to the appropriate outlet. Calculate the total and average discharge for all the nozzles/hoppers. Entry prompts have been provided for 3 discharge calibration runs. Calculate sums and averages of each nozzle/hopper outlet AND whether the results are within 5% (if applicable). Enter all calculations on 6.C.1.*

Output Run Number		1	2	3	Total (Required)	Average (Optional)
Pressure (psi)						
Time (seconds)						
Nozzle/Hopper Outlet Number Along Boom (These numbers should match those shown in the equipment diagram in 6.B)	1					
	2					
	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
Total						
Output per Nozzle or Outlet						
Output per Second						

Was this a recheck of discharge calibration or a target output? *(Check one)* YES_____ NO_____

If yes, were results within 5% of original calibration or target output? *(Check one)* YES_____ NO_____

If this is a 3-discharge calibration run, is each "output per second" (bottom row in Columns 1, 2, and 3) within 5% of the mean? *(Check one)* YES_____ NO_____

An output consisting of an average of three runs or a target output may be used when calculating the sprayer output and amount of test substance to use. If this is a recheck (one run) then the results of the original calibration must be used. If the output result of the recheck is more than 5% different than the original calibration result, then two more runs are needed to produce a new, full calibration. The original calibration data, or a true copy, must be in this field data book.

ABOVE DATA ENTERED BY: _____ DATE: _____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

D. SPEED CALIBRATION FOR **APPLICATION NUMBER(S)** ____

INSTRUCTIONS: Complete a separate form for additional times when a complete calibration or calibration- recheck of application equipment is required.

EQUIPMENT IDENTIFIER _____

SPEED CALIBRATION DATE _____ _____ PERFORMED BY_____ *(INITIALS)*

TERRAIN OF CALIBRATION TRACK *(e.g. tilled field)* _____

LOCATION WHERE THE CALIBRATION WAS PERFORMED_____

BRIEFLY DESCRIBE PROCEDURE USED FOR SPEED CALIBRATION _____

_____

_____

_____

SPEED CALIBRATION: *Calculate the speed of the application equipment. If appropriate, note the gear setting and /or RPM setting used in the speed calibration. Indicate the distance (in feet) of the track on which the application equipment was tested to determine speed (e.g. speed of application equipment tested for 100 ft.). The speed is calculated by dividing the length of test track (in feet or meters) by the time needed to cover that length (in seconds). Entry prompts have been provided for 2 additional runs. If this is a recheck, calculate the result is within 5% of the original calibration. Show all calculations.* ***A speed recheck (one run) is required whenever an output recheck is performed, except for multiple applications within a study that are being made on the same day on the same farm.***

RUN	GEAR	RPM	Length of test track (include units)	TIME (sec)	CALCULATED SPEED (include units)
1					
2					
3					
Total of test run times (sec)			Average time (sec)		Average speed	

CALCULATIONS:

100 ft ÷ _____ seconds = _____ ft/sec
100 ft ÷ _____ seconds = _____ ft/sec
100 ft ÷ _____ seconds = _____ ft/sec

Target Pass Time = $\frac{\text{Seconds} \times \text{ft}}{100\ \text{ft}}$ = _____ Seconds/_____ ft

WHAT WAS THIS A RECHECK OF SPEED CALIBRATION? *(Check one)* YES_____ NO_____
IF YES, WERE RESULTS WITHIN 5% OF ORIGINAL CALIBRATION? *(Check one)* YES_____ NO_____
The original calibration data, or a true copy, must be in this field data book.

NOTE: A target speed may be used for application calculations, rather than the mean of three runs, but for each application a full speed calibration must be conducted, and the mean of the three runs must be within 5% of the target speed.
WAS THIS A CHECK OF A TARGET SPEED? *(Check one)* YES_____ NO_____
IF YES, WERE RESULTS WITHIN 5% OF TARGET SPEED? *(Check one)* YES_____ NO_____

ABOVE DATA ENTERED BY: _____ *DATE:* _____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

E. DELIVERY RATE CALIBRATION FOR **APPLICATION NUMBER(S)** ____

INSTRUCTIONS: Complete a separate form for each application, unless the same parameters are used-- you are using the same equipment, and have performed a recheck to confirm the result of the full calibration. Determine the rate of delivery from the application equipment. Briefly describe the procedure, including formulas used to determine delivery rate calibration. Show all calculations and units. Equations used in electronic (computer software) calculations in this trial must be transcribed or printed out and attached here. Computer-generated values (as opposed to those entered by the field cooperators) must be reviewed and clearly delineated by circling, initialing, and dating.

PROCEDURE/FORMULA:

GPA =

$$\frac{\text{Total Boom Output (mls)}}{\text{Total Catch Time (sec)}} \times \frac{\text{Average seconds to travel 100 ft.}}{\text{Boom Swath Width (} \quad \text{ft)} \times \text{Calibrated Distance (100 ft)}} \times \frac{\text{ft}^2}{\text{acre}} \times \frac{\text{1 Gallon}}{\text{3785 ml}} =$$

$= \text{ft}^2$

CALCULATIONS:

$$\frac{\_\_\_\_\_ \text{ mls}}{\text{sec.}} \times \frac{\_\_\_\_\_ \text{ sec}}{\text{ft}^2} \times \frac{43560\ \text{ft}^2}{\text{Acre}} \times \frac{\text{1 Gallon}}{\text{3785 mls}} = \_\_\_\_\_ \text{ GPA}$$

ABOVE DATA ENTERED BY: _____ *DATE:* _____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

F. VOLUME, MIXING AND DILUTION CALCULATIONS FOR **APPLICATION NUMBER(S)** ____

INSTRUCTIONS: Complete a separate form for each application, unless there are no changes in multiple applications. Show all calculations, formulas, and results below, define units of measure, and cite the initials of the person performing the calculations. Equations used in electronic (computer software) calculations in this trial must be transcribed or printed out and attached here. Computer-generated values (as opposed to those entered by the field cooperators) must be reviewed and clearly delineated by circling, initialing, and dating.

Treated Area = _____ft x _____ft = _____ft^2

$$\_\_\_\_\_\text{GPA} \times \frac{\_\_\_\_\_ ft^2}{43560\ ft^2} \times \frac{3785\ \text{mls}}{\text{Gallon}} = \_\_\_\_\_\text{mls Required Volume}$$

$$\text{Overage factor} = \frac{\_\_\_\_\_\ \text{mls (Total Volume)}}{\text{mls (Required Volume)}} =$$

_____mls x Overage Factor _____ = _____mls Total Volume

Test Substance Rate _____lbs ai/Acre _____lbs ai/Gallon

$$\frac{\_\_\_\_\_\ \text{lbs ai}}{\text{Acre}} \times \frac{\_\_\_\_\_ ft^2}{43560\ ft^2/\text{Acre}} \times \frac{1.0\ \text{gallon}}{\text{lb ai}} \times \frac{3785\ \text{mls}}{\text{Gallon}} = \_\_\_\_\_\ \text{mls}$$

$$\_\_\_\_\_\text{mls} \times \frac{\_\_\_\_\_}{\text{Overage Factor}} = \_\_\_\_\_\text{mls T.S.}$$

DESCRIBE HOLDING AND TRANSPORT OF TEST SUBSTANCE AND ADJUVANT (if applicable) FROM STORAGE AREA TO LOCATION OF TANK MIXING *(E.g.: "Test substance held securely in an insulated cooler during transport to field site in the bed of a pickup truck" or "Tank mix prepared within walking distance of the chemical storage building")*

_____

_____

_____

_____

ABOVE DATA ENTERED BY: _____ *DATE:* _____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____DATE_____

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

G. APPLICATION INFORMATION FOR **APPLICATION NUMBER** ____ APPLICATION DATE _____

HAS THE APPLICATION EQUIPMENT BEEN USED SINCE THE LAST CALIBRATION/RECHECK WAS PERFORMED? *(Check one)* YES_____ NO_____ (If you are about to check YES, then a recheck is usually required.)

INSTRUCTIONS: **Complete a separate form for each application date and for each treatment on one application date (use the Treatment Number as indicated in the protocol).** *Provide the name of the test substance (common chemical name or chemical code number); the batch or lot number of the test substance; the approximate time the test substance was mixed with the carrier and the approximate time the mixture was applied to the plots, along with* ***the initials of the person(s) mixing and spraying the tank mix****; the time of additional agitation (if any); the unique name or code for the application equipment used to apply this treatment; the placement of the test substance (e.g. broadcast, in-furrow, directed, knifed-in, banded); the amount of carrier, formulated product and other additives in the mix; the measuring equipment with increments; the distance (include units) of the nozzles above the canopy or ground (indicate which); the pressure in pounds per square inch at the boom; if treatment(s) were incorporated, the method and/or equipment used to incorporate the test substance mix (e.g. disked, rotovator, irrigated, etc.), depth to which the test substance was incorporated* ***or*** *the amount of water used to move the test substance into the soil; the time after treatment the incorporation activity was performed; and the carrier (normally water), its source (e.g. farm pond, city water), pH of the carrier and its temperature, and the equipment used to measure the carrier pH.*

	TRT Number ____	
NUMBER OF DAYS SINCE PREVIOUS APPLICATION		TIME OF ADDITIONAL AGITATION/INITIALS (if applicable) e.g. "10:00" or "continuous" or "just prior to application"
TEST SUBSTANCE		
BATCH/LOT NUMBER/Container#[1]		
TIME MIXED/INITIALS		
TIME APPLIED/INITIALS		
EQUIPMENT IDENTIFIER		
PLACEMENT OF TEST SUBSTANCE		
TANK MIX AMOUNTS		MEASURING EQUIPMENT with INCREMENTS*
CARRIER (starting volume of water)		
VOLUME of WATER REMOVED from starting volume (if applicable)		
TEST SUBSTANCE (formulated product)		
ADJUVANT OR SURFACTANT		
TOTAL VOLUME OF TANK MIX		*e.g. 1000 mL grad. cylinder/10 ml incr.
NOZZLE DISTANCE from TARGET		ORDER IN WHICH ITEMS WERE ADDED TO SPRAY MIXTURE* W=Water, TS=Test Substance, A=Adjuvant *e.g. 1-W, 2-TS, 3-A, 4-W
PSI AT BOOM		
INCORPORATION - Methodology and/or Equipment - DEPTH - TIME		
CARRIER SOURCE/TYPE		
CARRIER pH/TEMPERATURE		
EQUIPMENT used to MEASURE pH		

[1] *If more than one test substance container was received for this trial. If not, only batch or lot number is needed.*

ABOVE DATA ENTERED BY: _____ *DATE:* _____

Description of Equipment Used to Measure Test Substances, Adjuvant and Carrier Water

FIELD ID No. Oxathiapiprolin / Strawberry ID No. 11719.16-CA55 Ennes **Application No.**_____

The following equipment was used in this study:

To remove volume of water:_____

Scale for solid Test Substance:

____ Mettler Toledo Scale, Model PL 303 (0.001gr increments)
____ Ohaus Portable Advanced Scale, Serial No. 16625 (0.01 gr increments)

Pipettes:*

Test Sub. (Liquid)	Adjuvant
____ 5 ml	____ 5 ml
____ 10 ml	____ 10 ml
____ 25 ml	____ 25 ml

Cylinders:**

Test Substance	Adjuvant	Carrier Water
____ 50 ml	____ 50 ml	____ 50 ml
____ 100 ml	____ 100 ml	____ 100 ml
____ 250 ml	____ 250 ml	____ 250 ml
____ 500 ml	____ 500 ml	____ 500 ml
____ 1000 ml	____ 1000 ml	____ 1000 ml
____ 4000 ml	____ 4000 ml	____ 4000 ml
		____ Scienco Flow meter

*The pipettes used to measure test substances or adjuvants are 5 ml, 10 ml and 25 ml (TD) plastic pipettes. The 5 ml and 10 ml pipettes measure in 0.1 ml increments and the 25 ml pipette measures in 0.2 ml increments.

**The graduated cylinders used to measure test substance, adjuvant or carrier water are 50,100, 250, 500, 1000 and 4000 mls. The 50 and 100 ml cylinders measure in increments of 1 ml, 250 ml cylinder in 2 ml increments, 500 ml cylinder in 5 ml increments, 1000 ml cylinder in 10 ml increments and the 4000 ml cylinder in 50 ml increments. Carrier water for airblast sprays is measured with a Scienco flow meter which measures water out to hundredths (i.e. 1.00)

Signature: _____ **Date:** _____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
FIELD ID NO: _ Ennes

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

H. ADDITIONAL INFORMATION FROM **APPLICATION NUMBER** _____

APPLICATION DATE _____ *(Complete a separate form for each application date)*

PLANT GROWTH & ENVIRONMENTAL DATA AT THE TIME OF APPLICATION	Enter data in this column
CROP HEIGHT *(Measure or estimate crop height, include units of measurements)*	
CROP GROWTH STAGE *(e.g. seed, vegetative, bud, bloom, fruiting, #true leaves)*	
CROP VIGOR *(e.g. poor, fair, good, variable)**	
PLANT SURFACE MOISTURE *(Check one)*	**SATURATED**___ **DAMP**___ **DRY**___ **NA**___
ESTIMATED % OF SOIL AREA COVERED BY CROP CANOPY	
MEASURED AIR TEMPERATURE *(Check F or C)* (*E.g.* 75 °F √ °C___)	**°F**___ **°C**___
MEASURED WIND SPEED *(Check MPH or Km/Hr)* (*E.g.* 0.5 MPH √ Km/Hr___)	**MPH**___ **Km/Hr**___
WIND DIRECTION FROM *(Check one)*	**N**___ **NE**___ **E**___ **SE**___ **S**___ **SW**___ **W**___ **NW**___ or **NO WIND**___
ESTIMATED % OF CLOUDS IN THE SKY	
MEASURED RELATIVE HUMIDITY%	
DEW *(heavy, light, none, etc.)*	
DESCRIPTION OF SOIL TILTH *(smooth, firm, packed, cloddy, etc.)*	
ESTIMATE OF SOIL SURFACE MOISTURE *(wet, moist, dry, etc.)*	
SOIL TEMPERATURE *(Check F or C)*	**°F**___ **°C**___
DEPTH OF MEASUREMENT OF SOIL TEMPERATURE *(Check INCHES or cm)*	**INCHES**___ **cm**___

*IF CROP VIGOR IS POOR OR VARIABLE, EXPLAIN: _____

ABOVE DATA ENTERED BY: _____ *DATE:* _____

BRIEFLY DESCRIBE PROCEDURE USED TO CLEAN APPLICATION EQUIPMENT AND IDENTIFY WHO CLEANED IT:

CLEANING DESCRIPTION ENTERED BY: _____ *DATE:* _____

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

I. PASS TIMES FOR **APPLICATION NUMBER** ____

APPLICATION DATE_____ *(COMPLETE A SEPARATE FORM FOR EACH APPLICATION DATE)*

RECORD PASS TIME AND PASS DIRECTION - *Complete the table by providing the time required to make each pass of the application equipment through the plot and direction of that pass (e.g. NE).*

	TREATMENT __		TREATMENT __		
PASS NUMBER	TIME	DIRECTION	PASS NUMBER	TIME	DIRECTION
1			1		
2			2		
3			3		
4			4		
5			5		
6			6		
7			7		
8			8		
9			9		
10			10		
11			11		
12			12		
TOTAL PASS TIME					

ABOVE DATA ENTERED BY: _____ *DATE:* _____

PROVIDE A BRIEF NARRATIVE SUMMARY OF THE APPLICATION

(E.g. *"Test substance was applied to the treated test plot in two passes; one pass down each side of the row. Each pass was applied to the soil, in a 3 ft. band out from the tree, with the spray boom 24 inches above the soil."*)

_____

_____

_____

_____

_____

_____

_____

_____

_____

NARRATIVE ENTERED BY_____ *DATE:* _____

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

J. POST APPLICATION RATE CONFIRMATION FOR **APPLICATION NUMBER ____**

APPLICATION DATE_____ *(COMPLETE A SEPARATE FORM FOR EACH APPLICATION DATE)*

CALCULATION OF ACTUAL APPLICATION RATE - *Using information such as total pass time, plot size, tank mix amounts, and discharge rate (average of 3 outputs) determine the actual amount of formulated test substance applied to treated plots. Even if a target rate was used for the pre-application calculations, the data from the calibration (average of 3 outputs) must be used for calculating the application rate. (If the protocol does not include a rate of formulated product, then the amount of active ingredient should be determined.) Convert this amount to the amount applied per acre (or hectare), and determine deviation from target application in the protocol, rounded to the nearest whole percent. Show all calculations and label all units.* ***It is not sufficient to merely compare the actual pass times to the "practice" pass times.*** *The example formulas listed at the bottom of* 6J *may be used to calculate the application rate.* ***Calculations may be entered on a separate page placed after this one, if there is not enough space below.***

EXAMPLE FORMULAS: The formulas below may be used to calculate the amount of test substance (TS) applied per acre as required in Part 6I. Other formulas may be used instead; however, it is not sufficient to merely compare the actual pass times to the "practice" pass times.

1) Total Pass Time x Discharge Rate/Nozzle x #Nozzles = Volume of Tank Mix applied to Plot

2) Volume of Tank Mix applied to Plot x $\frac{\text{Amount of TS in Tank Mix}}{\text{Total Volume of Tank Mix}}$ = Amount of TS applied to Plot

3) Amount of TS applied to Plot x $\frac{\text{43,560 sq ft per acre}}{\text{Plot area treated in sq ft}}$ = Amount of TS applied per acre

%DEVIATION FROM THE PROTOCOL RATE SHOULD BE ROUNDED LIKE THIS: -5% OR THIS: +8%,
NOT LIKE THIS: -5.4% *OR* THIS: +8.29% *OR* THIS: +3.14159265358979323846264338327950288419716939 9%

****

DISCHARGE RATE (ml/sec or g/sec): _____

ACTUAL AREA TREATED (*swath width or treated row or bed width x # of passes x length of plot*): _____
Note: *Use bed width for plots with multi-row beds.*

_____seconds x _____mls/sec = _____ mls Carrier Applied to Plot
Total Pass Time Discharge Rate

_____mls x $\frac{\text{mls (T.S. in Tank Mix)}}{\text{mls (Volume of Tank Mix)}}$ = _____ mls T.S. Applied to Plot
Carrier Applied to Plot

_____mls (T.S. applied to plot) x $\frac{\text{43560 ft}^2\text{/A}}{\text{ft}^2\text{ (Treated Area)}}$ = _____mls T.S Applied Per Acre

$\frac{\text{mls T.S./Acre (Actual Rate)}}{\text{mls T.S./Acre (Protocol Rate)}}$ x 100 = _____ % of Target rate

_____ % Deviation From Target

WAS ACTUAL APPLICATION RATE WITHIN -5% TO +10% OF PROTOCOL RATE?
(Check one) YES____ NO____ IF NO, **Contact the Study Director immediately.**

ABOVE DATA ENTERED BY: _____ *DATE:* _____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO.: _____ DATE: _____

FIELD NOTES FOR: Actual Gallons Per Acre Applied

TRT NO: _____ APPLICATION NO.: _____

_____ x _____ = _____ / _____ ft^2
Total Pass Time (sec) | Discharge Rate (mls/sec) | Carrier Applied to Plot(mls) | Treated Area

_____ Carrier Applied to Plot(mls) x 43560 ft^2/Acre
_____ = _____ mls
_____ ft^2
Treated Area | Applied Per Acre

_____ mls Applied Per Acre
_____ = _____ GPA
3785 mls/Gallon

Signature: _____

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

K. POST TREATMENT RECORDS FOR **APPLICATION NUMBER** _____

APPLICATION DATE_____ *(Complete a separate form for each application date)*

Was There Any Visible Phytotoxicity Damage? *(Check one)* YES___ NO___

Date Crop Was Observed: _____ *Initials/date*: _____

If YES, then contact the Study Director, fill in the box below, and if a digital camera is available, email digital photograph(s) to the Study Director along with a detailed explanation of the damage. If NO, then line out the entire box with initials and date.

DESCRIPTION OF PHYTOXICITY SYMPTOMS:
PHYTOTOXICITY DESCRIBED BY: *(Initials/date)*
DATE STUDY DIRECTOR WAS CONTACTED: CONTACTED BY: *(Initials/date)*

Enter the requested information below for both the first rainfall and first irrigation after each application, regardless of whether subsequent applications were made prior to the first rainfall or irrigation. The rainfall/irrigation data entered below should be transcribed from the data included in Part 9 unless otherwise indicated on this page. **If irrigation is required by the protocol to incorporate the test substance, or if the test substance is applied by irrigation, then that event should be recorded below. "NONE BEFORE HARVEST" OR "NONE BEFORE SAMPLING" MAY BE ENTERED, IF APPLICABLE.**

DATE OF FIRST RAIN *(Note the date of first rainfall after this application.)*	
TIME AFTER APPLICATION THAT PLOTS WERE EXPOSED TO FIRST RAINFALL (*Check DAYS or HOURS*) *(Enter #hours if first rainfall was on the date of application.)*	**DAYS**___ **HOURS** ___
AMOUNT OF WATER (*Check INCHES or mm*)	**INCHES**___ **mm**___
RAIN INFORMATION RECORDED BY *(Initials/date)*	
TYPE OF IRRIGATION *(e.g. overhead, trickle, flood)*	
DATE OF FIRST IRRIGATION *(Note the date of first irrigation after this application.)*	
TIME AFTER APPLICATION THAT PLOTS WERE EXPOSED TO FIRST IRRIGATION (*Check DAYS or HOURS*) *(Enter #hours if first irrigation was on the date of application.)*	**DAYS**___ **HOURS** ___
AMOUNT OF WATER (*Check INCHES, mm, or mL*)	**INCHES**___ **mm**___ **mL**___
IRRIGATION INFORMATION RECORDED BY*(Initials/date)*	

If the data entered above differ from the rainfall/irrigation data included in Part 9, explain: _____

_____

_____ *Initials/date*: _____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN FIELD DATA BOOK NO. _____ INITIALS _____DATE_____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

L.1. DIFFERENTIATION OF MULTIPLE TRIALS CONDUCTED IN CLOSE PROXIMITY*

ARE YOU CONDUCTING MORE THAN ONE TRIAL IN THIS STUDY? YES___ NO✓___

IS ANOTHER FIELD RESEARCH DIRECTOR IN THIS STUDY CONDUCTING A TRIAL WITHIN 20 MILES OF YOUR TRIAL(S)? YES___ NO✓___

If "NO" is checked twice, then no other input is needed except for signing and dating at the bottom of each page.

If "YES" is checked at least once, then an independently prepared tank-mix must be used in each trial, except in studies in which this is not applicable such as studies with granular formulations.

In order to differentiate these trials, select one option from Set 1 OR two options from Set 2.

If 3 or more trials in this study cannot be differentiated by the same options, then you should check all options that have been used, and explain below which options are differentiating between which trials.

If different crop varieties are being used as a differentiation option, then enter below information that explains why these varieties were chosen. Examples: Variety A produces large fruit, whereas Variety B produces small fruit. Variety A produces fruit with a smooth skin, whereas Variety B produces fruit with a rough skin. Varieties A and B are the two most commonly grown cultivars in this state.

If options are used that are listed in the protocol but are not listed in the table in Part 6.L.2, then enter descriptions of those options below.

Enter below any additional information that will improve the understanding of the options that have been chosen.

*Trials conducted in different calendar years are exempt from these requirements. (If separate trials by the same person or within 20 miles are conducted in late fall/early winter, then the differentiation options should be used to reduce the possibility of data rejection by a regulatory agency.)

Trial IDs of other trials in this study to which these options are being applied:

DK 5-26-16

Additional information:

DK 5-26-16

ABOVE DATA ENTERED BY: David Ennes *DATE:* 5-26-16

PART 6 PAGE ___ Trial Year 2016

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

L.2. DIFFERENTIATION OF MULTIPLE TRIALS (IF YOU CHECKED "YES" ON THE PREVIOUS PAGE)

Some options included in this table may <u>not</u> be acceptable for use in this study. Refer to Protocol Section 11.4 for the study-specific list of options.

Check the options (in the third column) used to differentiate the trials that you are conducting in this study:

Set	Option	√	Description
1	A		Trial sites must be separated by at least 20 miles (32 km)
	B		First application or planting date (for annual crops) in each trial is separated by at least 30 days
	C		Different crop variety (different size or shape at maturity, rough vs. smooth surface, different amount of foliage shielding the commodity, different rate of growth, or representative of the major varieties grown within the region)—confirm with Study Director if this option will be chosen
2	A		Spray volume must vary by at least 25% of the lower volume (minimum 10 GPA difference) Example 1, Trial A has a volume of 20 GPA and Trial B has a volume ≥ 30 GPA Example 2, Trial A has a volume of 60 GPA and Trial B has a volume ≥ 75 GPA The trial with the lowest spray volume for the first application must remain the lowest for each application; the trial with the highest must remain the highest for each, and so on
	B		Use of an adjuvant (of any suitable type) in the tank mix for one trial vs. <u>no adjuvant</u> in the tank mix for another trial
	C		Different foliar application type: foliar directed or foliar broadcast (Do not use this option if the label instructions for this commodity will specify one type or the other)
	D		Different granular application type: broadcast or banded (only if label supports both types)
	E		Different types of application equipment be used in each trial (for example, tractor-pulled boom sprayer, tractor-pulled spreader, airblast sprayer, axial fan orchard sprayer, proptec sprayer, cannon mist sprayer, tower sprayer, over-row sprayer, tunnel sprayer, backpack sprayer, waist pack sprayer, hand gun, hand-held spreader, or shaker can) OK 5-26-16
	F		Different spray droplet size (fine, medium, coarse, very coarse, or extra coarse) This may be accomplished by changing nozzles and/or by changing spray pressure Document in the Field Data Book the droplet size that results from the pressure and nozzles used in the trial (nozzle catalog may be used as a reference) Coarse, very coarse, and extra coarse are appropriate for herbicides only
	G		Different incorporation method for soil-applied test substance: mechanical or irrigation
	H		Different band width for soil applications: band width must vary by at least 50% of the lower width
	I		Different irrigation type (drip or furrow or sprinkler/over-the-top) (Irrigation must be applied at least once after each application, but over-the-top irrigation must not be applied within one hour of an application, and irrigation is not needed following the last application if samples are to be collected on the same day)
	J		For test substances that must be applied through drip irrigation: surface drip line or buried drip line
	K		Different planting arrangement for annual crops: single row beds or multi-row beds (two or more rows on each bed)
	L		One trial shall have trellised plants and the other shall not
	M		Different training system for fruit trees (for example, central leader or open center)
	N		Different maturity of trees or bushes in fruit and nut studies—young trees or bushes in one trial and mature trees or bushes in the other (minimum 5 year age difference); all trees/bushes must be commercially productive
	O		Different soil series, type, or texture (only in trials in which applications are made to the soil)
	P		Different formulations of the test substance (within the types generally considered equivalent)

ABOVE DATA ENTERED BY: David Ennes *DATE:* 5-26-16

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THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

M. APPLICATION EQUIPMENT MAINTENANCE AND REPAIR LOG

INSTRUCTIONS: Complete this form or provide equivalent information. Provide dates and a brief description of maintenance and repair work completed on the application equipment relevant to this trial. Be sure to date and initial all entries.

APPLICATION EQUIPMENT IDENTIFIER_____

EQUIPMENT USED FOR **APPLICATION NUMBERS**_____

INITIALS/DATE_____

RECORD DATES AND BRIEF DESCRIPTION OF ANY CALIBRATION, MAINTENANCE AND REPAIR WORK DONE ON THE APPLICATION EQUIPMENT, OR ATTACH TRUE COPIES OF THE LOGS.
ALSO RECORD SOP# FOLLOWED, IF APPLICABLE.

Initials and Date	Was Maintenance or Repair routine? (Check one)		SOP#	Description
	Yes	No		

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Sample Collection
Part 7

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 7. SAMPLE COLLECTION AND STORAGE

A.1. GENERAL HARVESTING INFORMATION *INSTRUCTIONS: Complete a separate form for each sampling date.*

HARVEST DATE[1]_____ **SAMPLING DATE**[2]_____ **PHI**[3]_____

[1]*Record the date of crop harvest (harvest defined as crop digging, crop cutting, picking, etc.)*
[2]*Enter the date the sampled crop items were placed in sample bags (i.e. sample collection)*
[3]*Record the number of days from last application to harvest (PHI)*

IF THE PHI IS 0 DAYS, WAS THE SPRAY DRY BEFORE THE CROP WAS HARVESTED? YES____ NO____ NA____
(Check NA if PHI>0 days or if the test substance was not sprayed, e.g. a granular application.)

DESCRIPTION OF HARVESTED CROP STAGE
(E.g. commercially mature lettuce heads, blueberries mature in size (mostly blue in color), mature plums for drying)

_____

Number of (check one) **Plants_____ Trees_____ Bushes_____ Areas_____ of the Plot from Which Each Sample was Collected**	
Number and Location of Rows from Which Each Sample Was Collected *Examples: "6 middle rows" "All 3 rows" "1" (for single-row plot)*	
Minimum Number of (check one) **Fruit_____ Heads_____ Roots_____ Plants_____ Other_____** (describe) **Actually Collected per Sample**	*(If a minimum is required by the protocol)*
Number of (check one) **Plants_____ Trees_____ Bushes_____ at Each End, or** (check) **Length of Row Ends_____, That Were Not Sampled**	
Was Less Than 50% of the Harvestable Crop Sampled? (May be determined by visual estimation)	**YES _____ NO_____** *If* **no** *is checked, contact the Study Director*
Was Each Sample Collected in a Separate Run Through the Entire Plot?	**YES _____ NO_____** *If* **no** *is checked, contact the Study Director*
HARVESTING EQUIPMENT (*Provide a brief description of harvesting equipment, including make and model numbers, if appropriate.* ***Do not include gloves, sample bags, coolers, or scales.)***	
ORDER OF SAMPLE COLLECTION	

BRIEFLY DESCRIBE PROCEDURES UTILIZED TO HARVEST CROP. Provide enough details in addition to data entered above to ensure that protocol requirements have been met and to inform a data reviewer exactly how this crop was harvested. *Examples: "Hand-picked berries from one side of the row, then the other. Collected fruit from high and low, exposed and shielded areas." "Barley was cut 3-4 inches above the ground with a scythe and left on the ground to dry for hay samples. Each entire plot was cut."* ATTACH A SEPARATE SHEET IF NECESSARY.

_____

_____

_____

_____

Was the crop in all of the trial plots healthy? YES___ NO___

IF NO, PLEASE EXPLAIN: _____

_____

ABOVE DATA ENTERED BY: _____ *DATE:* _____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 7. SAMPLE COLLECTION AND STORAGE

A.2. GENERAL SAMPLING INFORMATION--*Complete a separate form for each sampling date.*

Were harvested crop items collected directly into residue sample bags? **YES___** **NO___**

IF NO, PLEASE EXPLAIN _____

_____

DESCRIPTION OF SAMPLED CROP STAGE *(if different from harvested crop, such as dried plums, mint oil)*

_____

IF THE SAMPLING OCCURRED AFTER THE HARVEST DATE, DESCRIBE SAMPLE COLLECTION. ALSO, DESCRIBE ANY MODIFICATIONS TO THE HARVESTED CROP SUCH AS TRIMMING, CLEANING, CUTTING, DRYING AND/OR COMPOSITING SAMPLES. IF THE MODIFICATIONS ARE TOO COMPLEX TO BE DESCRIBED BELOW, ATTACH A SEPARATE SHEET THAT CLEARLY DESCRIBES THE MODIFICATION PROCEDURES

Include a description of equipment, duration of procedure(s), temperatures, estimated moisture content, etc., as appropriate.

_____

_____

_____

_____

_____

_____

_____

_____

_____

CHECK ALL PROCEDURES USED TO PREVENT CONTAMINATION OF RESIDUE SAMPLES

___UNCONTAMINATED GLOVES WORN AND CHANGED BETWEEN SAMPLES
___TREATMENTS WERE SAMPLED BY DIFFERENT PEOPLE
___PHYSICALLY SEPARATED TREATED AND UNTREATED SAMPLES
___CLEANED SAMPLING EQUIPMENT BETWEEN COLLECTIONS OF EACH TREATMENT
___OTHER, EXPLAIN: _____

_____

DESCRIBE HOLDING AND TRANSPORT OF SAMPLES FROM FIELD TO FREEZER

(E.g. Sample bags placed in cooler with blue ice, then transported by pickup truck to research center for pitting. Following pit removal, sample bags were hand-carried to freezer.)

_____

_____

_____

ABOVE DATA ENTERED BY: _____ *DATE:* _____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 7. SAMPLE COLLECTION AND STORAGE

B. SPECIFIC SAMPLE INFORMATION AND INVENTORY

INSTRUCTIONS: Complete this form ***or*** *provide equivalent information.* **USE A SEPARATE PAGE FOR EACH SAMPLE DATE.** *Enter the date the individual samples were collected (***do not enter the harvest date when this date is different from sample date***), the sample ID (see protocol Section 18 for Sample ID code), a brief description of the crop part sampled (e.g. turnip roots, turnip tops, tomato fruit, corn forage etc.,), the weight of the sample, the approximate time of day of* **completion of each sample collection–i.e., sample placed in sample bag following any modifications** *(e.g., 10:15 a.m.), the approximate time of day that each sample was placed in a freezer, the approximate time interval between completion of collection of each sample (***placement of the sample in sample bag***) and the placement of the sample in freezer (e.g., 45 minutes), the identification code of the freezer where the samples are stored, and the initials of the person providing the above information and the date it is entered on this form.*

SAMPLE COLLECTION DATE: _____

SAMPLE ID*	CROP FRACTION	WEIGHT (INCLUDE UNITS)	APPROXIMATE TIME OF DAY OF COMPLETION OF SAMPLE COLLECTION	APPROXIMATE TIME OF DAY THAT SAMPLE WAS PLACED IN FREEZER	APPROXIMATE ELAPSED TIME TO FREEZER FROM SAMPLE COLLECTION	FREEZER ID	INITIALS & DATE

* See Protocol Section 18 for assigned Sample ID code

Was a GLP-maintained scale used to determine weight of residue samples? YES____ NO____

CROP DESTRUCT: Please describe in Part 5I of this Field Data Book how the (leftover) treated crop has been destroyed or handled in such a way that it cannot be consumed as a human food or animal feed.

ABOVE DATA ENTERED BY: _____ *DATE:* _____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 7. SAMPLE COLLECTION AND STORAGE

C. FREEZER TEMPERATURE LOG

INSTRUCTIONS: Use this (or an equivalent) form when freezer temperatures are taken manually. For each day that temperatures are taken, directly record the date, the minimum and maximum temperature, the degree units (°F or °C), and provide the initials of the person entering the data. Photocopy this form if space for more freezer records is needed. When temperature records are monitored automatically, the original or certified true copy of the output (disk from data logger, computer printout, etc.) must be placed in this Field Data Book.

UNIQUE IDENTIFIER FOR FREEZER: _____
Enter Freezer ID—may be make/model/serial# or assigned identifier.

UNIQUE IDENTIFIER FOR FREEZER TEMPERATURE RECORDER: _____
Enter Freezer Temperature Recorder ID—may be make/model/serial# or assigned identifier.

DATE	TEMP MIN/MAX	INITIALS	DATE	TEMP. MIN/MAX	INITIALS	DATE	TEMP MIN/MAX	INITIALS

Unless otherwise noted in the table above, all temperature units are in (*Check one*):

°C___ °F___ _____(Initials)_____(Date)

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____DATE_____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 7. SAMPLE COLLECTION AND STORAGE

D. FREEZER CONTENTS LOG

INSTRUCTIONS: Use this (or an equivalent) form to record the movement of residue samples in and out of the freezer. Note the trial ID # (e.g., 06788.99-CA45), "contents" (e.g. treated peppers), the day and time it entered the freezer and the initials of the person putting the samples into the freezer. Also note the date and time the same samples are removed from the freezer and the initials of the person removing the samples from the freezer.

UNIQUE IDENTIFIER FOR FREEZER: _____
Enter Freezer ID—may be make/model/serial# or assigned identifier.

TRIAL ID#	CONTENTS	DAY/TIME IN	INITIALS	DAY/TIME OUT	INITIALS

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE_____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 7. SAMPLE COLLECTION AND STORAGE

E. FREEZER MAINTENANCE AND REPAIR LOG

INSTRUCTIONS: Complete this form or provide equivalent information. Provide dates and a brief description of maintenance and repair work completed on the freezers relevant to this trial. Be sure to date and initial all entries.

UNIQUE IDENTIFIER FOR FREEZER: _____
Enter Freezer ID—may be make/model/serial# or assigned identifier.

RECORD DATES AND BRIEF DESCRIPTION OF ANY CALIBRATION, MAINTENANCE AND REPAIR WORK DONE ON FREEZER.

ALSO RECORD SOP# FOLLOWED, IF APPLICABLE: SOP#_____

Initials and Date	Was Maintenance or Repair routine? (Check one)		Description
	Routine	Non-Routine	

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____DATE_____

Sample Shipping
Part 8

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 8. RESIDUE SAMPLE SHIPPING

A. RESIDUE SAMPLE SHIPPING INFORMATION

INSTRUCTIONS: Complete this form for each sample shipment. ***Fax, mail, or email a true copy to the Study Director and to your Regional Field Coordinator (along with 8B).*** *Retain the original in the Field Data Book.*

WERE SAMPLES KEPT FROZEN[1] FROM
SAMPLE COLLECTION DATE TO SHIPMENT? *(Check one)* YES _____ NO_____

[1]*"Kept frozen" indicates storage at temperatures generally <0 °F (-18 °C).*

IF NO, PLEASE EXPLAIN: _____

_____

DATE/TIME RESIDUE SAMPLES PACKAGED: _____ TIME: _____ AM___ PM___ (*Check one*)

DATE/TIME RESIDUE SAMPLES RETURNED
TO FREEZER AFTER PACKAGING: _____ TIME: _____ AM___ PM___ NOT APPLICABLE___

DESCRIBE PROCEDURES UTILIZED TO PACKAGE SAMPLES:

_____

_____

_____

METHOD OF SHIPMENT *(Check one)* OVERNIGHT AIR EXPRESS_____ FREEZER TRUCK_____
OTHER_____ *(Describe)*: _____

DATE SAMPLES GIVEN TO CARRIER: _____ TIME: _____ AM____ PM____ (*Check one*)

NAME OF CARRIER _____

Were the Chain of Custody Form (8B) and the Sample Arrival Check Sheet (8C) sent with the samples? YES___ NO___

ABOVE DATA ENTERED BY: _____ *DATE:* _____

INSERT THE ORIGINAL OR VERIFIED TRUE COPY OF THE BILL OF LADING (WAY BILL) INTO THIS FIELD DATA BOOK AFTER THIS PAGE

****

SHIPPING ADDRESS (include the name of the person to whom the samples are being sent):

_____

_____

_____

_____

NAME OF PERSON CONTACTED AT LAB REGARDING SHIPMENT: _____

DATE OF CONTACT: _____ TIME: _____ AM____ PM____ (*Check one*)

METHOD OF CONTACT (*e.g., telephone*): _____

ABOVE DATA ENTERED BY: _____ *DATE:* _____

Total number of pages in this section at initial pagination: ____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____DATE_____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 8. RESIDUE SAMPLE SHIPPING

B. RESIDUE SAMPLE CHAIN OF CUSTODY FORM

INSTRUCTIONS: Complete this form for each sample shipment. ***Use separate forms if different samples from the same trial are going to different destinations.*** ***Place a true copy within each shipping container and fax, mail, or email a true copy to the Study Director and to your Regional Field Coordinator.*** *Retain the original in the Field Data Book.*

TEST SUBSTANCE_____

CROP _____

Include protocol-specified information such as sour or sweet, small-fruited or large-fruited, processing variety, if applicable.

FIELD RESEARCH DIRECTOR_____

PHONE#_____FAX#_____

TRIAL LOCATION_____

NUMBER OF BOXES SHIPPED_____ TOTAL NUMBER OF SAMPLES SHIPPED_____

DESTINATION (do not enter more than one destination) _____

CARRIER_____

Sample ID[1]	Treatment/Rate[2]	No. of Applics.	Date of Last Application	Date Harvested	Date Sampled	Crop Fraction[3]	LAB ID (Lab Use only)

[1]*See protocol for assigned ID code under Section 18, Sample ID column*
[2]*Use the rate of the last application if different applications had different rates assigned by the protocol. If there are two active ingredients (a.i.) in the test substance, enter the rate of the a.i. that is to be analyzed for that sample.*
[3]*E.g. fruit, straw, processed apple juice*

ABOVE DATA ENTERED BY: _____ *DATE:* _____

****

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____DATE_____

IR-4 PROJECT	PART 8C: SAMPLE ARRIVAL CHECK SHEET

Note to Field or Processing Personnel: Place a copy of this blank form inside each of the sample boxes before shipment. If a copy of the completed form is received back from the laboratory prior to completion of the Field Data Book, then insert the form in the appropriate area of Part 8.

This form should be completed by the Laboratory Personnel, unless a similar form kept at the laboratory is used instead. Complete all blanks in this form that apply to these samples. Keep this form and any accompanying shipping forms, such as Federal Express receipts and field cooperator's residue sample shipping forms, in the raw data file for this study. ***Mail, fax, or e-mail a copy to the Field Research Director, the Regional Field Coordinator and the Study Director.*** If multiple boxes from one trial are received, each with a copy of this form, then it is only necessary to complete one form for all of the samples.

Laboratory ID# (from Protocol Part 24 or amendment):			
Chemical:		Commodity:	
Field Trial ID# (format is 00000.YY-XX##):			
Shipper: [ ]ACDS [ ]Federal Express [ ]Other:			
Shipping Reference#:		# Boxes:	
Date Received:	Rec'd by *(print name)*:		
A. CONDITION OF SAMPLES (check all that apply)			
[ ]Frozen	[ ]Dry Ice Present	[ ]Fresh, Never Frozen	
[ ]Thawed	[ ]Sample Bags Intact	[ ]Sample Bags Not Intact and Contents Mixed	
B. FORM OF SAMPLES AS RECEIVED		Matrix (e.g., roots, leaves):	
[ ] Whole	[ ] Halved or Quartered	[ ] Sliced	[ ] Other:
C. RESIDUE SAMPLE CHAIN OF CUSTODY FORM		Received with Samples: [ ] Yes [ ] No	
Please note any apparent missing samples or protocol deviations in Section E.			
D. SAMPLE LOG	Project Listed on the Laboratory's Master Schedule: [ ]Yes [ ]No		
Lab Numbers Assigned:		Date:	
E. COMMENTS:			
Signature/Date of person filling out this form:			

Weather & Irrigation
Part 9

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 9. WEATHER AND IRRIGATION RECORDS

A. DAILY FIELD TRIAL WEATHER RECORDS

INSTRUCTIONS: Document field trial weather records by manually collecting information or by providing computer generated records. ***Weather records are required from planting of annual crops or for a minimum of one month prior to the first application onto perennial crops, until last residue sample collection.*** *Weather records that are collected manually must be recorded directly on this (or equivalent) forms daily. Document computer generated weather data by placing the original or true copy of the data printout directly behind this page.* **Whether manually recorded or computer-generated, please indicate the approximate time of day that weather data were collected.** *Be sure to date and initial all entries.*

MONTH April 2016 - ok 4-20-16

Date/Initials	Air Temp. Min/Max	Rainfall	Irrigation/Time	Date/Initials	Air Temp. Min/Max	Rainfall	Irrigation/Time
1 /				17/			
2/				18/			
3/				19/			
4/				20/ ok 4-20-16			9:30 Am - 3:00 Pm ~ 1.60 in
5/				21/			
6/				22/ ok 4-22-16			8:00 - 11:30 Am ~ 1.02 in
7/				23/			
8/				24/			
9/				25/			
10/				26/			
11/				27/ ok 4-27-16			8:00 - 10:00 Am ~ 0.58 in
12/				28/			
13/				29/ ok 4-29-16			12:00 - 3:00 Pm ~ 0.87 in
14/				30/			
15/				31/			
16/							

TEMPERATURE UNITS: **°F**___ **°C**___ (*Check one*) MOISTURE UNITS: **CM**____ **Inches**____ (*Check one*)

APPROXIMATE TIME OF DAY THAT WEATHER DATA WERE COLLECTED_____

LOCATION AND AFFILIATION OF WEATHER STATION_____
Provide the location (nearest town) and affiliation (on-site, NOAA, state, etc.) of the weather station(s) from which meteorological data are obtained.

ESTIMATED DISTANCE FROM METEOROLOGICAL STATION TO FIELD TRIAL SITE _____

ABOVE DATA ENTERED BY: _____ *DATE:* _____

Total number of pages in this section at initial pagination: ____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____DATE _____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: __

IR-4 FIELD DATA BOOK

PART 9. WEATHER AND IRRIGATION RECORDS

A. DAILY FIELD TRIAL WEATHER RECORDS

INSTRUCTIONS: Document field trial weather records by manually collecting information or by providing computer generated records. ***Weather records are required from planting of annual crops or for a minimum of one month prior to the first application onto perennial crops, until last residue sample collection.*** *Weather records that are collected manually must be recorded directly on this (or equivalent) forms daily. Document computer generated weather data by placing the original or true copy of the data printout directly behind this page.* **Whether manually recorded or computer-generated, please indicate the approximate time of day that weather data were collected.** *Be sure to date and initial all entries.*

MONTH May 2016 - DK 5-2-16

Date/Initials	Air Temp. Min/Max	Rainfall	Irrigation/Time	Date/Initials	Air Temp. Min/Max	Rainfall	Irrigation/Time
1/				17/			
2/ DK 5-2-16			12:00-2:00Pm ~0.58 in	18/			
3/				19/			
4/				20/ DK 5-20-16			12:00 - 2:00 Pm ~0.58 in
5/ DK 5-5-16			12:00 - 2:00Pm ~0.58 in	21/			
6/				22/			
7/				23/ DK 5-23-16			12:30 - 2:30 Pm ~0.58 in
8/				24/			
9/				25/			
10/				26/			
11/ DK 5-11-16			11:30Am - 12:20 Pm ~0.29 in	27/ DK 5-27-16			10:00 Am - 1:00 Pm ~0.87 in
12/				28/			
13/ DK 5-13-16			11:30 Am - 1:30 Pm ~0.58 in	29/			
14/				30/			
15/				31/ DK 5-31-16			8:00 - 9:30 Am ~0.44 in
16/ DK 5-16-16			8:30 - 10:30 Am ~0.58 in				

TEMPERATURE UNITS: ^{O}**F**___ ^{O}**C**___ (*Check one*) MOISTURE UNITS: **CM**____ **Inches**____ (*Check one*)

APPROXIMATE TIME OF DAY THAT WEATHER DATA WERE COLLECTED_____

LOCATION AND AFFILIATION OF WEATHER STATION_____
Provide the location (nearest town) and affiliation (on-site, NOAA, state, etc.) of the weather station(s) from which meteorological data are obtained.

ESTIMATED DISTANCE FROM METEOROLOGICAL STATION TO FIELD TRIAL SITE _____

ABOVE DATA ENTERED BY: _____ *DATE:* _____

Total number of pages in this section at initial pagination: ____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____DATE _____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 9. WEATHER AND IRRIGATION RECORDS

A. DAILY FIELD TRIAL WEATHER RECORDS

INSTRUCTIONS: Document field trial weather records by manually collecting information or by providing computer generated records. ***Weather records are required from planting of annual crops or for a minimum of one month prior to the first application onto perennial crops, until last residue sample collection.*** *Weather records that are collected manually must be recorded directly on this (or equivalent) forms daily. Document computer generated weather data by placing the original or true copy of the data printout directly behind this page.* **Whether manually recorded or computer-generated, please indicate the approximate time of day that weather data were collected.** *Be sure to date and initial all entries.*

MONTH June 2016 - DR 6-1-16

Date/Initials	Air Temp. Min/Max	Rainfall	Irrigation/Time	Date/Initials	Air Temp. Min/Max	Rainfall	Irrigation/Time
1 / DR 6-1-16			12:12 - 1:38 PM 0.50 in	17/ DR 6-17-16			11:00 AM - 2:00 PM ~0.87 in
2/				18/			
3/ DR 6-3-16			11:00 AM - 1:00 PM ~0.58 in	19/			
4/				20/			
5/				21/			
6/ DR 6-6-16			12:00 - 2:30 PM ~0.73 in	22/			
7/				23/			
8/ DR 6-8-16			9:50 - 11:17 AM 0.50 in	24/			
9/				25/			
10/ DR 6-10-16			11:30 AM - 1:30 PM ~0.58 in	26/			
11/				27/			
12/				28/			
13/				29/			
14/				30/			
15/ DR 6-15-16			1:00 - 3:00 PM ~0.58 in	31/			
16/							

TEMPERATURE UNITS: **°F**___ **°C**___ (*Check one*) MOISTURE UNITS: **CM**____ **Inches**____ (*Check one*)

APPROXIMATE TIME OF DAY THAT WEATHER DATA WERE COLLECTED_____

LOCATION AND AFFILIATION OF WEATHER STATION_____
Provide the location (nearest town) and affiliation (on-site, NOAA, state, etc.) of the weather station(s) from which meteorological data are obtained.

ESTIMATED DISTANCE FROM METEOROLOGICAL STATION TO FIELD TRIAL SITE _____

ABOVE DATA ENTERED BY: _____ *DATE:* _____

Total number of pages in this section at initial pagination: ____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____DATE _____

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

Field ID No.: _____

Example Irrigation Calculations (10 psi)

2 line of drip tape with 12 inch emitter spacing at 280 feet in length puts out 4.2* gallons/minute.

Beds are 5 feet x 280 feet = 1400 ft^2

$$\frac{4.2 \text{ gallons/minute} \times 43560 \text{ ft}^2/\text{acre}}{1400 \text{ ft}^2} = 130.68 \text{ Gal/Min/Acre}$$

$$\frac{130.68 \text{ Gal/Min/Acre}}{27154 \text{ Gal/Acre Inch}} = 0.0048 \text{ Acre Inch/Min}$$

Example: Run irrigation system for one hour = 60 minutes

0.0048 acre inch/minute = 0.29 acre inch/1 hour of irrigation

* From dripline calculation chart

Signature: David Ennes **Date:** 4-20-16

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

FIELD ID NO: _

IR-4 FIELD DATA BOOK

PART 9. WEATHER AND IRRIGATION RECORDS

B. ADDITIONAL METEOROLOGICAL INFORMATION

WERE THE TEST PLOTS IRRIGATED? (*Check one*) YES____ NO____

TYPE OF IRRIGATION (e.g., drip, flood, overhead sprinkler) _____

IRRIGATION WATER SOURCE (e.g., canal, well) _____

IF THE TEST PLOTS WERE IRRIGATED, DESCRIBE HOW THE DAILY AMOUNTS WERE DETERMINED:

_____

_____

_____

_____

IF IRRIGATION DATA ARE PLACED IN THIS FIELD DATA BOOK IN A SECTION OTHER THAN PART 9*,

INDICATE HERE THE PART AND PAGE NUMBERS WHERE THE DATA ARE FOUND: PART____ PAGES_____

**Excluding the "first irrigation after application" entries in Part 6.*

WAS WEATHER NORMAL? (*Check one*) YES____ NO____

It is not sufficient to simply indicate below the differences from the monthly mean rainfall and temperature; an assessment is needed as to whether the precipitation and temperatures are within the normal range that is experienced in the location of the field trial. *Severe weather events such as damaging hail, hard frosts, tropical storms, excessive rain and unusually prolonged or high winds are cause for checking "no" above, even if such events are not considered unusual in the location of the trial.*

INSTRUCTIONS: ***IF "NO" IS CHECKED,*** *then assess the impact on the crop in the test plots for this trial of any unusual weather conditions. Note whether temperatures were unusually high or low, and whether precipitation was unusually heavy or light, during the growing season of the crop, and include the dates of unusual or severe weather events. Include the initials of the person making these notes along with the date the notes are recorded.*

_____

_____

_____

_____

_____

_____

_____

_____

_____

ABOVE DATA ENTERED BY: _____ *DATE:* _____

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
THE ORIGINAL IS IN IR-4 FIELD DATA BOOK NO. _____ INITIALS _____ DATE _____

Protocol & Changes
Part 10

FIELD ID NO: _ Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

IR-4 FIELD DATA BOOK

PROTOCOL & PROTOCOL CHANGES

The protocol shall be inserted into this IR-4 Field Data Book after this cover page. Sequentially insert all relevant protocol amendments and deviations that have been received from the Study Director. Protocol changes are sent only to those field trials to which they pertain, thus the changes that are received during the course of this trial may not comprise a complete set. ***Protocol changes pertinent to this trial that have been signed by the Study Director or received by the Field Research Director (FRD) after the Field Data Book has left the custody of the FRD do not need to be inserted into the Field Data Book.***

PAGES IN THIS SECTION DO NOT NEED TO BE NUMBERED.

PAGES IN THIS SECTION DO NOT NEED LINING OUT IF NO ENTRIES ARE MADE

INSTRUCTIONS FOR COMPLETING THE PROTOCOL/SOP DEVIATION FORM:
Every effort should be made to follow the protocol and standard operating procedures. If an unforeseen or an unavoidable circumstance results in a change, the Study Director must be notified as soon as practical (via phone call, email or FAX). **Also notify the Regional Field Coordinator (via phone call, fax, or cc on an email message). If possible, contact the Study Director prior to taking actions that differ from the protocol.** The Study Director will provide instructions and/or appropriate protocol change authorization. Otherwise, document the deviation with completion of this or similar form for each individual deviation. **If the deviation is faxed or emailed to the Study Director, then the original should be mailed to the Study Director. A true copy should be retained in the Field Data Book in the Protocol and Protocol Changes section.** The return copy (signed by the Study Director) should be placed in the Protocol/Protocol Changes section of the Field Data Book.

The brief description of the deviation should make clear what the protocol or SOP requirement is, and what was done that is different from this requirement. For example, *"The application interval was 10 days instead of the 7(±1) days required by the protocol."*

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

CHEMICAL/CROP/FIELD ID NO:_____

IR-4 FIELD DATA BOOK

DEVIATION FORM **(PHOTOCOPY THIS PART IF NECESSARY)**

THE DATE THAT THE DEVIATION OCCURRED _____

THE DATE THAT THE DEVIATION WAS RECOGNIZED _____

THE DATE THAT THE STUDY DIRECTOR WAS NOTIFIED _____

METHOD OF NOTIFICATION (e.g. telephone, email, fax) _____
(Include telephone notes or copy of email or fax in Part 3 of this book)

THE DEVIATION IS FROM *(check appropriate)* PROTOCOL_____ SOP'S_____

SECTION OF THE PROTOCOL OR SOP'S THAT IS AFFECTED _____

BRIEF DESCRIPTION OF DEVIATION: _____

_____

_____

_____

_____

_____

EXPLAIN WHY THE DEVIATION OCCURRED: _____

_____

_____

_____

_____

ABOVE DATA ENTERED BY: _____ *DATE:* _____

FIELD PERSONNEL: DO NOT WRITE BELOW THIS LINE

STUDY DIRECTOR'S ASSESSMENT OF IMPACT OF THIS DEVIATION ON THE STUDY:

_____

_____

_____

_____

APPROVED BY:

_____ _____

Study Director/Date Sponsor/Date

PROTOCOL CHANGE NUMBER_____

cc: QA Field Research Director:

Regional Field Coordinator:

Laboratory Research Director:

This protocol change form when copied on colored paper is an exact copy of the original.

IR-4 Project Headquarters, 500 College Road East, Suite 201 W, Princeton, New Jersey, 08540, 732-932-9575, FAX# 609-514-2612

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

CHANGE # 1

IR-4 PROTOCOL AMENDMENT FORM*

Project Title: Oxathiapiprolin/Strawberry **PR No.:** 11719

Field I. D. No.: All

Lab. I. D. No.: 11719.16-MIR13

Description of Amendment:

In section **15. APPLICATION TREATMENTS AND TIMING:**

Add:

If soil-directed spray is used for the soil application, follow application with irrigation of 0.25 to 0.5 acre inch of water.

Reason for Deviation:
Post-application irrigation was inadvertently left out of the protocol.

Impact on Study:
No impact.

Authorization:

Carolyn Jolly 5/9/16
Study Director (DATE)
Carolyn Jolly

Sponsor Representative (DATE) 10 May 2016

cc: IR-4 QA Unit (HQ), L. Horst, S. Benzen, Z. Jacimovski, P. Dittmar, D. Ennes, N. Leach, G. Koskela, M. Clodius, D. Hanscomb, J. Dubuc, R. Sisco, S. Archambault, M Ross, M. Samuel-Foo, P. Schwartz, S. Erhardt

* This form is used to document changes of the protocol initiated by the Study Director (Protocol Amendment) and Changes initiated by the Field/Residue Research Director (Protocol Deviations). If possible, seek approval of the protocol deviations prior to occurrence. All protocol deviations must be documented promptly (ie 2 weeks of occurrence) by completion of this form and forwarded to IR-4 Headquarters.

F-3 (Replaces PC-10) Rev.02/93

THIS CHANGE FORM COPIED ON COLORED PAPER IS AN EXACT COPY OF THE ORIGINAL

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

PR11719.16-OH*286

CHEMICAL/CROP/FIELD ID NO: _____

IR-4 FIELD DATA BOOK

DEVIATION FORM **(PHOTOCOPY THIS PART IF NECESSARY)**

THE DATE THAT THE DEVIATION OCCURRED 5/10/16

THE DATE THAT THE DEVIATION WAS RECOGNIZED 5/11/16

THE DATE THAT THE STUDY DIRECTOR WAS NOTIFIED 5/11/16

METHOD OF NOTIFICATION (e.g. telephone, email, fax) email
(Include telephone notes or copy of email or fax in Part 3 of this book)

THE DEVIATION IS FROM *(check appropriate)* PROTOCOL ✓ SOP'S _____

SECTION OF THE PROTOCOL OR SOP'S THAT IS AFFECTED 15

BRIEF DESCRIPTION OF DEVIATION: Application was not followed by 0.25 to 0.5 acre inches of water. Naturally occurring rain was only 0.01 inches within 24 hrs. of application.

EXPLAIN WHY THE DEVIATION OCCURRED: Above requirement was not in the original protocol. Protocol change 1 was not received until 24 hrs. after application.

ABOVE DATA ENTERED BY: LH *DATE:* 5/11/16

FIELD PERSONNEL: DO NOT WRITE BELOW THIS LINE

STUDY DIRECTOR'S ASSESSMENT OF IMPACT OF THIS DEVIATION ON THE STUDY:
The residues should not be affected since this was a soil applications.

APPROVED BY:

Carolyn Coley 6/17/16
Study Director/Date

Deborah Carpenter June 27, 2016
Sponsor/Date

PROTOCOL CHANGE NUMBER 2

cc: QA Field Research Director: L. Horst
Regional Field Coordinator: D. Schwartz
Laboratory Research Director: S. Erhardt

Trial Year 2016

This protocol change form when copied on colored paper is an exact copy of the original.

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

PR11719.16-OH*286

CHEMICAL/CROP/FIELD ID NO: _____

IR-4 FIELD DATA BOOK

DEVIATION FORM (PHOTOCOPY THIS PART IF NECESSARY)

THE DATE THAT THE DEVIATION OCCURRED: 6/1/16

THE DATE THAT THE DEVIATION WAS RECOGNIZED: 5/31/16

THE DATE THAT THE STUDY DIRECTOR WAS NOTIFIED: 5/31/16

METHOD OF NOTIFICATION (e.g. telephone, email, fax)
(Include telephone notes or copy of email or fax in Part 3 of this book): telephone

THE DEVIATION IS FROM *(check appropriate)* PROTOCOL ✓ SOP'S _____

SECTION OF THE PROTOCOL OR SOP'S THAT IS AFFECTED: 17

BRIEF DESCRIPTION OF DEVIATION: There were not enough ripe berries to meet weight required by protocol, 95% of all red and pink berries were picked to make 1 pound samples. Protocol requires less than 50% to be picked and 2 pound samples.

EXPLAIN WHY THE DEVIATION OCCURRED: Cold temperatures and snow showers slowed berry development after applications were being made. 95% of all red and pink berries were picked to make 1 Pound samples.

ABOVE DATA ENTERED BY: LH *DATE:* 6/1/16

FIELD PERSONNEL: DO NOT WRITE BELOW THIS LINE

STUDY DIRECTOR'S ASSESSMENT OF IMPACT OF THIS DEVIATION ON THE STUDY:
No impact expected. Sample size is adequate for analysis and sample was commercially representative of fresh market or processing.

APPROVED BY:

Carolyn Holly 6/17/16
Study Director/Date

Deborah Carpenter 06/28/16
Sponsor/Date

PROTOCOL CHANGE NUMBER 3

cc: QA Field Research Director: L. Horst
Regional Field Coordinator: D. Schwartz
Laboratory Research Director S. Erhardt

Trial Year 2016

This protocol change form when copied on colored paper is an exact copy of the original.

IR-4 PROJECT HEADQUARTERS, 500 COLLEGE ROAD EAST, SUITE 201 W, PRINCETON, NJ 08540
PHONE: (732) 932-9575; FAX#: (609) 514-2612

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

CHANGE # 4

IR-4 PROTOCOL AMENDMENT FORM*

Project Title: Oxathiapiprolin / Strawberry **PR No.:** 11719

Field I. D. No.: 11719.16-CA55 (decline) & 11719.17-CA3 (decline)

Lab I.D. No.: 11719.16-MIR13

Description of Change:

Field trial ID No 11719.16-CA55 (decline) has been terminated from Section 23. The Quality Assurance Unit will not audit data generated from this field trial, including the Field Data Book, after ~~7/xx/16~~ 7/15/16. Data from this trial should be sent to IR-4 HQ per standard routing procedures.

Add the following Field Trials to Section 23: late entry cj 8/9/16

Field Research Director	Field ID NO.	RFC
David Ennes, Kearney Agricultural Research & Ext. Center (KARE), 9240 S. Riverbend Ave., Parlier, CA 93648, (559) 646-6061, FAX# 559-646-6015, CELL# (559)-791-5309,e-mail: djennes@ucanr.edu	11719.17-CA3 (decline)	WSR

Reason for Change:

Due to the weather, there are not enough strawberries to meet protocol sampling requirements.

Impact on Study:

A replacement trial is needed to have an adequate number of trials for registration.

Authorization:

Carolyn Jolly 7/15/16
Carolyn Jolly cj 8/9/16 (DATE)
Study Director

Deborah Carpenter Aug 11, 2016
Sponsor Representative (DATE)

cc: IR-4 QA Unit D Ennes R Sisco S Erhardt

THIS PROTOCOL CHANGE FORM COPIED ON COLORED PAPER IS AN EXACT COPY OF THE ORIGINAL

Oxathiapiprolin / Strawberry
ID No. 11719.16-CA55
Ennes

Decline

IR-4 NATIONAL PESTICIDE CLEARANCE PROTOCOL
OXATHIAPIPROLIN/STRAWBERRY

PR No.: 11719
Date: 04/16

RECEIVED
APR 13 2016
WR IR-4

1. PROJECT TITLE: OXATHIAPIPROLIN: Magnitude of the Residue on STRAWBERRY

2. JUSTIFICATION AND OBJECTIVES:

IR-4 has received a request for the minor use of oxathiapiprolin on strawberry for control of *Phytophthora* species (leather rot, red stele, crown rot) and *Pythium* (black root rot).

To establish this tolerance, it is required that the magnitude of the residue in or on the commodity be determined as per EPA Series 860 Guidelines. The purpose of this study is to collect and analyze treated and untreated residue samples from appropriate field sites according to the application parameters requested to provide the sponsor with residue chemistry data to support a pesticide tolerance.

To determine the magnitude of residues of total oxathiapiprolin in or on strawberry, this protocol will be employed using appropriate Standard Operating Procedures (SOP's) and will be conducted under provisions outlined in 40 CFR Part 160 (**IN ACCORDANCE WITH EPA's GOOD LABORATORY PRACTICE STANDARDS**). Canadian field/processing/analytical trials, if any, will be conducted at facilities consistent with the provisions outlined in the Organization for Economic Cooperation and Development (OECD) Series on Principles of Good Laboratory Practice and Compliance Monitoring.

All study participants are **reminded** and **encouraged** to follow all appropriate campus, local, state (or provincial) and national regulations and laws in association with the safe use of pesticides.

3. SPONSOR/TESTING FACILITY NAME, ADDRESS AND PHONE:

IR-4 Project Headquarters, 500 College Road East, Suite 201 W, Princeton, NJ 08540, (732) 932-9575, FAX# (609) 514-2612.

4. STUDY DIRECTOR[1]:

Carolyn Jolly, IR-4 Project Headquarters, 500 College Road East, Suite 201 W, Princeton, NJ 08540, (732) 932-9575 extension 4612, FAX# (609) 514-2612, E-mail: jolly@aesop.rutgers.edu

5. PROPOSED DATES:

Experimental Start :	04/16
Experimental Termination:	9/17
Study Completion:	4/18

6. PROPOSED TEST SITES:

Field sites:	Refer to Section 23
Laboratory:	Refer to Section 24

7. STUDY AUTHORIZATION:

Deborah Carpenter April 13, 2016	Carolyn Jolly 4/12/16
Sponsor Representative / Date	Carolyn Jolly / Study Director / Date

7.1 STUDY DIRECTOR INITIALS: CJ

[1]In case the Study Director is not available, contact Dr. Deborah Carpenter (x4637) or Dr. Daniel Kunkel (x4616) at IR-4 Headquarters (732) 932-9575 for guidance.

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8. GOOD LABORATORY PRACTICE COMPLIANCE:

The appropriate cooperative testing facility (field and laboratory) will be responsible for certifying that its portion of the study will be conducted in accordance with EPA's Good Laboratory Practice (GLP) Standards, 40 CFR 160, amended and effective Oct. 16, 1989. A statement of compliance, together with any GLP deviations will be signed and submitted by the appropriate Research Directors in their report or data package.

9. QUALITY ASSURANCE:

Quality Assurance duties and responsibilities will be in conformance with 40 CFR 160.35. A Quality Assurance Statement will be submitted in the final report and shall include the date inspections were made and date(s) the findings were reported to the Study Director and management.

10. TEST SYSTEM/CROP:

STRAWBERRY - Use a commercial variety. Report: variety, age of plants, and other descriptive information if available.

Field trials will be conducted at the appropriate sites to support the establishment/maintenance of a national residue tolerance, **see Section 23 for these assignments**. Refer to Section 11.4 for requirements to differentiate multiple trials by the same field researcher.

11. TEST SYSTEM DESIGN and STATISTICAL METHOD:

11.1 Each test site will consist of **one** untreated and **one** treated plot.

The individual plots shall be of adequate size to ensure that no more than 50% of the harvestable crop in the sampled area will be needed to provide the necessary plant material. See Parts 17 & 18 for requirements for residue sampling.

Field trial 11719.16-CA55 will provide samples for a decline trial (multiple sampling dates after the drip applications and the foliar application). The plots must be large enough to provide enough samples on each sampling date to meet sample size requirements.

11.2 Employ adequate buffer zones between each of the plots to prevent contamination. For most application types, a minimum distance of 15 feet is required, but a minimum of 50 feet is strongly preferred. For applications made by airblast, mist blower, or power sprayers, a minimum distance of 50 feet is required, but a minimum of 100 feet is strongly preferred. When plants are used as a buffer between the untreated and treated plots, a lower distance is needed to prevent contamination, but the minimums indicated above must be observed. If another study using a test substance with the same active ingredient is being conducted at the same research site, the untreated plot from one study must be separated from the treated plot(s) of the other by the appropriate buffer zone indicated above.

11.3 If this pesticide use is not registered on this crop, federal law requires that the treated crop must be destroyed or handled in such a way that it is not consumed as a human food or animal feed.

11.4 An independently prepared tank-mix must be used in each trial if a Field Research Director is assigned more than one trial in this study.
Also, choose at least one option from Set 1 or at least two options from Set 2:

Set	Option	Description
1	A	Trial sites must be separated by at least 20 miles (32 km)
	B	First application or planting date (for annual crops) in each trial is separated by at least 30 days
	C	Different crop variety (different size or shape at maturity, rough vs. smooth surface, different amount of foliage shielding the commodity, different rate of growth, or representative of the major varieties grown within the region)—confirm with Study Director if this option will be chosen
2	A	Spray volume must vary by at least 25% of the lower volume (minimum 10 GPA difference) Example 1, Trial A has a volume of 20 GPA and Trial B has a volume ≥ 30 GPA Example 2, Trial A has a volume of 60 GPA and Trial B has a volume ≥ 75 GPA The trial with the lowest spray volume for the first application must remain the lowest for each application; the trial with the highest must remain the highest for each, and so on
	B	Use of an adjuvant (of any suitable type) in the tank mix for one trial vs. no adjuvant in the tank mix for another trial
	C	Different foliar application type: foliar directed or foliar broadcast (Do not use this option if the label instructions for this commodity will specify one type or the other)
	D	Not applicable
	E	Different types of application equipment be used in each trial (for example, tractor-pulled boom sprayer, tractor-pulled spreader, airblast sprayer, axial fan orchard sprayer, proptec sprayer, cannon mist sprayer, tower sprayer, over-row sprayer, tunnel sprayer, backpack sprayer, waist pack sprayer, hand gun, hand-held spreader, or shaker can)
	F	Different spray droplet size (fine, medium, coarse, very coarse, or extra coarse) This may be accomplished by changing nozzles and/or by changing spray pressure Document in the Field Data Book the droplet size that results from the pressure and nozzles used in the trial (nozzle catalog may be used as a reference) Coarse, very coarse, and extra coarse are appropriate for herbicides only
	G	Different incorporation method for soil-applied test substance: mechanical or irrigation
	H	Not applicable
	I	Different irrigation type (drip or furrow or sprinkler/over-the-top) (Irrigation must be applied at least once after each application, but over-the-top irrigation must not be applied within one hour of an application, and irrigation is not needed following the last application if samples are to be collected on the same day)
	J	For test substances that must be applied through drip irrigation: surface drip line or buried drip line
	K	Different planting arrangement for annual crops: single row beds or multi-row beds (two or more rows on each bed)
	L	Not applicable
	M	Not applicable
	N	Not applicable
	O	Different soil series, type, or texture (only in trials in which applications are made to the soil)
	P	Not applicable

If these criteria cannot be met to separate multiple trials, the Field Research Director should contact the Study Director to discuss possible alternatives that can be amended to the protocol. Trials conducted in different calendar years are exempt from these requirements.

11.5 Mark plots with identifiable markers containing at minimum the Field ID number and treatment number or treatment name that will persist for the duration of the field research trial or that can be readily replaced.

11.6 This study is not designed for statistical evaluation of field data.

12. TEST SITE PREPARATION:

Select a test site that has been maintained following good local agricultural practices for the production of strawberries including fertilization, irrigation, if necessary and available, and other practices that ensure commercially acceptable crop production.

The test site will have a known pesticide and crop treatment history of a minimum of 1 year and preferably 3 years.

13. TEST/CONTROL SUBSTANCE:

Use the OD (100g ai/L or 0.834 lb ai/gal) formulation of oxathiapiprolin (EPA Reg.100-1572, CAS# 1003318-67-9) that has been characterized to meet GLP standards. IR-4 Headquarters personnel will arrange procurement of GLP test substance from the Registrant. Upon receipt, document the lot/batch number, condition, quantity received and if GLP characterized. **Temperature monitoring should begin within 2 days of receipt of the test substance, regardless of where it is held or stored.**

Contact the Study Director if there are any concerns regarding the GLP status, labeled identification, expiration date, etc. of the test substance.

The registrant will provide a copy of the Certificate of Analysis to IR-4 Headquarters.

Store the test substance in a secure, clean, dry area and document storage temperatures.

EPA regulations require that test substance container(s) must be retained until the final study report is completed.

Study completion can be confirmed by contacting the Study Director or the Regional Field Coordinator, or by searching the IR-4 web site; click on "Food Crops" and under the "IR-4 Food Crops Database" click on the "Test Substance Container Disposal Approval" link. URL: http://ir4.rutgers.edu/FoodUse/Food_UseSimple3.cfm

If test substance containers are shipped to another location, the shipment must be conducted in accordance with local, state, and Federal regulations. Registrant representative: Dr. Dirk Drost, (336) 632-7510, FAX# 336-632-6021, e-mail: dirk.drost@syngenta.com

The registrant will archive a retention sample of the test substance.

Control substances are not relevant to this study.

14. TEST SUBSTANCE APPLICATION:

14.1 Simulate commercial application practices by applying the test substance in a manner that represents a representative application technique that is used by area commercial growers, while following the directions specified in Section 15.

- Use application equipment that will provide uniform application of the test substance and result in adequate canopy penetration and coverage.
- The test substance, if applied in a mixture, must be applied to the test system within 30 minutes of mixing, otherwise the mixture must be agitated just prior to making the application to ensure that it is well mixed. (The additional agitation should be documented in Part 6G of the Field Data Book.) The mixture must always be applied to the test system within 2 hours of mixing.
- Each field trial requires a unique spray mixture. Do not use the spray mixture from one field trial on another field trial.

For foliar directed applications (generally used for insecticides and fungicides), do not proportionally reduce the application rate (the amount of active ingredient applied per acre). Direct the entire per-acre rate onto the crop. If row widths in the research plots are greater than local commercial practices, then the application rate should be calculated using a local commercial row width. **Note that the treated area for directed applications is calculated as row spacing X number of rows X plot length. Contact the Study Director** if guidance is needed.

For soil applications of any type, see IR-4 Advisory #2004-02 for clarification of terminology: http://ir4.rutgers.edu/Other/Advisories/Final2004-02on10Dec04.pdf **Contact the Study Director** if guidance is needed.

14.2 Full Calibrations for output and speed must be performed to ensure accurate delivery.
A calibration consists of a minimum of 3 consecutive, documented checks for nozzle or hopper output and speed (equipment or walking speed). An output calibration is a 3 run discharge of all the nozzles. An output recheck is a single run discharge of all the nozzles. A speed calibration is 3 runs. A speed recheck is a single run. (When the output of an airblast sprayer is calibrated or rechecked, it is not necessary to record the outputs of individual nozzles.)

Verification of the actual amount of test substance applied will always be made using **the most recent complete calibration data for that equipment.** (Note: When the most recent calibration data is from another trial, a certified true copy of that data must be included in the field data book for this trial.)

Discharge/Output Calibrations:

Is this the first application of test substance in this trial?

YES: A full calibration is required just prior to the first application (allowable the day before the application, but calibration on the day of use is preferred).

NO: A single run recheck may be conducted to confirm consistent delivery (within ±5% of the last complete calibration) just prior to subsequent applications. (Full calibrations are preferred.)

Recheck is required when:

1. Full calibration data from another trial is used.
2. The equipment has been moved from the location where the most recent full calibration or recheck has occurred. (A sprayer that has been calibrated or rechecked at a farm or research station and then used to make an application somewhere else on that same farm or research station is *not* considered to have been "moved".)
3. The equipment has been cleaned.
4. Nozzles are removed and placed back on.
5. CO_2 tank has been changed.

Recheck is not required when the same Field Research Director is making applications on the same day for multiple trials in this study, or multiple treatments in the same trial, unless there have been changes in other application parameters as described above.

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Full output calibration is required if:

1. Application parameters or equipment components have changed (other than changing out CO_2 tanks) including:
    a. Nozzle or hopper output
    b. Nozzle size or type
    c. Delivery pressure (even if it has been changed back to the pressure used during the initial calibration)
2. The recheck is not within ±5% of the last complete calibration.
3. The discharge of any single nozzle during a run is greater than ±5% of the mean of the same run.

Target outputs: The use of a target output rather than the mean output may be used in the calculations made prior to the application; however a full output calibration must be conducted just prior to each use of a target output, and the mean output must be within 5% of the target output. Using a target output rather than a mean output increases the probability that an application rate deviation will occur. Verification of the amount of test substance that has been applied in calculations that use the discharge rate will always be made using the most recent calibration data.

Speed Calibrations:
Conduct the speed calibration in an area adjacent to the test plot, or on similar terrain (allowed the day before the application, but calibration on the day of use is preferred).

Is this the first application of test substance in this trial?

YES: A full speed calibration is required.
Exception: when a handgun is used to spray tree fruits or nuts, and each tree is sprayed for a predetermined time, a speed calibration is not required.

NO: A single run recheck may be conducted to confirm consistent speed (±5% of the last complete speed calibration) just prior to subsequent applications.

Full speed calibration is required when:

1. A major equipment change has been made, such as from a tractor-pulled sprayer to a backpack sprayer.
2. A complete output calibration is performed.

Speed recheck is required when:

1. Speed calibration data from another trial is used.

Speed recheck is not required when the same Field Research Director is making applications on the same day for multiple trials in this study, or multiple treatments in the same trial, unless there a major equipment change or the treated plots are located on separate farms.

14.3 Actual Application Rate: Record actual application pass-times in the Field Data Book and verify the accuracy of the application against the protocol rate. **The application is considered acceptable if the accuracy is within -5% and +10% of the target rate specified in Section 15. If the application did not meet this range, the Study Director must be notified of this deviation before proceeding with this trial.**

The submitted Field Data Book shall contain the original calibration data or a true copy of all calibrations referenced, along with the original data from the rechecks performed for this trial.

15. APPLICATION TREATMENTS AND TIMING:

Trt#	Treatment	Target Rate of active ingredient	Target Rate of formulated product*	Application Type	Spray Volume Range**
01	Untreated	Not Applicable	Not Applicable	Not Applicable	Not Applicable
02	OXATHIAPIPROLIN (100 g ai/L)	1st and 2nd applications 0.143 lb ai/acre	1st and 2nd applications 649 ml/acre	1st and 2nd applications Drip Irrigation Application or by Soil Application Directed at soil near the base of the plants****	1st and 2nd applications Drip (via irrigation system; follow application with approximately 0.25 to 0.5 acre inches of water (±10%) **to the entire drip line area**) Soil Directed Application(30-100GPA)
		3rd and 4th applications 0.03125 lb ai/acre	3rd and 4th applications 142ml/acre + adjuvant ***	3rd and 4th application Foliar Spray-Broadcast or Directed****	3rd and 4th application 30-100 GPA

*The nominal formulation concentration of the test substance will be used in calculating application rates (see Section 13 for the nominal concentration).
**GPA=gallons per acre
***All foliar applications shall include an adjuvant at a rate recommended by the adjuvant label unless the absence of an adjuvant has been chosen to differentiate two trials conducted by the same Field Research Director (see Part 11.4). Include a copy of the adjuvant label in the Field Data Book.
****Note that the treated area for directed applications is calculated as row spacing X number of rows X plot length

Make 2 soil applications via drip irrigation or soil directed sprays at an interval of 7(+/- 1) days at 0.143 lb ai/A. After 7 (+/- 1) days, make the first foliar application at 0.03125 lb ai/A. Then 7 (+/- 1) days later, make the second (and final) foliar application at 0.03125 lb ai/A on the day of harvest (0 day PHI).

FOR ALL TRIALS:

DRIP IRRIGATION APPLICATIONS:
Apply approximately 0.25 to 0.5 acre inches of water **to the entire drip line area**. Apply irrigation water and test substance as follows: after system is primed and running for a short period of time, inject test substance for the first approximate 1/3 of the irrigation set and final approximate two thirds (2/3) of irrigation water without test substance. The fractions are not exact requirements but rather guidance as to how to apply. It is not necessary to irrigate after drip irrigation applications.

For drip irrigation applications, follow the SOPs of the field facility or fully document the procedures used.

If it appears that phytotoxicity has resulted from applications made in this trial, contact the Study Director. If possible, take one or more photographs and send them to the Study Director via email to facilitate the evaluation of crop/ test substance effects.

16. SUPPLEMENTAL CROP TREATMENTS:

Protect the integrity of the field trial by managing pests that may cause significant damage to the test crop. Only EPA-registered maintenance pesticides should be used; apply according to labeled directions. Make identical applications to the untreated and treated plots.

Consult with Study Director if no registered pesticides are available to control the pests. Document all supplemental crop treatments. DO NOT USE pesticides that are similar to the test substance or other chemicals that might interfere with analysis of the test substance. If unsure, **contact the Study Director**.

Bird netting is an acceptable means of protecting the test system against birds and other vertebrate pests. Contact the Study Director if netting is needed during the period that applications will be made. When bird netting is used, be sure to document use and details (type, when covered, removed etc.) in the Field Data Book.

17. RESIDUE SAMPLE COLLECTION:

All trials except decline trial: Collect two samples from each plot. Each sample should be representative of the entire plot (except plot ends). (Ripeness suitable for the fresh market is preferred, but ripeness suitable only for processing is acceptable. If the berries are at a level of ripeness that is suitable for processing but not for fresh market then this should be documented in the Field Data Book.) On the day of the last application after the spray has dried, starting with the untreated plot, collect berry samples that weigh a minimum of 2 lbs (but preferably not more than 3 lbs). Each sample should be collected during a separate run through the entire plot. Take berries from at least 12 separate areas of the plot. Document in the field data book that the spray has dried after the application.

The untreated samples may be collected prior to handling the test substance on the day of the last application.

Remove caps, retaining the berries for the sample.

If loose soil or other debris adheres to fruit, remove it by lightly brushing it off (document what is used to remove the soil or debris, e.g. a clean brush, clean gloved hand, clean dry towel, or similar method). If necessary, lightly rinse using a minimal amount of clean water. Pat lightly with clean paper towels. DO NOT RUB WHILE RINSING OR DRYING THE FRUIT.

Decline trial 11719.16-CA55 only (see sample inventory in Protocol Section 18.2): Follow the sample collection directions noted above. Collect two additional samples from the treated plot at 1, 3-4, 6-7 and 10 (± 1) days after the second foliar application. Collect the 0 day treated samples after the spray has dried. Document in the field data book that the spray has dried after the application.

All trials: Follow proper handling practices with clean or gloved hands and clean tools to prevent transfer of pesticide residue from one sample to another. If practical, complete harvest and sample preparation for the untreated plot(s) before proceeding to the treated plot(s).

Place all samples in plastic-lined cloth bags. **(It is acceptable to place the samples within new, sealable plastic bags, and then place those plastic bags within the IR-4 cloth bags, to reduce leaking.)** Bags may be obtained

from the Field Research Coordinator (Section 23). Identify each sample bag** with correct Field ID number, Test Substance (common chemical name and formulation), complete sample ID (see Section 18) and harvest/sampling dates. See Section 19 for residue sample handling directions.

When using **IR-4 plastic lined cloth residue sample bags, complete attached sample tag as follows: Field ID Number; Crop Fraction; Test Substance (enter the chemical name listed in Section 15); Sample ID; Trt#; Harvest Date; Sample Date; Field Research Director (enter name and telephone number).

18. FIELD RESIDUE SAMPLE INVENTORY:

18.1 All Field Trials except Decline Trial 11719.16-CA55:

SAMPLE ID	TRT#	TREATMENT	DAYS AFTER LAST APPLIC.	MINIMUM SAMPLE SIZE	CROP FRACTION
A	01	Untreated	NA	2 lbs.	Berries without caps
B	01	Untreated	NA	2 lbs.	Berries without caps
C	02	OXATHIAPIPROLIN	0	2 lbs.	Berries without caps
D	02	OXATHIAPIPROLIN	0	2 lbs.	Berries without caps

18.2 Decline Trial 11719.16-CA55:

SAMPLE ID	TRT#	TREATMENT	DAYS AFTER LAST APPLIC.	MINIMUM SAMPLE SIZE	CROP FRACTION
A	01	Untreated	NA	2 lbs.	Berries without caps
B	01	Untreated	NA	2 lbs.	Berries without caps
C	02	OXATHIAPIPROLIN	0	2 lbs.	Berries without caps
D	02	OXATHIAPIPROLIN	0	2 lbs.	Berries without caps
E	02	OXATHIAPIPROLIN	1	2 lbs.	Berries without caps
F	02	OXATHIAPIPROLIN	1	2 lbs.	Berries without caps
G	02	OXATHIAPIPROLIN	3-4	2 lbs.	Berries without caps
H	02	OXATHIAPIPROLIN	3-4	2 lbs.	Berries without caps
I	02	OXATHIAPIPROLIN	6-7	2 lbs.	Berries without caps
J	02	OXATHIAPIPROLIN	6-7	2 lbs.	Berries without caps
K	02	OXATHIAPIPROLIN	10(±1)	2 lbs.	Berries without caps
L	02	OXATHIAPIPROLIN	10(±1)	2 lbs.	Berries without caps

19. RESIDUE SAMPLE HANDLING AND SHIPMENT:

After residue sample collection, store samples in a freezer. If the samples cannot be placed into a freezer within approximately one hour, use an appropriate method of cooling and temperature-monitoring samples in order to maintain integrity.

Sample handling and storage methods can be outlined generally in SOP's, but describe methods fully in the Field Data Book.

For pre-shipment storage, the samples will be held frozen at temperatures generally less than -18 °C (0 °F), allowing for normal variations of less than 24 hours duration due to freezer cycling, sample movement, etc. If the analytical laboratory is close enough to the field site to permit delivery of the samples by field personnel on the day of sampling, then pre-shipment frozen storage is not required.

Freezer logs will be used to document all sample additions to and removals from storage. All on-site storage temperatures will be monitored and documented.

Shipment of frozen samples will be by freezer truck or express shipment, unless the samples are brought to the analytical laboratory by field trial personnel. Shipments sent via express shipment (overnight carriers such as Federal Express or Airborne) will require the addition of quantities of dry ice sufficient to maintain sample integrity while in transit to the laboratory. If field trial personnel transport the samples to the analytical laboratory directly from the plots and the sampling-to-freezer interval is more than approximately one hour, an appropriate method of cooling and temperature-monitoring shall be used to maintain sample integrity. If the samples are stored frozen at the field trial facility prior to being transferred to the analytical laboratory by field trial personnel, then appropriate methods must be used to keep the samples frozen during transport. These methods should be documented in the FDB.

Document the notification made to the sample destination by use of e-mail, fax, telephone log, Field Data Book communication note, etc.

Insert a true copy of Field Data Book Part 8B and a blank copy of Field Data Book Part 8C (Sample Arrival Check Sheet) into each box or container used to ship sample bags. This documentation is needed even when field personnel transport the samples to the analytical laboratory.

For analysis, send samples to: Dr. Royal Fader, IR-4 North Central Research Center, Michigan State Univ., 3900 Collins Road, Lansing, MI 48910-8396, 517-336-4684, FAX# 517-432-2098, email: faderr@msu.edu

20. FIELD DOCUMENTATION AND RECORD KEEPING:

All operations, data and observations appropriate to this study should be **recorded directly and promptly into the IR-4 Field Data Book**.

The content of the Field Data Book should be **sufficiently detailed to completely reconstruct the field trial.** At a minimum, collect and maintain the following raw data:

20.01- Names of all personnel conducting specific research functions

20.02- Amendments and deviations from protocol and standard operating procedures (including copies of signed protocol changes received prior to submission of the Field Data Book to the Regional Field Coordinator).

20.03- Test site information

20.04- Plot maps

20.05- Test substance receipt, use and container/substance disposition records

20.06- Test substance storage conditions (including temperatures)

20.07- Data regarding calibration and use of application equipment

20.08- Treatment application data

20.09- Crop maintenance pesticides and cultural practices, test plot history, and soil information. (Reporting soil information from typical farm service soil analysis labs, or past history for the farm, or from official documents, such as the SCS Soil Survey for the test plot area is adequate for this study. The nature of this study is such that soil characteristics do not need to be determined under GLP standards.)

20.10- Residue sample identification, collection, storage conditions and handling (Weight measurements are considered estimates for the samples collected from field or processing trials, and the scales/balances used for this purpose do not need to be maintained in strict adherence to GLP.)

20.11- Residue sample shipping information

20.12- Description of crop destruction, or explanation for lack of destruction

20.13- Meteorological/Irrigation records (temperature/humidity records for greenhouse trials)--required from planting of annual crops or for a minimum of one month prior to the first application onto perennial crops, until last residue sample collection. These records do not need to be determined under GLP standards.

20.14- Pass times (if applicable) and other data to confirm amount of material applied to plots

20.15- Equipment maintenance records with indication of routine vs. non-routine nature of maintenance

20.16- Other applicable data requested in the IR-4 Field Data Book necessary for confirmation that the study was conducted in accordance with the protocol.

Compliance with GLP's is not required for the collection of data associated with crop phytotoxicity.

21. PROTOCOL/SOP MODIFICATIONS - FIELD RESEARCH:

Consult with the Study Director and with the Regional/ARS Field Research Coordinator to discuss desired changes in the protocol prior to occurrence. If appropriate, an amendment will be issued.

Any deviations from the protocol will require the Field Research Director to complete a written report outlining the changes. **Provide this report to the Study Director promptly** (e.g. within 14 days of occurrence or recognition) for review and signature.

All deviations from the approved SOP's also require documentation and **approval by the Study Director**.

22. FIELD RESEARCH REPORT/ARCHIVING:

The Field Research Director will forward the completed originals of the IR-4 Field Data Book and other raw data to the Regional/ARS Field Research Coordinator as soon as possible after the shipment of residue samples.

The Field Research Director will maintain a complete certified true copy of these field documents.

The original IR-4 Field Data Book and other raw data will be forwarded to IR-4 Headquarters for reporting and archiving.

23. FIELD PERSONNEL / ID NO. / REGIONAL/ARS FIELD RESEARCH LOCATION

If a Field Research Director is assigned more than one trial in this study, refer to Section 11.4 for requirements to differentiate the trials.

Field Research Director	Field ID NO.	RFC	Test Crop
Leona Horst, USDA, ARS, Application Technology Research, Room 132, Selby Hall, OARDC, 1680 Madison Ave., Wooster, OH 44691-4996, (330) 263-3691, FAX# 330-263-3841; e-mail: Leona.Horst@ars.usda.gov	11719.16-OH*286	ARS	Strawberry
Sharon D. Benzen, USDA, ARS, Crop Improvement & Protection Research, 1636 East Alisal Street, Salinas, CA 93905, (831) 755-2828, FAX# 831-755-2814; e-mail: Sharon.Benzen@ars.usda.gov	11719.16-CA*54	ARS	Strawberry

Zvonko Jacimovski, Cornell University, 236 Tower Rd, Plant Science Bldg, Rm 148, Ithaca, NY 14853; Ph: 607-255-9085, Fax: 607-255-0599, e-mail: zj28@cornell.edu	11719.16-NY272	NER	Strawberry
Peter Dittmar, University of Florida, Plant Science & Education Unit, 2556 W. Hwy 318, Citra FL 32113-2132; Phone: 352-273-4771; e-mail: pdittmar@ufl.edu	11719.16-FL130	SOR	Strawberry
David Ennes, Kearney Agricultural Research & Ext. Center (KARE), 9240 S. Riverbend Ave., Parlier, CA 93648, (559) 646-6061, FAX# 559-646-6015, CELL# (559)-791-5309,e-mail: djennes@ucanr.edu	11719.16-CA55 (decline)	WSR	Strawberry
Nathan Leach, UC Riverside – Ag Operations, University of California, Riverside, 1060 Martin Luther King Blvd., Riverside, CA 92507; phone: 951-534-4401; cell: 814-769-9788, e-mail: nathan.leach@ucr.edu	11719.16-CA56	WSR	Strawberry
Gina Koskela, Oregon State University-FRC, North Williamette Research & Extension Center, 15210 NE Miley Road, Aurora, OR 97002-9543, (503) 678-1264 ext. 67829, FAX# 503-678-5986; Cell: 503-476-2387; e-mail: gina.p.koskela@oregonstate.edu	11719.16-OR311	WSR	Strawberry
Markus Clodius, Agassiz Research and Development Centre, 6947 Highway 7, PO Box 1000, Agassiz BC, V0M 1A0; Telephone: (604) 796-6077; Fax: (604) 796-6133; e-mail: Markus.Clodius@agr.gc.ca	11719.16-BC14	Canada	Strawberry
Darrell D Hanscomb, Kentville Research and Development Centre, 32 Main Street, Kentville NS, B4N 1J5; Telephone: (902) 365-8475; Fax: (902) 365-8455; Internet: darrell.hanscomb@agr.gc.ca	11719.16-NS270	Canada	Strawberry
Jean-François Dubuc, Saint-Jean-sur-Richelieu Research and Development Centre, 430 Gouin Blvd, Saint-Jean-sur-Richelieu QC, J3B 3E6 ; Telephone: (579) 224-3124; Fax: (579) 224-3199; e-mail: jean-francois.dubuc@agr.gc.ca	11719.16-QC344	Canada	Strawberry

RFC = Regional/ARS Field Coordinator

Location:

ARS: Dr. Paul H. Schwartz, BARC-W, ANRI, Bldg. 007, Room 212, 10300 Baltimore Ave., Beltsville, MD 20705-2350; Tel: (301) 504-8256, FAX# 301-504-5048; e-mail: schwartp@ba.ars.usda.gov.

NCR: Dr. Satoru Miyazaki, IR-4 North Central Research Center, Michigan State Univ., 3900 Collins Road, Suite 1031B, Lansing, MI 48910-8396; Tel: (517) 336-4611, FAX# 517-432-2098; e-mail: ncrir4@msu.edu.

NER: Ms. Marylee Ross, Univ. of MD/LESREC, 27664 Nanticoke Rd., Salisbury, MD 21801, (410) 742-8788 x 310, FAX# 410-742-1922; e-mail: mross@umd.edu

SOR: Dr. Michelle Samuel-Foo, Food & Env. Tox. Lab., Dept. of Food Science & Human Nutrition, Bldg 685 SW 23rd Drive, IFAS, Univ. of Florida, P.O. Box 110720, Gainesville, FL 32611-0720; Tel: (352) 294-3991, FAX# 352-392-1988; e-mail: mfoo@ufl.edu.

WSR: Ms. Rebecca Sisco, Regional Field Coordinator, Western Region IR-4 Project, Univ. of CA, Dept. of Environmental Toxicology, One Shields Ave., 4218 Meyer Hall, Davis, CA 95616; Tel: (530) 752-7634; FAX# 530-752-2866; e-mail: rsisco@ucdavis.edu.

Canada: Ms. Shirley Archambault, Agriculture & Agri-Food Canada, Pest Management Centre, Building 57, 960 Carling Avenue, Ottawa, ON Canada K1A 0C6; Tel: (613) 759-7714; FAX# 613-694-2323; e-mail: archambaultsh@agr.gc.ca.

24. LABORATORY PERSONNEL/ID NO.: **LAB ID NO.:** **11719.16-MIR13**

LABORATORY RESEARCH DIRECTOR/TESTING LABORATORY:
Dr. Susan Erhardt, IR-4 North Central Research Center, Michigan State Univ., 3815 Technology Blvd., Suite 1031B, Lansing, MI 48910-8396 , (517) 336-4653 FAX# 517-432-2098; e-mail: serhardt@msu.edu

25. LABORATORY SAMPLE INVENTORY:

Treated and untreated samples of strawberry will be received from each of the field sites in Section 23.

Notify appropriate Field Research Director and Regional/ARS Field Research Coordinator of sample receipt.

26. LABORATORY SAMPLE IDENTIFICATION:

Each sample (raw commodity, crop fractions, storage stability, method validation, etc.) is to be assigned a unique laboratory sample number by the laboratory personnel.

A cross-reference must be maintained between the assigned laboratory sample number and the identification utilized in the Residue Sample Shipping and Identification Sheet.

27. LABORATORY SAMPLE STORAGE/PREPARATION:

Store samples in a limited access area at temperatures that will maintain frozen sample integrity (generally less than -18°C), until extraction.

The samples may be stored whole or ground, depending on the standard procedure of the analytical laboratory. However, if maceration will cause residue deterioration, then samples must be stored whole until analysis.

Do not composite samples.

The entire sample provide from the field must be ground, if sample is too large to be manageable then contact the Study Director for appropriate subsampling to assure the representative nature of the sample obtained in the field is maintained by the laboratory procedure.

Generally, sample extracts should be stored at $\leq$ 4°C for no longer than 14 days before analysis.

Storage stability of extracts must be demonstrated if extracts are not analyzed on the same day as they are obtained.

Concurrent fortifications may be used to show extract storage stability, as long as the extracts from the concurrent fortifications have been stored at least as long as the extracts obtained from the weathered samples.

Contact the Study Director if samples extracts are stored greater than 14 days prior to analysis.

All storage temperatures, conditions and location of sample storage are to be monitored and documented.

28. LABORATORY REFERENCE SUBSTANCE:

Obtain the laboratory reference substance(s), Oxathiapiprolin from the Registrant. Dr. Dirk Drost, (336) 632-7510, FAX# 336-632-6021, e-mail: dirk.drost@syngenta.com to procure the proper material.

Document the date the analytical standards are received, the source, stated purity, storage conditions, and expiration date.

Use only reference standards that have been characterized to meet GLP standards.

Archival and characterization of the reference substance (purity, identity, stability and solubility) is the responsibility of the registrant.

29. ANALYTICAL METHODOLOGY:

REFERENCE METHOD:

Method contained in DuPont Study titled "Analytical Method for the Determination of DPX-QGU42 and Metabolites in Crops Using LC/MS/MS"; Authors: Robert M. Henze and James J. Stry; DuPont Project Identification: DuPont-30422 Supplement No 1.

REFERENCE METHOD MODIFICATIONS/METHOD VALIDATION

The above listed Reference Method(s) may be modified if needed for the test matrix.

The Reference Method, along with any modifications must be validated on each crop fraction prior to residue sample analysis of that crop fraction.

To validate the method, fortify some of the control samples in triplicate with oxathiapiprolin at a minimum of three concentration levels each, lowest level of method validation (0.01 ppm or lower), 0.1 ppm and 1 ppm.

A minimum of 6 fortification samples (recovery spikes) at the lowest level of method validation (LLMV) is required for each analyte on each fraction prior to completion of the analytical phase of the study. **The acceptable recovery range is 70-120%.**

Documented approval from the Study Director is needed for recoveries outside of this range.

Document the exact procedures for sample analysis.

This validated step-by-step Working Method should incorporate all changes from the Reference Method.

Provide the Study Director with a copy of this Working Method and results of method validation prior to treated sample analysis.

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If the Working Method has been used successfully on the test matrix or a similar matrix, the Study Director may waive the requirement for method validation. **Contact the Study Director for details**.

SAMPLE ANALYSIS:

Samples will be analyzed for the residues of oxathiapiprolin following the Working Method.

For each field trial associated with this study, analyze at least one untreated and all treated residue samples for each matrix.

Contact the Study Director if residues above the lowest level of method validation for each matrix are detected in the untreated samples.

Any changes or modifications to the Working Method **require Study Director approval**. Whenever possible, **notify the Study Director** prior to occurrence.

Any change or modification to the Working Method must be documented in the raw data and discussed in the final report.

A typical analytical set (or run) should consist of calibration standards, untreated sample(s), concurrent recovery sample(s), and treated sample(s). Each analytical set must begin and end with a calibration standard. Additional calibration standards should be injected with sample analysis to ensure goodness of fit to the standard curve.

Over the course of method validation, residue sample and storage stability (if appropriate) analysis, adequate fortification samples that bracket the actual residues should be analyzed. At least one concurrent fortification sample should be analyzed per analytical set.

The Study Director should be immediately notified if concurrent recoveries deviate from the acceptable recovery range of 70% to 120%.

All efforts will be made to resolve existing recovery problems before continuing forward with additional analytical sets.

If residues in samples are above the highest Working Method validation concentration, additional recovery samples at levels above actual residues must be run in triplicate (3 uniquely extracted samples) as soon as practical. A minimum of 6 fortification samples (recovery spikes) at the lowest level of method validation (LLMV) is required for each analyte on each fraction prior to completion of the analytical phase of the study.

Treated samples may be analyzed using a screening run prior to analysis of treated samples using the working method, if the procedure is covered in the laboratory SOPs and the working method for the study. The peak areas of the treated samples and highest standard from any screening run will not be quantified or reported. (Any data, such as chromatograms, generated during screening run(s) will be kept.)

STORAGE STABILITY ANALYSIS:

As soon as possible after receipt of samples, a minimum of six subsamples of all available crop fractions of the control shall be fortified with oxathiapiprolin at 0.1 ppm each.

Three samples of each analyte and crop fraction will be analyzed after the appropriate storage period. The analysis of storage stability samples may be conducted following a storage period equal to or greater than 90% of the longest

storage period of the field –treated samples from collection in the field/processing facility until their analysis. The remaining samples will be retained for long-term storage.

If analysis of treated/control samples is completed within 30 days of harvest analysis of storage fortification samples may not be required. If appropriate, **contact Study Director**.

STATISTICAL METHOD(S):

Utilize regression analysis to determine the linearity of the standard curve (r^2) or the goodness of fit if the standard curve is non-linear.

Criteria for acceptance of the standard curve(s) or other statistical methods shall be determined by Laboratory Research Director and documented in the raw data.

30. DISPOSITION OF SAMPLES:

A minimum of 100 g or all (if less than 100 g) of each of the remaining frozen treated and untreated crop samples is to be retained for at least 12 months after submission of the laboratory report.

Long term fortified storage study samples shall be retained for a period of 1 to 5 years, as appropriate, after submission of the final report.

Sample extracts can be disposed of after data analysis.

The Study Director is to be contacted prior to discarding samples.

31. LABORATORY PROTOCOL/SOP MODIFICATIONS - LABORATORY RESEARCH:

Consult with the Study Director regarding desired changes in the protocol prior to occurrence. If appropriate, an amendment will be issued. Any unauthorized changes to the protocol will require the Laboratory Research Director to complete a written report outlining the changes.

This report should be **provided to the Study Director promptly** (e.g. within 14 days of occurrence) for review and signature.

All deviations from the approved SOP's also require documentation and approval by the Study Director.

32. LABORATORY DOCUMENTATION AND RECORD KEEPING:

All operations, data and observations shall be recorded in the analyst's notebook and log books, which must be signed and dated on date of entry.

At a minimum, collect and maintain the following raw data:

32.01 - Analytical standard(s) receipt, use and disposition records

32.02 - Analytical standard(s) storage conditions

32.03 - Analytical standard(s) dilution calculations and preparation records

32.04 - Sample storage conditions and locations

32.05 - Calculation work sheets

32.06 - All chromatograms, including those that are not reported

32.07 - Chain of custody records

32.08 - Deviations from protocol, Working Method and/or standard operating procedures

32.09 - Name of personnel conducting specific research functions

32.10 - Sample analysis worksheets

32.11- Storage stability fortification records

32.12 - Concurrent recovery fortification records

A study file shall be developed and maintained by the Laboratory Research Director in conjunction with the analysis. It will contain a copy of the protocol, all pertinent raw data, documentation, records, correspondence, and the final analytical summary report. In addition, records of equipment maintenance and calibrations will be kept and periodically archived.

33. LABORATORY RESEARCH REPORT:

The analytical summary report sent to IR-4 HQ shall contain, but not be limited to:

33.01 - Applicable method validation data

33.02 - Applicable storage stability data

33.03 - Residue levels for control and treated samples with concurrent fortified recoveries

33.04 - Complete copy of the analytical Working Method

33.05 - Any modifications or deviations from the protocol and/or Working Method

33.06 - Completed IR-4 residue data reporting form or appropriate reporting form which includes information listed on the IR-4 generic residue data reporting form

33.07 - Representative chromatograms from a minimum of 10 different treated samples (if fewer than 10 submit all), a minimum of three chromatograms each of control and fortified control samples, chromatograms (one of each concentration) for at least one set of calibration standards for each compound analyzed, and any chromatograms of samples with unusual or inconsistent results

33.08 - Summary of quantitative data associated with samples and spike recovery samples should be provided (e.g. peak heights, injection volumes, sample sizes, final volumes, etc.)

33.09 - Clearly presented example calculations or statistical evaluations

33.10 - Discussion of results (including purpose of method modifications, sample storage conditions, etc.)

33.11 - Summary data associated with calibration standards (dilution and use records, calibration curves, etc.)

34. LABORATORY ARCHIVES:

When the final analytical summary report is completed and sent to the sponsor representative, all original raw data including a "true copy" of the final analytical summary report shall be secured in the archives of the Laboratory Research Director/Testing Facility.

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Dr. Dirk Drost, (336) 632-7510, FAX# 336-632-6021, e-mail: dirk.drost@syngenta.com

Field Research Director	Field ID NO.	Formulation	Amount of Test Substance	Date Needed
Leona Horst, USDA, ARS, Application Technology Research, Room 132, Selby Hall, OARDC, 1680 Madison Ave., Wooster, OH 44691-4996, (330) 263-3691, FAX# 330-263-3841; e-mail: Leona.Horst@ars.usda.gov	11719.16-OH*286	Oxathiapiprolin OD 100 g ai/L	150 mL	2/1/16
Ms. Sharon D. Benzen, USDA, ARS, Crop Improvement & Protection Research, 1636 East Alisal Street, Salinas, CA 93905, (831) 755-2828, FAX# 831-755-2814; e-mail: Sharon.Benzen@ars.usda.gov	11719.16-CA*54	Oxathiapiprolin OD 100 g ai/L	150 mL	2/1/16
Dr. Robin Bellinder, Horticulture Dept., Rm 164 Plant Science Bldg., Cornell University, Ithaca, NY 14853, (607) 255-7890, Farm: 607-844-8270, FAX# 607-255-0599; e-mail: rrb3@cornell.edu	11719.16-NY272	Oxathiapiprolin OD 100 g ai/L	150 mL	TBD
Peter Dittmar, University of Florida, Plant Science & Education Unit, 2556 W. Hwy 318, Citra FL 32113-2132; Phone: 352-273-4771; e-mail: pdittmar@ufl.edu	11719.16-FL130	Oxathiapiprolin OD 100 g ai/L	150 mL	2/1/16
David Ennes, Kearney Agricultural Research & Ext. Center (KARE), 9240 S. Riverbend Ave., Parlier, CA 93648, (559) 646-6061, FAX# 559-646-6015, CELL# (559)-791-5309,e-mail: djennes@ucanr.edu	11719.16-CA55 (decline)	Oxathiapiprolin OD 100 g ai/L	450 mL (decline)	2/1/16
Nathan Leach, UC Riverside – Ag Operations, University of California, Riverside, 1060 Martin Luther King Blvd., Riverside, CA 92507; phone: 951-534-4401; cell: 814-769-9788, e-mail: nathan.leach@ucr.edu	11719.16-CA56	Oxathiapiprolin OD 100 g ai/L	150 mL	12/1/15
Gina Koskela, Oregon State University-FRC, North Williamette Research & Extension Center, 15210 NE Miley Road, Aurora, OR 97002-9543, (503) 678-1264 ext. 67829, FAX# 503-678-5986; Cell: 503-476-2387; e-mail: gina.p.koskela@oregonstate.edu	11719.16-OR311	Oxathiapiprolin OD 100 g ai/L	150 mL	2/1/16
Markus Clodius, Pacific Agri-Food Research Centre - Agassiz Site, 6947 Highway 7, PO Box 1000, Agassiz BC, V0M 1A0; Telephone: (604) 796-6077; Fax: (604) 796-6133; Internet: Markus.Clodius@agr.gc.ca	11719.16-BC14	Oxathiapiprolin OD 100 g ai/L	150 mL	2/1/16
Heather Peill, Atlantic Food and Horticulture Research Centre – Kentville, 32 Main Street, Kentville NS, B4N 1J5; Telephone: (902) 365-8479 ext 58479; Fax: (902) 365-8455; Internet: Heather.Peill@agr.gc.ca	11719.16-NS270	Oxathiapiprolin OD 100 g ai/L	150 mL	2/1/16
Jean-François Dubuc, Horticulture Research and Development Centre - Saint-Jean-sur-Richelieu, 430 Gouin Blvd, Saint-Jean-sur-Richelieu QC, J3B 3E6 ; Telephone: (450) 515-2039; Fax: (450) 346-7740; Internet: jean-francois.dubuc@agr.gc.ca	11719.16-QC344	Oxathiapiprolin OD 100 g ai/L	150 mL	2/1/16