2026

IR-4

Field Data Book

Field ID No._____

CHAIN OF CUSTODY FOR IR-4 FIELD DATA BOOK

FIELD RESEARCH DIRECTOR: _____

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:_____Date:_____

Printed name:_____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 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 ID NO: _____

FIELD DATA BOOK REVISIONS FOR TRIAL YEAR 2026

Revisions are 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**. The following are changes made for the 2026 field data book:**

1. Page 5: Removed instruction to send the original Field Data Book to the Regional Field Coordinator upon completion.
2. Part 4A: Changed temperature monitoring days from 2 to 3 per 2026 protocol.
3. Part 4C: Added National SOP for test substance container disposal.
4. Parts 5G and 5H: Added Applicable Treatments at the top to harmonize with eFDB fields.
5. Part 6D: Changed description under speed calibration per 2026 protocol language.
6. Part 6H: Added prompt for sprayer cleaned prior to application to harmonize with eFDB fields.
7. Part 6J: Changed application rate tolerance to -10% (and +10%) per 2026 protocol.
8. Part 6K: Updated instructions for the use of form 6P.
9. Part 6L: Removed option C in trial differentiation per 2026 protocol.
10. Part 8B: Updated protocol section reference per 2026 protocol.

FIELD ID NO: _____

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 2026" 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 INVOLVED IN TRIAL
PART 3	NOTES AND COMMUNICATION
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
PART 10	PROTOCOL & PROTOCOL CHANGES

*Parts 4 and 6 (and some other FDB pages) are available in versions specific for trials with airblast applications and for greenhouse and seed treatment trials. If you have not received the appropriate Part 4 or 6, then you should contact your Regional Field Coordinator, or print the pages from the IR-4 website under Programs / Food Crops / Food Crop Researcher – Resources / Field Data Book.

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 intranet under Food Crop Researcher – Resources / Field Data Book.

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 copy 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. NOTES AND COMMUNICATIONS: More than one day's entry may be made on one page in the log in Part 3. Each day's entry must be dated and initialed. If a day's entry continues on more than one page, both pages must have the day's entry dated. Several trials within the same study under one Field Research Director may be documented on one form; but SEPARATE STUDIES MUST BE DOCUMENTED ON SEPARATE FORMS. When several trials are documented, true copies of the communication records must be placed in each FDB to which the comments apply. (The original goes in one of the FDB's.)

5. 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 FDB 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. (This does not apply to Part 3.) 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). Inserted printouts do not need blank areas lined out.

6. All entries should be clear, understandable, legible, and made with a 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.

7. **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.

8. 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 the first page only.

9. 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 copy that includes each page of the IR-4 FDB for your records.

10. 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 - 10% or +10% from the protocol rate

Supported by State, U.S. Hatch Act, and other U.S. Department of Agriculture Funds.

FIELD ID NO: ______________________

OPTIONAL PAGES REMOVED FROM THE FIELD DATA BOOK			
FDB Part	**Enter X if removed**	**Initials**	**Date**
2B			
2C			
4F			
5C3			

♦♦

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 Part 10 (Protocol & Protocol Changes) do not need pagination or field ID numbers; these pages are intended for reference for the field personnel while they are in possession of the Field Data Book. 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.** Unused portions of this table should not be lined out.

The insertion of a page number does not require initials/date to be entered on that page.

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	MJ	8/8/21
7	2A, 14B		
4	3A-C	MR	10/1/21
5	1A	KH	2/28/22
6	7B-F, 14C, 20A		

Note: The broken lines under initials and dates are intended to indicate hand-drawn lines. It is not necessary to actually draw the lines broken up this way; they may be continuous.

Field ID No. _____

PAGES ADDED TO THE FIELD DATA BOOK AFTER INITIAL PAGINATION

The information below is added by the person who inserts the new pages into the original 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.)

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 1. GOOD LABORATORY PRACTICE COMPLIANCE INFORMATION

STANDARD OPERATING PROCEDURES: Insert a verified true copy of the SOP index(s) after this page.

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
YES	NO	NA[1]	(Field personnel should not line out blank cells on this page.)
	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 DATA (See Part 4D for specific items of non-compliance with GLPs) Check NO here if one or more items are non-GLP compliant.
			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]Check "NA" for equipment that was not used, if adjuvants were not used, or if Part 6P data was not required in this trial.

_____ _____
SIGNATURE OF FIELD RESEARCH DIRECTOR DATE

This page should be signed and dated just prior to the submission of the Field Data Book to the Regional Coordinator.

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 critical phases of this trial. General field workers, seasonal assistants who have been instructed to perform specific (non-data entry) tasks, 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)*: _____

AFFILIATION: _____

OFFICE ADDRESS: _____

CITY: _____

STATE or PROVINCE: _____ ZIP (Postal Code): _____

TELEPHONE: ( ) _____

E-MAIL ADDRESS: _____

SIGNATURE: _____ DATE: _____

INITIALS: _____

OTHER TRIAL PERSONNEL

PRINT NAME	SIGNATURE	INITIALS	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_____

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 2. PERSONNEL INVOLVED IN TRIAL

B. QUALIFICATIONS SUMMARY (OPTIONAL)

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.
If this form is not needed, it may be removed from the Field Data Book before pagination.
Indicate the removal in the Optional Pages Removed table on Page 6 of the Instructions section with initials and date.

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_____

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 2. PERSONNEL INVOLVED IN TRIAL

C. TRAINING SUMMARY FOR TEMPORARY/SEASONAL PERSONNEL INVOLVED IN TRIAL (OPTIONAL)

INSTRUCTIONS: This optional form may be used to provide a brief narrative of instructions given to temporary personnel for completion of tasks within this study. CVs and educational records are NOT required for personnel listed below.
If this form is not needed, it may be removed from the Field Data Book before pagination.
Indicate the removal in the Optional Pages Removed table on Page 6 of the Instructions section with initials and date.

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_____

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 3. NOTES AND COMMUNICATION

INSTRUCTIONS: This section may be used to document phone calls and emails associated with the field trial, 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. Printed communications such as email messages that are inserted into this section should be initialed and dated.

DO NOT LINE OUT UNUSED SPACE ON THIS PAGE.

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

PART 3 PAGE ___ Trial Year 2026

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 3. NOTES AND COMMUNICATION

DO NOT LINE OUT UNUSED SPACE ON THIS PAGE.

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_____

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 4. TEST SUBSTANCE RECORDS

A. RECEIPT, STORAGE AND DISPOSITION OF TEST SUBSTANCE (TS)--*INSTRUCTIONS: Complete a separate form for **each different** batch/lot of test substance that has been received.*

PLEASE INSERT THE SHIPPING DOCUMENTS AND COA FOR TS AND ADJUVANT LABEL AFTER PART 4F.

NAME OF TEST SUBSTANCE ON CONTAINER LABEL *E.g. Darnitall 2 EC or GroundUp or XYZ8-0.*			
BATCH/LOT NO.		DATE OF RECEIPT	
Provide the batch/lot number of the test substance as it appears on the test material container label		TEST SUBSTANCE EXPIRATION DATE	
Do not assign an expiration date if none is provided with the test substance—contact the Study Director.			
SOURCE OF EXPIRATION DATE			
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) **Contact the Study Director if the anticipated last application date is after the expiration date of the test substance.**			
WILL THE TEST SUBSTANCE EXPIRE BEFORE THE ANTICIPATED LAST APPLICATION DATE? *If yes, contact the Study Director immediately.*		YES____ NO____	

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 DATE THAT STUDY DIRECTOR WAS INFORMED			
IF "YES", SOURCE OF GLP STATUS INFORMATION			
Label, shipping form, etc. Insert Certificate of Analysis (COA) in FDB Part 4 (if a COA has been received).			
CARRIER/TRACKING NO. *E.g. UPS/ABCDE12K0601601993*			
INDIVIDUAL WHO RECEIVED TEST SUBSTANCE			
APPROXIMATE AMOUNT RECEIVED		NUMBER OF CONTAINERS	
CONTAINER DESCRIPTION (*glass bottles, water soluble packets, etc.*)			
CONDITION OF CONTAINER ON ARRIVAL *(intact, bags broken, etc.)*			

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 3 days of receipt of the test substance by the Field Research Director or the designated person responsible for receiving it, regardless of where the test substance is held or stored.*			
IF YES, ENTER LOCATION			
DATES		ESTIMATED TEMPERATURE prior to monitoring	

*ABOVE DATA ENTERED BY:*_____ *DATE:* _____

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_____

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. If test substance is removed for application to more than one plot (in this trial or in separate trials), list separately the amount of test substance removed for each plot.*

NAME OF TEST SUBSTANCE ON CONTAINER LABEL _____

BATCH/LOT NUMBER_____ CONTAINER ID_____

DESCRIPTION OF TEST SUBSTANCE_____

(E.g. brown liquid, white powder. Note any unusual characteristics or changes here.)

*ABOVE DATA ENTERED BY:*_____ *DATE:* _____

DATE REMOVED	AMOUNT (*UNITS)* REMOVED	PURPOSE (include trial ID#) *[E.g. apply treatments, used in other research, etc.]*	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_____

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. Please follow instructions in the National SOP N-03.1 Test Substance Container Disposal Approval, available in eQA.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, enter the information requested below. **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 Test Substance Chain of Custody Form on the IR-4 website under Food Crop Researcher Resources/Field Data Book.***

SHIPPED CONTAINERS TO (Name and Address) _____

_____

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:* _____

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 4. TEST SUBSTANCE RECORDS

D. IDENTIFICATION AND RECEIPT OF ADJUVANTS

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. Place a copy of the label after the divider in Part 4.

NAME OF THE ADJUVANT ON CONTAINER LABEL	

TYPE OF ADJUVANT (check one or specify other)**:**	CROP OIL CONCENTRATE	
	METHYLATED SEED OIL	
	METHYLATED SPRAY OIL	
	NONIONIC SURFACTANT (NON-SILICONE)	
	SILICONE SURFACTANT	
	VEGETABLE OIL	
	OTHER:	

DATE OF RECEIPT	
RECEIVED BY	
DOES THE ADJUVANT HAVE A BATCH OR LOT NUMBER?	YES_____NO_____
IF YES, ENTER THE BATCH/LOT NO.	
EXPIRATION DATE	
WAS THE EXPIRATION DATE ASSIGNED BY FIELD PERSONNEL?	YES_____NO_____
AMOUNT RECEIVED	
SOP UTILIZED	
CONTAINER DESCRIPTION *(e.g. glass bottles)*	
CONDITION ON ARRIVAL *(e.g. good, bags broken, etc.)*	
ADJUVANT STORAGE LOCATION	

ARE THE FOLLOWING ITEMS GLP COMPLIANT?	YES	NO
Date of receipt of ADJUVANT at field facility is recorded (usually the purchase date)		
Identity and concentration of ADJUVANT is indicated on the adjuvant label		
Recommended storage conditions are listed on ADJUVANT label or SDS		
Expiration date of ADJUVANT has been assigned by manufacturer or field personnel		

*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 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 (ºF or ºC) and provide the initials of the person entering the data. When temperature records are monitored automatically, the original or certified true copy of the data 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): ºC_____ ºF_____

*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 4. TEST SUBSTANCE RECORDS

F. BALANCE CALIBRATION CHECK (OPTIONAL)

If this form is not needed, it may be removed from the Field Data Book before pagination.
Indicate the removal in the Optional Pages Removed table on Page 6 of the Instructions section with initials and date.

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: _____

UNITS MEASURED_____

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:* _____

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: _____

INSERT AFTER THIS PAGE:

- **ADJUVANT LABEL(S)**
- **MSDS/SDS (optional)**
- **OTHER SUPPORTING DOCUMENTS RECEIVED WITH THE TEST SUBSTANCE**
- **CERTIFICATE(S) OF ANALYSIS**

PAGINATE THEM WITHIN PART 4

Preferred order of insertion* is indicated above.

*This is not a required order. If documents have been inserted in a different order and paginated, it is not necessary to re-arrange and re-paginate them.

The test substance label, if received from the supplier, **does not need to be included** in the Field Data Book, but it must be accessible to the field personnel during applications and to the QA auditor during a critical phase inspection. The label may be kept in a separate folder or notebook than this Field Data Book. The MSDS/SDS may be kept with the label, or it may be placed in Part 4, after this page. If inserted in the Field Data Book, the MSDS/SDS must be printed on one side only.

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 5. TRIAL SITE INFORMATION:

A. DIRECTIONS TO TRIAL SITE

INSTRUCTIONS: Indicate the name and location (street address, town, state or province) of the trial site (e.g. Agricultural Experiment Station, Adjuntas Road 525, KM 2.5, Bo. Limani, Adjuntas, PR), the crop production region (e.g. 13), and provide directions from the nearest city or town ***or*** *provide a map to the trial 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 trial site location marked and the highways, nearest city or town identified.*

NAME OF TRIAL SITE _____

PHYSICAL ADDRESS _____

EPA/PMRA/Mexican CROP PRODUCTION REGION_____
(For U.S. regions, see *Food and Feed Crops of the United States, Second Edition,* pp. 324-325.)

DIRECTIONS FROM NEAREST CITY OR TOWN TO THE 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_____

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 5. TRIAL SITE INFORMATION:

B. MAP OF THE TEST PLOT AREA WITHIN THE TRIAL SITE

INCLUDE:

1) North Direction
2) Test Plot Area
3) Entrance to Trial Site
4) Direction and distance from site entrance to test plot area
5) Irrigation source and meteorological equipment (if on site)

*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 5. TRIAL SITE INFORMATION:

C.1. PLOT PLAN

INSTRUCTIONS:

Legibly sketch on 5.C.2 the actual plot plan. Computer-generated plans are acceptable. The plot map should be completed prior to the first application in the trial (except that test chemicals applied to adjacent plots may be added later). Include the following required items:

1) The dimensions and locations of treated and untreated plots*
2) Buffer zone distances between plots and distances between all plots in this study
3) 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 (or two plot centers per plot for perennial crops)
4) North direction
5) Slope direction and estimated percentage with an arrow pointing down slope
6) The number of rows* and/or beds and their direction

Legibly sketch on 5.C.3 a plan of the immediately adjacent plots treated with test chemicals that are not part of the trial covered by this Field Data Book. Computer-generated plans are acceptable. Alternatively, it is acceptable to include on the 5.C.2 map all of the information required for the adjacent-plot map, and then remove 5.C.3 from this Field Data Book. (If 5.C.3 is used, it does not need to be completed prior to the first application in this trial.) Include the following required items:

1) Distances and relative locations of immediately adjacent plots. (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.)
2) Identity of the test chemical(s) used on the adjacent plots
Exception: Proprietary compounds that cannot be identified because of a secrecy agreement may be labeled as "experimental compound" in this Field Data Book.

**Items marked with an asterisk are also required in 5D; please enter on both pages for clarity.*

***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: _____

IR-4 FIELD DATA BOOK

PART 5. TRIAL SITE INFORMATION:

C.2. PLOT PLAN

DATE OF PLOT LAYOUT_____PERFORMED BY_____SOP UTILIZED _____

Are there adjacent plots treated with test chemicals as described in part 5.C.1? YES_____NO_____

If YES, enter the required information described in Part 5.C.1 in 5.C.3, or include on this page.

Date that adjacent-plot information was added to this map: Date_____Initials_____NA_____

If a global position system (GPS) was used for plot location, enter GPS-related SOP/revision# used _____

Are any treated plots in this trial stacked with plots from another trial? YES NO_____

If YES, enter the stacked trial IDs: _____

INCLUDE DIMENSIONS FOR EACH PLOT IN THIS TRIAL

*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 5. TRIAL SITE INFORMATION:

C.3. ADJACENT-PLOT PLAN (OPTIONAL)

INCLUDE DISTANCES AND RELATIVE LOCATIONS OF IMMEDIATELY ADJACENT PLOTS
IDENTIFY TEST CHEMICALS USED ON EACH ADJACENT PLOT (EXCEPT PROPRIETARY COMPOUNDS)

*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 5. TRIAL SITE INFORMATION:

D. TEST CROP RECORDS

CROP		VARIETY	
SEEDING DATE*		PLANT SPACING *Indicate the distance (with units) between the plants within the row*	
DATE OF TRANSPLANT INTO TEST PLOTS		AGE OF TREES OR BUSHES OR OTHER PERENNIAL CROPS	
Please enter additional seed and transplant information below, if available.			
SOURCE OF SEED/TRANSPLANTS			
DATE SEEDS/TRANSPLANTS RECEIVED			
LOT NO. OF SEED/TRANSPLANTS			
TYPE OF PLANTER OR TRANSPLANTER			

*If the plants were obtained for the trial as transplants and the seeding date is unknown, enter "NA" or "Unknown".

IF BEDS ARE USED:		BED WIDTH	
NUMBER OF ROWS PER BED		NUMBER OF BEDS PER PLOT	
IF BEDS ARE NOT USED:			
NUMBER OF ROWS PER PLOT		ROW WIDTH	
If the commodity in your plots is not planted in rows (e.g. cranberries), then check here: _____			
TRT 01 (UNTREATED) PLOT DIMENSIONS			
TRT 02 (TREATED) PLOT DIMENSIONS			
TRT 03 (TREATED) PLOT DIMENSIONS			
IF THIS IS A TREE FRUIT OR NUT TRIAL:			
NUMBER OF TREES PER PLOT		TREE SPACING	
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:*_____*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 5. TRIAL SITE INFORMATION:

E. SITE AND SOIL INFORMATION CHARACTERISTICS

INSTRUCTIONS: Furnish soil description and classification information for the plot area. This information can be transcribed from USDA Soil Conservation Service soil maps or via soil sampling and laboratory analysis of the soil. If USDA Soil Conservation Service data is used, a copy may be stored in your facility file and transcribed data should be verified on this page, or copies may be placed behind this page. If soil analysis is used, place the original or true copy behind this page.

SITE IDENTIFIER							
SOIL TEXTURE/TYPE (e.g., sandy loam)							
The following may be entered as single values or ranges:							
SOIL TEXTURE PERCENTAGES		SAND		SILT		CLAY	
ORGANIC MATTER %		pH		CATION EXCHANGE CAPACITY (CEC) in meq/100 g			

IF USDA SOIL CONSERVATION SERVICE DATA IS USED BUT NOT INCLUDED IN THE FIELD DATA BOOK:

DATA WERE VERIFIED BY:_____
(Print name above of someone other than transcriber)

IS THIS A GREENHOUSE TRIAL USING NON-SOIL GROWING MEDIA? YES_____NO_____

IF YES, INCLUDE A LIST OF INGREDIENTS (supporting information 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: _____

_____

_____

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_____

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 5. TRIAL SITE INFORMATION:

F. TRIAL SITE HISTORY FORM

INSTRUCTIONS: Complete this form or provide equivalent information. Enter all pesticide and fertilizer applications for 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).

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".

DATE OR SEASON APPLIED	ACTIVE INGREDIENT	TRADE NAME	RATE *(units)*	CROP

SOURCE OF DATA _____

(e.g. Facility logbook, farmer's records)

TRIAL SITE HISTORY DATA ARE (*Check one*): ORIGINAL___ TRANSCRIBED___

IF TRIAL SITE HISTORY DATA ARE TRANSCRIBED, CHECK APPROPRIATE LINE BELOW:

_____DATA WERE VERIFIED BY_____

(Print name above of someone other than transcriber)

_____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_____

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 trial site from the harvest of the previous crop until the residue samples are collected. If no crop was grown on the trial site, collect data for a period beginning one year prior to planting the current 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".

OPERATION (depth into soil if applicable)	DATE	INFO SOURCE	EQUIPMENT	INITIALS/DATE

Cultural practices data entered above are (*Check all that apply*): ORIGINAL DATA___ TRANSCRIBED___

IF CULTURAL PRACTICES DATA ARE TRANSCRIBED, CHECK APPROPRIATE LINE BELOW:

_____DATA WERE VERIFIED BY_____

(Print name above of someone other than transcriber)

_____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_____

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 5. TRIAL SITE INFORMATION:

H. MAINTENANCE FERTILIZERS AND PESTICIDES

INSTRUCTIONS: Enter all maintenance pesticide and fertilizer applications (including adjuvants and seed treatments) during the trial or insert additional pages. 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.

Include all chemicals necessary to produce the crop from the last given entry on Part 5F. List tank-mixed chemicals together, if known, and bracket the tank mix in the first (left) column on the form.

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".

If seed was used, was it treated?* YES____ NO____ NA___

If this is a seed treatment study, include only seed treatments other than the test substance. If YES, provide treatment chemicals (Date Applied would be "Seed TRT").

Were transplants used? YES____ NO____

If YES, provide treatments prior to transplanting.

{	DATE APPLIED	Active Ingredient	TRADE NAME	RATE *(units)*	PURPOSE	INITIALS/DATE
BRACKET TANK						

Maintenance fertilizers and pesticides data entered above are *(Check all that apply):* ORIGINAL DATA____ 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)

____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_____

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. 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 below.

Date of crop destruction: _____

Description: _____

SOURCE OF DATA: _____

(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:*_____*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

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] _____

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

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

OTHER____*(Describe)* _____

PROPELLANT *(Check one)* CO_2_____ COMPRESSED AIR_____ PUMP_____

OTHER____*(Describe)* _____

TYPE OF APPLICATION *(Check one)* FOLIAR BROADCAST_____ FOLIAR DIRECTED_____
SOIL BROADCAST_____ SOIL BANDED_____ SOIL DIRECTED_____

IN-FURROW (SEED ROW)_____ IN-FURROW (BETWEEN ROWS) _____
OTHER_____*(Describe)*_____

NUMBER OF PASSES THAT ARE NEEDED TO TREAT THE PLOT _____

NUMBER OF NOZZLES OR HOPPER OUTLETS USED			
MESH SIZE USED IN THE STRAINERS		SPACING BETWEEN NOZZLES OR HOPPER OUTLETS	
NOZZLE BRAND/TYPE/SIZE *(e.g. T-Jet 8004, even flat fan)*			

TREATED AREA[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 directed 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 AREA USED FOR APPLICATION RATE CALCS. = PLOT AREA (from Parts 5C/5D)? 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 applic. rates correctly.)

IF NO, PLEASE EXPLAIN: _____

_____

_____

*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

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 or other image of application equipment.*

Include the following required items in the sketch or image:

1) Relative location and size of the target crop
2) Nozzle or hopper outlet placement in relation to crop
3) Application pattern in relation to crop
4) Assign each nozzle or hopper outlet a unique number

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

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

INSTRUCTIONS: Use this form when conducting full (3-run) calibrations or rechecks. If conducting a recheck, please provide calculations to verify that the output is within +/-5% of the most recent full calibration.

If you are conducting a 3-run target check, please use the 3-run target check form provided on the IR-4 website.

EQUIPMENT IDENTIFIER_____

DISCHARGE CALIBRATION DATE_____TIME_____PERFORMED BY_____ *(INITIALS)*

LOCATION WHERE THE CALIBRATION WAS PERFORMED _____

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

BRIEFLY DESCRIBE PROCEDURE USED TO CHECK DISCHARGE CALIBRATION_____

_____

_____

_____

PRESSURE (psi)_____ UNITS (e.g. ml, grams) _____

Output Run Number		1	2	3	
Nozzle/Hopper Outlet Number Along Boom *(If more than 6 nozzles, use the alternate form Part-6C. Large Boom provided on the website.)*	1				
	2				
	3				
	4				
	5				
	6				Total
Total Boom Volume					A
Mean per nozzle or outlet					B
Time (seconds)					C
Discharge Rate					Average Discharge Rate* D _____

Is this a recheck?

Yes_____

No _____

Indicate whether discharge rate is calculated for: Total Boom Volume____Mean Nozzle Volume_____ *(A or B)/C=D

Is the discharge rate of each run within 5% of the mean? YES_____ NO_____ NA____

Are individual nozzle outputs within 5% of the mean during each run? YES____ NO_____ NA_____

If this is a recheck, are results within 5% of original output? YES____ NO_____ NA_____

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

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_____TIME_____PERFORMED BY_____*(INITIALS)*

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

LOCATION WHERE THE CALIBRATION WAS PERFORMED_____

BRIEFLY DESCRIBE PROCEDURE USED FOR SPEED CALIBRATION _____

_____

_____

_____

GEAR_____RPM_____LENGTH OF TEST TRACK (include units) _____

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 or meters) of the track on which the application equipment was tested to determine speed (e.g. speed of application equipment tested for 100 ft.). 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 trials in the same study or multiple treatments in the same trial. See Protocol section 2.2.4.2.***

RUN #	1	2	3	TOTAL	AVERAGE	TARGET OR ORIGINAL CALIBRATION TIME
TIME (sec)						

CALCULATIONS:

WAS THIS A RECHECK OF SPEED CALIBRATION? *(Check one)* YES_____ NO_____

IF YES, WERE RESULTS WITHIN 5% OF ORIGINAL CALIBRATION? 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? 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.

PROCEDURE/FORMULA:

CALCULATIONS:

PROTOCOL SPECIFIED SPRAY VOLUME (from Part 15, in gallons per acre or liters per hectare): _____
Enter "NA" if a spray volume is not applicable.

*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

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, and define units of measure. Equations used in electronic (computer software) calculations in this trial must be transcribed or printed out and attached here.

*CALCULATIONS ENTERED BY:*_____*DATE:* _____

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")*

_____

_____

_____

_____

*NARRATIVE 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 _____

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).

	TRT Number ____	
NUMBER OF DAYS SINCE PREVIOUS APPLICATION		TIME OF ADDITIONAL AGITATION (if applicable) e.g. "10:00" or "continuous" or "just prior to application"
TEST SUBSTANCE		
BATCH/LOT NUMBER		
TIME MIXED/BY WHOM[1]		
TIME APPLIED/ BY WHOM[1]		
EQUIPMENT IDENTIFIER		
APPLICATION TYPE[2] (*e.g., foliar broadcast, soil directed)*		
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		
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] *The identity of the person that performed this task may be entered by the person entering the rest of the data on this page. Initials are acceptable for identification.*

[2] *If application type for this application is different than what is indicated in Part 6A, then a new 6A must be completed.*

*ABOVE DATA ENTERED BY:*_____ *DATE:* _____

FIELD ID NO: _____

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 CLOUD COVER		
MEASURED RELATIVE HUMIDITY%		
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:* _____

WAS THE SPRAYER CLEAN PRIOR TO APPLICATION? If no, explain:

_____

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

_____

_____

_____

_____

_____

NAME(S) OF PERSON(S) WHO CLEANED EQUIPMENT: _____

*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_____

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 AND IDENTIFY WHO PERFORMED IT:

(E.g. *"Test substance was applied to the treated test plot in two passes; one pass down each side of the row, starting with the east side. 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."*)

_____

_____

_____

_____

_____

_____

_____

_____

WERE THERE ANY PROBLEMS DURING THE APPLICATION? YES___ NO___

If YES, then contact the Study Director as soon as possible.

APPLICATION WAS MADE BY: _____

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_____

CALCULATION OF ACTUAL APPLICATION RATE AND SPRAY VOLUME - *Show all calculations and label all units. 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. 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.*

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 = 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

4) Volume of Tank Mix applied to Plot x $\frac{\text{1 gallon}}{\text{3785 ml}}$ x $\frac{\text{43,560 sq ft per acre}}{\text{Plot area treated in sq ft}}$ = Spray Volume in gallons per acre (GPA)

%DEVIATION FROM THE PROTOCOL RATE SHOULD BE ROUNDED LIKE THIS: -10% OR THIS: +10%

****

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.*

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

(Check one) YES____ NO____ IF NO, **Contact the Study Director immediately.**

WAS ACTUAL SPRAY VOLUME WITHIN THE PROTOCOL RANGE?

(Check one) YES____ NO____ NA____ IF NO, **Contact the Study Director immediately.**

*ABOVE DATA ENTERED BY:*_____ *DATE:* _____

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

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

APPLICATION DATE_____

Was There Any Visible Phytotoxicity? *(Check one)* YES___NO ___

If YES, fill in the box below* (or 6P for trials conducted in California) and contact the Study Director. Provide a detailed description and if possible email pictures.

Is a phytotoxicity rating required in the protocol? *(Check one)* YES ___ NO____

If YES, fill in the box below* (or 6P for trials conducted in California).

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

*Alternatively, a separate sheet with a description of the phytotoxicity may be inserted at the back of Part 6.

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

Enter the requested information below for <u>both</u> 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 <u>unless otherwise indicated on this page</u>. **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 AFTER THIS APPLICATION	
TIME AFTER APPLICATION THAT PLOTS WERE EXPOSED TO FIRST RAINFALL (*Check DAYS or HOURS*) *(Enter #hours if first rainfall was <u>on the date of application</u>.)*	**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 AFTER THIS APPLICATION	
TIME AFTER APPLICATION THAT PLOTS WERE EXPOSED TO FIRST IRRIGATION (*Check DAYS or HOURS*) *(Enter #hours if first irrigation was <u>on the date of application</u>.)*	**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*: _____

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THE ORIGINAL IS IN FIELD DATA BOOK NO._____INITIALS_____DATE_____

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 6. APPLICATION RECORDS

L. 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 30 kilometers (18.6 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 the list below.

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 options are used that are listed in the protocol but are not listed in the table below, then enter descriptions below.

* Trials conducted in different calendar years are exempt from these requirements. (If separate trials by the same person or within 30 km 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.)

Check the options used to differentiate the trials that you are conducting in this study:

Option	√	Description
A		Trial sites must be separated by at least 30 km (18.6 miles) [measured as straight line distance]
B		Planting date (for annual crops) or first application date in each trial is separated by at least 30 days

Trial IDs of other trials in this study to which these options are being applied:

_____

Enter below any additional information that will improve the understanding of the options that have been chosen:

_____

_____

_____

_____

_____

*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

M. APPLICATION EQUIPMENT MAINTENANCE AND REPAIR LOG

INSTRUCTIONS: Complete this form or attach true copies of maintenance logs. Provide dates and a brief description of maintenance and repair work completed on the application equipment relevant to this trial. Date and initial all entries.

APPLICATION EQUIPMENT IDENTIFIER_____

EQUIPMENT USED FOR **APPLICATION NUMBERS**_____

INITIALS/DATE_____

Initials and Date	Was Maintenance or Repair routine? (Check one) Yes	No[1]	SOP#	Description

[1] If non-routine, include in the description the nature of the defect, when discovered, and the action taken.

COMPLETE IF APPROPRIATE: "THIS IS A TRUE COPY OF THE ORIGINAL"
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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] *Harvest is defined as crop digging, crop cutting, picking, etc.*
[2] *Date the samples were placed in sample bags (i.e. sample collection)*
[3] *Preharvest interval: Number of days from last application to harvest, or planting to harvest in seed treatment trials*

IF 0 DAY PHI, 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 or a seed treatment.)

Was the crop in all of the trial plots healthy? YES___NO____NA____

IF NO, PLEASE EXPLAIN: _____

_____

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)*	
Number of (check one) **Fruit_____Heads_____Roots_____Plants_____ Other_____**(describe) **Actually Collected per Sample** *Enter NA if the sample size requirement is determined only by weight*	
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 (*Do not include gloves, sample bags, coolers, or scales.*)	

DESCRIBE PROCEDURES 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.

_____

_____

_____

_____

_____

*ABOVE DATA ENTERED BY:*_____*DATE:* _____

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 COMMODITY *(if different from harvested crop, such as dried plums, mint oil):*

_____

DESCRIBE SAMPLE COLLECTION IF IT OCCURRED AFTER THE HARVEST DATE. ALSO, DESCRIBE ANY MODIFICATIONS TO THE HARVESTED CROP SUCH AS TRIMMING, CLEANING, CUTTING, DRYING AND/OR COMPOSITING SAMPLES. *You may attach a separate sheet that clearly describes these procedures. Include a description of equipment, duration of procedure(s), temperatures, estimated moisture content, etc., as appropriate.*

_____

_____

_____

_____

IF CUTTING OR PITTING IS DONE AT THE FIELD SITE, INDICATE HERE THE LENGTH OF TIME FROM COMPLETION OF THE MODIFICATIONS FOR EACH SAMPLE TO PLACEMENT IN A COOLER (attach a separate sheet if there are >4 samples):

Sample ID	Approximate Elapsed Time from Modification to Placement into Cooler (minutes)

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.)

_____

_____

_____

Were the samples placed in a freezer within one hour of collection[1]? **YES___** **NO___**

[1]Following the completion of any modifications, such as drying or pitting, or following harvest if there were no modifications

If no, and you used a min-max thermometer, enter the temperature ranges of the samples during transport and check off ^{O}F or ^{O}C:	**Untreated_____ ^{O}F____ ^{O}C____NA____** **Treated_____ ^{O}F___ ^{O}C____NA____**

If NO, and you used a data logger, insert the temperature graphs in this Field Data Book (true copies are acceptable).

*ABOVE DATA ENTERED BY:*_____*DATE:* _____

FIELD ID NO: _____

IR-4 FIELD DATA BOOK

PART 7. SAMPLE COLLECTION AND STORAGE

B. SPECIFIC SAMPLE INFORMATION AND INVENTORY

INSTRUCTIONS: Use a separate page for each sample date. Enter the date the individual samples were collected (do not enter the harvest date if different from sample date), the sample ID, 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 who collected each sample.

SAMPLE COLLECTION DATE: _____

SAMPLE ID[1]	CROP FRACTION	WEIGHT (INCLUDE UNITS)	APPROX. TIME OF DAY OF COMPLETION OF SAMPLE COLLECTION[2]	APPROX. TIME OF DAY THAT SAMPLE WAS PLACED IN FREEZER	ELAPSED TIME TO FREEZER FROM SAMPLE COLLECTION	FREEZER ID	SAMPLED BY (INITIALS)[3]

[1]See Protocol Section 18 for assigned Sample ID code
[2]After the completion of any modifications, such as drying or pitting, or harvest time if there were no modifications
[3]These initials serve only to identify the sample collectors; it is not necessary for each collector to enter their own initials

Was a GLP-maintained scale used to determine weight of residue samples? YES____ NO____

*ABOVE DATA ENTERED BY:*_____ *DATE:* _____

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. 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.

Unless otherwise noted in the table below, all temperature units are in (*Check one*):

ºC____ ºF____ _____(Initials)_____(Date)

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

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

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"
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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. Record dates and brief description of any maintenance and repair work done on freezer.

UNIQUE IDENTIFIER FOR FREEZER: _____
Enter Freezer ID—may be make/model/serial# or assigned identifier.

RECORD SOP# FOLLOWED, IF APPLICABLE: SOP#_____

Initials and Date	Was Maintenance or Repair routine? (Check one)		Description
	Routine	Non-Routine	

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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. 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 ºF (-18 ºC).*

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"
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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 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 details such as small- or large-fruited, oil or confectionary variety, or processing variety, if applicable.

FIELD RESEARCH DIRECTOR_____

PHONE#_____EMAIL_____

NUMBER OF BOXES SHIPPED_____TOTAL NUMBER OF SAMPLES SHIPPED_____

DESTINATION (*do not enter more than one destination*) _____

CARRIER_____

Sample ID[1]	Treatment #[2]	No. of Apps.	Date of Last App.	Date Harvested	Date Sampled	Crop Fraction[3]	LAB ID (Lab Use only)

[1]See protocol for assigned ID code under Section 2.4.1. [2]See protocol for treatment number under Section 2.4.1. [3]E.g. fruit, straw, mint oil.

*ABOVE DATA ENTERED BY:*_____*DATE:* _____

****

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

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 the date of planting or transplanting of annual crops into the test plot(s), or for a minimum of one month prior to the first application onto perennial crops, until last residue sample collection. If the protocol requires that transplants are treated with the test substance prior to transplanting, then weather records are required from the date of seeding. If transplants are used for an IR-4 trial but no test substance applications are made prior to the transplanting, then temperature/humidity records are NOT required for the period prior to transplanting. 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. **Greenhouse Trials:** Document daily min/max temperatures and daily min/max humidity.

MONTH _____

Date/Initials	Air Temp. Min/Max	Rainfall	Irrigation	Date/Initials	Air Temp. Min/Max	Rainfall	Irrigation
1 /				17/			
2/				18/			
3/				19/			
4/				20/			
5/				21/			
6/				22/			
7/				23/			
8/				24/			
9/				25/			
10/				26/			
11/				27/			
12/				28/			
13/				29/			
14/				30/			
15/				31/			
16/							

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:* _____

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 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____

Make an assessment as to whether precipitation and temperatures are within the normal range that is experienced in the location of the field trial.

WERE THERE ANY SEVERE WEATHER EVENTS DURING THE TRIAL? (*Check one*) YES____ NO____

Severe weather events include damaging hail, hard frosts, tropical storms, excessive rain and unusually prolonged or high winds, even if such events are not considered unusual in the location of the trial.

INSTRUCTIONS: IF THE WEATHER HAS BEEN ASSESSED AS <u>NOT</u> NORMAL OR IF ANY SEVERE WEATHER EVENTS OCCURRED, then assess the impact on the crop in the test plots for this trial. 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. Do not list below the differences from the monthly mean rainfall and temperature unless these differences are indicative of truly abnormal weather.

_____

_____

_____

_____

_____

_____

_____

*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 10. 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.

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.

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 or email). Also notify the Regional Field Coordinator (via phone call 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 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 Part 10. The return copy (signed by the Study Director) should be placed in Part 10 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."*

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)* _____
(Include telephone notes or copy of email 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.