



**NATIONAL EDUCATION
CONFERENCE** February 3-5, 2026

Electronic Field Data Book General Training

**Philip, Jimmy, David, Megan, Mika, Celeste, Nicole,
Jane, Josh, Juliet, Kathleen, Martin, Scott**

Remember? Ask your IR-4 Neighbors for Help!

"Computers do nice things...
But they don't do everything."

"A computer is just a machine.
Human beings are far more
wonderful than machines."

-Fred Rogers



"There are times when explanations, no matter how
reasonable, just don't seem to help."

IR-4 eFDB Admin - Contact Us for Help!

Jimmy Byrtus: Study Director (jpbyrtus@ncsu.edu)

- Lead contact for anyone with any issues / questions / technical difficulties

Philip Moore: Lead Entomologist (pmoore@ncsu.edu)

- Senior eFDB Admin supervising David and Jimmy
- Help with questions from anyone

David Schnatter: Research Assistant (drschnat@ncsu.edu)

- Building and providing access to eFDBs for all trials
- Uploading Attachments to eFDBs
- Resetting Passwords if locked out
- Adding IR-4 database entries (Master Schedule)

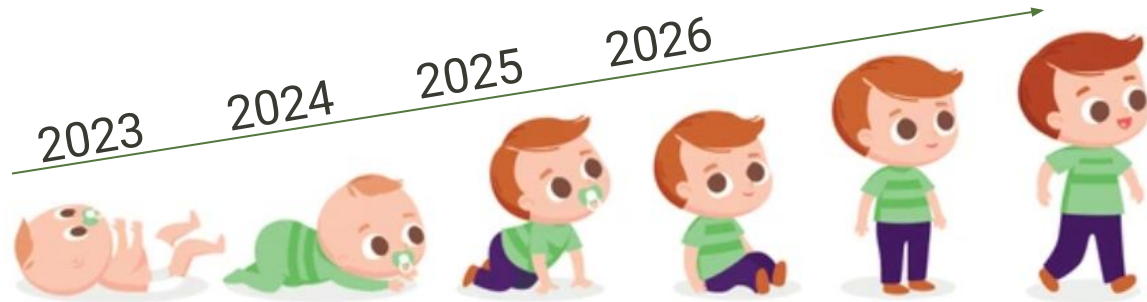


What will we be discussing today?

1. IR-4 eFDB Overview - Important Reminders and What's Changed - Philip
2. eFDB Tips and Tricks - Nicole Soldan, Celeste Wheeler & Megan James Hickman
3. Where to find info: eFDB Guidance Document, Paper Notebook, etc
4. Common QA and QC findings
5. eFacility Files
6. Test your Knowledge Quiz

Great Job! and Thank You!

We have all been
learning to crawl..
then to walk...
and some are running!
We grow stronger with
eFDBs each year!



IR-4 eFDB Overview :

Important Reminders and What has Changed?





What are electronic field data books?

- **40 CFR 160 (GLP) regulated software service called eStudy/eNotebook that IR-4 licenses from iAdvantage Software, used for all IR-4 sponsored GLP residue crop field trials.**
- Access is restricted to only trained users, who follow our eFDB SOPs.
- **Each trial's electronic field data book is really 3 things:**
 - 1) Data entered in eNotebook "forms"** provided online and able to be "checked out" in an offline version
 - 2) Trials' Document Uploads in eStudy:** PDF uploaded files of electronically generated or scanned paper
 - 3) Paper that is utilized in the trial** (e.g. T.S. receipt docs) these are retained along with printing the first 7 pages of Paper Notebook and mailed to HQ at end of the trial



What if you have never used an eFDB before?

- You are in the right place! www.estudy.org/ir4/elm
- You access via Google Chrome, Apple Safari, or MS Edge
- Log in with your username, password, and **org code: IR4**
- Request a practice notebook if desired
- **Read the instructions** (scrolls down) on each form before entering data
- Read **and Follow** the eFDB SOP (in the eFDB Attachments)
- Read protocol “Field Documentation” section
- Keep a printed copy of **eFDB Paper Notebook** in case



Before receiving an eFDB

- In July, suggestions are solicited from users for improving the system in next version
- eFDB Admins implement approved system changes, notify users this is the draft changes planned, and **validate** the new version
- IR-4 residue study protocol template is updated, SOPs and other instructions are revised to match changes
- Study Director will draft the protocol, (reflecting the PCR use), solicit comments, get registrant and TFM approval, then sign it

When receiving an eFDB

- Just before or after signing, David creates the eFDBs with a eFDB Template, setting the application rates and test substance in the notebook per protocol
- Jimmy/ Philip/ Study Director review the generated eFDBs (David revises if needed).
- If approved or next day, David gives writer access to FRDs (others at test site) and notifies via email.

What if the eFDB is not provided in time?

1. Notify the SD, RFC, and eFDB Admin(s)
2. If needed, use current year paper forms (see protocol)

2.7 FIELD DOCUMENTATION:

Raw data, study operations, and observations must be recorded directly and promptly. Electronic field data books must be used in this study. It is expected that electronic forms be used for the majority of the study.

Cases where paper forms may be used are facility files, maps related to test site/plot area, equipment diagram(s), paperwork associated with test substance receipt, adjuvant label and calculation of the adjuvant for application (if applicable), sample drying calculations/forms, shipping documentation, soil testing report (if applicable), and/or cases where no electronic forms are available. Any raw data or other information associated with each field trial must be uploaded to the eFDB prior to study completion. See IR-4 National SOP N-02.1 for instructions on handling of facility file documentation.

Pre-application calculations may be done on paper and uploaded into the eFDB. Actual application data must be entered directly into the eFDB.




Part 1: GLP Compliance

Part 1A Research Director Agreement:

- First step in using eFDB is adding **Estimated Dates**
- These populate the **Master Schedule** - GLP Required
- Only update if trial timing significantly changes

1	Enter today's date to acknowledge you have reviewed the protocol and agree to adhere to it during the conduct of this study.	07/14/2025
2	Estimated First Application Date	08/05/2025
3	Estimated First Sampling Date	08/19/2025
4	Estimated First Shipping Date	09/25/2025
5	Estimated Field Databook Completion Date	11/25/2025

		IR-4 MASTER SCHEDULE (IR-4=SPONSOR) All Studies MOR Unless Coded Otherwise Estimated Dates except for ACT (=ACTUAL DATES) Good Laboratory Practice Studies (GLP) Studies								
<u>PR#</u>	<u>CHEMICAL/COMMODITY</u> <u>STUDY DIRECTOR/AUDITOR</u>	<u>FIELD RESEARCH</u> <u>DIRECTOR (FRD)</u>	<u>FIELD</u> <u>ID#</u>	<u>FIELD</u> <u>START</u>	<u>COLLECT</u> <u>SAMPLE</u>	<u>SAMPLES</u> <u>SHIPPED</u>	<u>FIELD</u> <u>COMP.</u>	<u>RFC</u>	<u>TO QA</u>	<u>HQ</u> <u>Recd.</u>
13856	AZOXYSTROBIN + BENZOVINDIFLUPYR MINT (GH TRANSPLANT) WELKER/HQ	Peng, Wilson	25-WA324	08/05/25	08/19/25	09/25/25	11/25/25			



What is a Master Schedule?

“A master schedule [is a] sheet of all studies conducted at the testing facility indexed by test substance, and containing the test system, nature of study, date study was initiated, current status of each study, identity of the sponsor, and name of the study director.”

IR-4 Project

About IR-4 ▾ Food Crops ▾ Environmental Horticulture Events & Training Stakeholder Resources ▾ Submit a Project Request

Q Search... Search

Food Crops Database Search Options

Frequently Used Search Options

- Simple Search
- Full Search
- **Master Schedule Search**
- Key Words Search

NEW VIDEO: Nominating Projects for the Food Crops Database

The IR-4 Project

IR-4 MASTER SCHEDULE (IR-4=SPONSOR)
All Studies MOR Unless Coded Otherwise
Estimated Dates except for ACT (=ACTUAL DATES)
Good Laboratory Practice Studies (GLP) Studies

<u>PR#</u>	<u>CHEMICAL/COMMODITY</u>	<u>STUDY DIRECTOR/AUDITOR</u>	<u>FIELD RESEARCH DIRECTOR (FRD)</u>	<u>FIELD ID#</u>	<u>FIELD START</u>	<u>COLLECT SAMPLE</u>	<u>SAMPLES SHIPPED</u>	<u>FIELD COMP.</u>	<u>RFC</u>	<u>TO QA</u>	<u>HC</u>
13856	AZOXYSTROBIN + BENZOVIDIFLUPYR MINT (GH TRANSPLANT) WELKER/HQ	Peng, Wilson		25-WA324	08/05/25	08/19/25	09/25/25	11/25/25			



What is a Master Schedule?

- Your Dates in eFDB Part 1A
- IR-4 Database
- Generates Master Schedule
- Lab, QA, SD, EPA track dates to expect these milestones

Project Director: ALL

Field Study Year: Field Trial Location: ALL

Field Trial Droppe: Study completed: All

Lab Study Year: ALL

Study QA Auditor: ALL

Company: ALL

Field Research: ALL

Analytical/Seed Treatment: ALL

Performing Research: ALL

Study Expedited: Study Trial Expedited: GLP Letter Not Received: FRD LAB ASR Not Received

Study Trial Delay:

The IR-4 Project

IR-4 MASTER SCHEDULE (IR-4=SPONSOR)
All Studies MOR Unless Coded Otherwise
Estimated Dates except for ACT (=ACTUAL DATES)
Good Laboratory Practice Studies (GLP) Studies

PR#	CHEMICAL/COMMODITY STUDY DIRECTOR/AUDITOR	FIELD RESEARCH DIRECTOR (FRD)	FIELD ID#	FIELD START	COLLECT SAMPLE	SAMPLES SHIPPED	FIELD COMP.	RFC	TO QA	HO Rec
13856	AZOXYSTROBIN + BENZOVINDIFLUPYR MINT (GH TRANSPLANT) WELKER/HQ	Peng, Wilson	25-WA324	08/05/25	08/19/25	09/25/25	11/25/25			



Part 1: GLP Compliance

Part 1B. GLP Compliance Statement:

GLP COMPLIANCE STATEMENT

This study meets current Good Laboratory Practice Requirements of 40 CFR Part 160, except as noted below. These deviations do not affect the conclusions presented in this report.

The test substance and reference substances that were characterized by Bayer Crop Science in Germany were not characterized in accordance with 160.135 (a) (b), but were characterized in accordance with the country specific GLPs for the OECD GLP guidelines, which are accepted by the US EPA because of the Mutual Acceptance of Data.

GLP deviation declarations:

1. Weather/irrigation and soil characterization at the field sites.
2. Test site history at the field sites.
3. Cultural practices dating back to harvest of the previous crop, and maintenance fertilizer and pesticide applications during the field trial year.
4. The pH meter or strip used to measure the acidity of the carrier in the field trials (Trial WA*344 only).
5. Residue sample weighing equipment in the field trials (except for Trial OH*249).
6. Phytotoxicity data from the plots (Trial CA*41 only).

- Last step in using eFDB is marking each common GLP exception as compliant or not and adding any other that apply to the trial
- Some **deviations** are violations of GLP and must be disclosed here
- SD will carry forward these into the final study report



Part 1: GLP Compliance

Part 1C. Document Upload Log:

- Do you hate adding a text box to each file? This log is an option for providing details about your uploads.
- Document uploads must clearly show these 3 things:
 - Field ID Number
 - Initial and Date (by whom and when file created)
 - Source - such as “this is a true copy of an original, which is located X”, or the name of device generating numbers like weather station or hobo
- What if I need to revise a document? **Uploaded Documents cannot be deleted per GLP**
- Your list of uploads can become very confusing to reviewers.

This PDF is a true copy of the original.
The original is in IR-4 eFDB paper raw
data for Trial No. 13633.24-CA50
Oxathiapiprolin Peach DJE 6/14/24

FIELD ID NO
IR-4 FIEL

PART 4. TEST SUBSTANCE RECORDS

A. RECEIPT, STORAGE AND DISPOSITION OF TEST SUBSTANCES

Complete a separate form for each different batch/lot.

PLEASE INSERT THE SHIPPING DOCUMENTS AND

NAME OF TEST SUBSTANCE ON CONTAINER LABEL.



Part 1: GLP Compliance

Part 1C. Document Upload Log example

No need to add a text box to file before uploading!

- 1) 3 Emails - Part 3. General Communications or Notes (627 KB)
- 2) 4 COA and COC - Part 4. Certificate of Analysis / Test Substance Doc (128 KB)
- 3) 5 Adjacent Plot Map - Part 5. Plot Diagram (19.57 MB)
- 4) 5 Field Records - Part 5. Farm Records/ Test Site History (228 KB)
- 5) 5 Map from entrance to trial site - Part 5. Map to Trial Site (17.42 MB)
- 6) 5 Map from entrance to trial site R1 - Part 5. Plot Diagram (17.45 MB)
- 7) 5 Map to Trial Site - Part 5. Map to Trial Site (64 KB)
- 8) 5 Plot Map - Part 5. Plot Diagram (394 KB)
- 9) 5 Soil Report - Part 5. Soil Records or Characterization Data (123 KB)

1/6/26, 2:32 PM

North Carolina State University Mail - 13847 Terbacil Peach eFDB

NC STATE

Cole Smith <scsmith7@ncsu.edu>

13847 Terbacil Peach eFDB

4 messages

Cole Smith <scsmith7@ncsu.edu>
To: Robert Welker <rmwelker@ncsu.edu>, Philip Moore <pmoore@ncsu.edu>, David Schnatter <drschnat@ncsu.edu>
Cc: "Searer-Jones, Kristen" <k.searerjones@ufl.edu>

Thu, Apr 17, 2025 at 12:44 PM

Rob,

Part 6 for this study has "Granular Application" forms. While Sinbar WDG (Water Dispersible Granule) is a granular formulation it is meant to be mixed with water. Can the eFDB forms be updated to show spray equipment and calculations?

Thanks,

Cole

--

Cole Smith, Ph.D.
Research Scholar / Field Research Director
NCSU IR-4 Field Research Center
Department of Horticultural Science
North Carolina State University
(919) 515-1193
3800 Castle Hayne Rd
Castle Hayne NC 28429

Robert Welker <rmwelker@ncsu.edu>
To: Cole Smith <scsmith7@ncsu.edu>
Cc: Philip Moore <pmoore@ncsu.edu>, David Schnatter <drschnat@ncsu.edu>, "Searer-Jones, Kristen" <k.searerjones@ufl.edu>

Thu, Apr 17, 2025 at 12:46 PM

I sure hope so since this is a spray.

Philip?

[Quoted text hidden]

Philip Moore <pmoore@ncsu.edu>
To: Robert Welker <rmwelker@ncsu.edu>
Cc: Cole Smith <scsmith7@ncsu.edu>, David Schnatter <drschnat@ncsu.edu>, "Searer-Jones, Kristen" <k.searerjones@ufl.edu>

Thu, Apr 17, 2025 at 12:53 PM



Part 1: GLP Compliance

IR4 Part 1C. Document Upload Log

PR Number: 13847

Field ID/ Chemical/ Crop: 13847.25-NC174/ Terbacil/ Peach

Folder: Part 1. GLP Compliance

Instructions:

Add a row for each document uploaded to this eFDB that you need to describe. If certifying the upload is a true copy you must provide the location of the original.

This form is optional, if the required attribution elements are present on the first page of each eFDB document uploaded. The requirements are to provide the Field ID number,

	A	B	C	D	E	F	G
	Name Given to Uploaded Document	Document Description	Name of Person who Generated File	Date File Created	I certify the uploaded document is a true copy of the original	Location of Original Document	Comments
5	5 Map from entrance to trial site R1	Map from entrance to trial site	cs	9/22/2025		This is an electronic original	Trial numbers corrected.
6	5 Map to Trial Site	Map to trial site	cs	12/4/2025		This document is an electronic original	
7	8 ACDS	ACDS Bill of lading	cs	12/5/2025	Yes	paper efdb 13847.25-NC174	
8	5 Soil Report	Soil Report	cs	12/8/2025		This document is an electronic original	
9	9 Weather Records	Daily weather records	cs	12/8/2025		This document is an electronic original	
10	5 Field Records	Field Records 2024 and 2025	cs	1/5/2026		This document is an electronic original	
11	8 Sample Arrival Check Sheet	Sample Arrival Check Sheet	cs	1/5/2025		This document was emailed to me by the lab.	
12	3 Emails	Emails	cs	1/5/2026		This document is an electronic original	

Part 1C. Document Upload Log

- No need to add a textbox to file before uploading!
- Fill in a new row for each file
- Note in comment if a revised file added

Document Upload Reminder!

Always put the eFDB Part Number in front of the file name!

This allows files uploaded to sort so reviewers can find it where it's expected

PR Number |Field ID/ Chemical/ Crop: 13017 | 13017.21-NC220

Upload Attachment

Supported Attachments (JPG, JPEG, GIF or PDF format).

Attachment of:

Attachment Name:

Attachment Location: No file chosen

Don't do this :(

List of Attachments

1) freezer log - Equipment Document (Verification, Maintenance, Repair Record, Image, Etc) (

List of Attachments

- 1) 1 SOP 2024 - Part 1. SOP Index (113 KB)
- 2) 2 CV - Part 2. CV, Resume, Training Records (87 KB)
- 3) 2 CV and Training Hope Thome - Part 2. CV, Resume, Training Records (350 KB)
- 4) 3 Emails - Part 3. General Communications or Notes (956 KB)
- 5) 4 COA and COC - Part 4. Certificate of Analysis / Test Substance Doc (127 KB)
- 6) 4 Part 4A - Part 4. Certificate of Analysis / Test Substance Doc (198 KB)
- 7) 4 TS Inventory Log - Part 4. Certificate of Analysis / Test Substance Doc (90 KB)
- 8) 4 TS Temperature - Temperature Log (Test Substance) (1.01 MB)
- 9) 4 TS Use Log - Part 4. Certificate of Analysis / Test Substance Doc (994 KB)
- 10) 5 Adjacent Plot Map - Part 5. Plot Diagram (239 KB)
- 11) 5 Field History - Part 5. Farm Records/ Test Site History (246 KB)
- 12) 5 Field Records - Part 5. Farm Records/ Test Site History (234 KB)
- 13) 5 Map from entrance to trial site - Part 5. Map to Trial Site (1.44 MB)

Do this :)

Document Upload Reminder!

When uploading revised docs use the same name as original with “revision 1”
Or similar method as shown. Different ways to do it, but be consistent!

List of Attachments

- 1) 13011.24-WI341 eFDB Laptop Maintenance Log - Equipment Document (Verification, Maintenance, Repair Image, Etc) (222 KB)
- 2) 13011.24-WI341 Part 1 SOP Index - Part 1. SOP Index (411 KB)
- 3) 13011.24-WI341 Part 1 SOP Index v2 1.21.25 - Part 1. SOP Index (425 KB)
- 4) 13011.24-WI341 Part 1 SOP Index v3 2.16.25 - Part 1. SOP Index (427 KB)
- 5) 13011.24-WI341 Part 2 Personnel - Part 2. CV, Resume, Training Records (123 KB)
- 6) 13011.24-WI341 Part 2 Personnel v2 1.21.25 - Part 2. CV, Resume, Training Records (140 KB)
- 7) 13011.24-WI341 Part 2 Personnel v3 2.16.25 - Part 2. CV, Resume, Training Records (138 KB)
- 8) 13011.24-WI341 Part 3 Notes and Communication - Part 3. General Communications or Notes (344 KB)
- 9) 13011.24-WI341 Part 3 Notes v2 1.21.25 - Part 3. General Communications or Notes (451 KB)
- 10) 13011.24-WI341 Part 3 Notes v3 2.16.25 - Part 3. General Communications or Notes (359 KB)
- 11) 13011.24-WI341 Part 4 Test Substance - Multiple or Other Category (1.39 MB)
- 12) 13011.24-WI341 Part 4 Test Substance v2 1.21.25 - Multiple or Other Category (1.56 MB)
- 13) 13011.24-WI341 Part 4 Test Substance v3 2.16.25 - Multiple or Other Category (1.4 MB)

- 3) Part 1 SOP index - Part 1. SOP Index (996 KB)
- 4) Part 1. GLP Compliance Information - Part 1. SOP Index (562 KB)
- 5) Part 1A. SOP Index-Part 1.SOP index revision 1 - Part 1. SOP Index (1.03 MB)
- 6) Part 2. CV Resume Training Records - Part 2. CV, Resume, Training Records (2.6 MB)
- 7) Part 2A. CV Resume Training Records - Part 2. CV, Resume, Training Records (2.6 MB)
- 8) Part 3. General Communications Notes - Part 3. General Communications or Notes (2.5 MB)
- 9) Part 3. General communications notes revision 1 - Part 3. General Communications or Notes (262 KB)
- 10) Part 3. General Communications or Notes Revision 2 - Part 3. General Communications or Notes (460 KB)
- 11) Part 3. QC correspondence chain - Part 3. General Communications or Notes (1.76 MB)
- 12) Part 3. QC correspondence chain revision 1 - Part 3. General Communications or Notes (410 KB)
- 13) Part 4 Test Substance shipping DOC - Part 4. Certificate of Analysis / Test Substance Doc (6.42 MB)
- 14) Part 4A test substance Shipp DOC all - Part 4. Certificate of Analysis / Test Substance Doc (6.47 MB)
- 15) Part 4A test substance Shipp DOC all revision 1 - Part 4. Certificate of Analysis / Test Substance Doc (707 KB)

Or do this :)

Part 1. eFDB Document Uploads Required

1. eFDB Maintenance and Repair Log (including verification if using mobile)
2. Upload your Signed SOP Index for your Test Site

See eFDB Paper Notebook Page 5

eFDB Table of Data Requirements and Locations					IR-4 2026
Part #	Document Title or Description	eFDB Form?	eFDB Backup PDF / Paper?	Document Upload?	e-Facility File Eligible?
1	eFDB Maintenance and Repair Log	No	Yes	Required in either location	
1A	Research Director Agreement	Required	No	No	No
1B	GLP Compliance Statement	Required	No	No	No
1C	Document Upload Log	Optional	No	No	No
1	SOP Index for Test Site / Trial	No	No	Required in either location	

eFDB Maintenance and Repair Log

Required for **all devices that enter data in eFDBs**, per GLP regs on Equipment. Even if only entering data via the website.



eFDB Maintenance and Repair Log (2026)

Instructions: Complete this form or provide equivalent records uploaded to the eFDB. Provide dates and a brief description of maintenance and repair work completed on the electronic data recording equipment. Use a separate form for each device.

*The initials portion of the form is not present in the online version and only required for entry on paper.

A	B	C	D	E	F	G	H	I	J	K
Initials & Date	eFDB Device ID or Make and Model	eFDB Website Version No.	eFDB Mobile Edition Windows or iPad and Version No.	Description of Maintenance	Performed By	New Verification Performed?	Routine or Non-Routine	If Non-Routine: How and When Discovered, Action Taken, and Defect	SOP No. Followed	Comments
1 PM 2/1/ 2026	IR4- D3XQLS3	8.2.20.22		n/a	PM 2/1/ 2026		Routine		N-02.1 rev. 1	

eFDB Maintenance and Repair Log

IR-4 FRDs use either Facility Files or anyone can use *Paper Notebook Page 8*

If you use the Mobile Edition, then also include verification on log

eFDB Maintenance and Repair Log (2026)



Instructions: Complete this form or provide equivalent records uploaded to the eFDB. Provide dates and a brief description of maintenance and repair work completed on the electronic data recording equipment. Use a separate form for each device.

*The initials portion of the form is not present in the online version and only required for entry on paper.

A	B	C	D	E	F	G	H	I	J	K
Initials & Date	eFDB Device ID or Make and Model	eFDB Website Version No.	eFDB Mobile Edition Windows or iPad and Version No.	Description of Maintenance	Performed By	New Verification Performed?	Routine or Non-Routine	If Non-Routine: How and When Discovered, Action Taken, and Defect	SOP No. Followed	Comments
PM 2/1/ 2026	IR4- D3XQLS3	8.2.20.22	Windows 8.2.20.49	Installed New v. Mobile Edition	PM 2/1/ 2026	Yes	Routine		N-02.1 rev. 1	

See the eFDB SOP N-02.1 for how to perform verification

IR-4 National Standard Operating Procedures

Page 1 of 12

SOP N-02.1
Rev # 1
Title: iAdvantage Electronic Field Data Book Use

PURPOSE: This document outlines the data recording and submission procedures when using the electronic field data book (eFDB) in GLP field residue studies.

SCOPE: This SOP shall be used by all IR-4 personnel when using the eFDB for data entry, submission of the electronic data and accompanying paper documentation, during the review and revisions processes, and at archiving. This SOP replaces the IR-4 HQ SOP 5.8. References to HQ SOP 5.8 in test site SOPs and study protocols are considered to be referring to this SOP.

PROCEDURES:

Table of Contents:

Hardware and Software Compatible and Mobile Editions	Page 1
Device Verification	Page 2
Maintenance and Repair Log	Page 3
Raw Data Recording and Audit Trail	Page 4
Raw Data Submission	Page 6
Archiving	Page 7
Additional eFDB Requirements	Page 8
Limitations of the System	Page 9
Facility Files eFDB	Page 11

SOP N-02.1

Rev # 1

Title: iAdvantage Electronic Field Data Book Use

B. Device Verification Procedure: Device verification is performed according to the following procedures:

- a. Open the Windows or iPad Mobile Edition and Login to the user account.
- b. Refresh the notebook list after selecting to check the Verification Study Notebook for the name of the FRD. An eStudy Administrator will provide the Verification Study Notebook.
- c. Select to Move Off Line the verification form provided in the notebook.
- d. Enter your name, initials, and username to the form and save the entries in the mobile edition. If needed, add an additional row for making a subsequent verification entry.
- e. Select Move On Line to return the verification form online.
- f. Open the eFDB website and login to access the online eFDB for the Verification Study Notebook.
- g. Open the verification form within the notebook.
- h. Use a screen shot, snipping tool, or print screen to generate a file showing that the offline entries were populated in the online form.
- i. Print or otherwise retain this file, with initial and date, and place it in Facility Records.
- j. Make an entry into the eFDB Device maintenance log denoting that verification was performed, when performed, by whom, using what SOP or process, and where the location of the screen shot raw data is retained.

Questions?

Next is: Part 2. Personnel

Part 3. Notes and Communications

Part 4. Test Substance and Adjuvant



Part 2. Personnel

- **Part 2A. Personnel Involved in Trial**
 - Names and usernames of any (permanent) field staff who enters data in that eFDB
 - Upload a Resume/CV and Training List for each
- **Part 2B. Field Research Director Information**
 - FRD info and Location of trial Facility Files and Paper Facility Files in Archive
- **Part 2C. Training Summary for Temporary Personnel**
 - Names and training summary of any (temporary) field staff involved (who do not enter GLP data)

Part 3. Notes and Communication

- **Part 3A. Notes and Communications Log**
 - List all phone calls with SD, farm managers, etc and relevant discussion
- E-mails (PDFs) added Document Uploads
- Each eFDB Form also contains a Notes button at top and a Notes/Comments prompt as last data field.



Part 3. Notes and Communication

PR4

Part 3A. Notes and Communications Log

PR Number: 13325

Field ID/ Chemical/ 13325.26-CA18/ Flazasulfuron/ Cherry
Crop:
Folder: Part 3. Notes and Communications

Instructions:
Add a new row for each note or description of a communication.
It is not required to document e-mails in this log. If the communication was via e-mail, upload it as a PDF file to the Documents section of this eFDB.

A Date of Occurrence	B Note or Communication Description	C Additional Details
1		

- **Part 3A. Notes and Communications Log**
 - List all phone calls with SD, farm managers, etc and relevant discussion

- E-mails (PDFs) added Document Uploads
- Each eFDB Form also contains a **Notes button** at top and a **Notes/ Comments prompt** as last data field.



Part 4. Test Substance Receipt

- **Part 4A. Test Substance Receipt Paper Notebook Page 9**
 - Add a column for each TS shipment received
 - Upload all documents pertaining to Test Substance
- **Part 4B. Test Substance Use Log Paper Notebook Page 10**
 - Add a row for each removal that occurs from a given bottle.
 - If using one bottle in multiple trials, document all prior removals that occurred before the last use
- **Part 4C. Disposition of Test Substance Containers**
 - Enter data prior to trial conclusion



Part 4. Test Substance Receipt

- **Part 4D. Identification and Receipt of Adjuvants** *Paper Notebook Page 11*
 - Required if protocol includes adjuvant
 - Upload PDF of Adjuvant label to Documents
- **Part 4E. Test Substance Storage Temperatures**
 - Overall Min/ Max and storage location prompts
 - Upload PDF daily Min/Max records to Documents (or use eFacility Files)
- **Part 4F. Balance Calibration Check** *Paper Notebook Page 12*
 - If test substance is dry, use this form or provide equivalent (form is also in eFacility Files).

Questions?

Next is Part 5. Test Site





Part 5: Test Site

eFDB Table of Data Requirements and Locations					IR-4 2026
Part #	Document Title or Description	eFDB Form?	eFDB Backup PDF / Paper?	Document Upload?	e-Facility File Eligible?
5A & 5B	Directions to Trial Site and Site Maps (e-form)	Required	No	No	No
5	Map of the Region: Test Site, Closest Town, and Highways	No	No	Required	No
5	Map within Test Site: Entrance, distance and direction to plot area, weather station, N. arrow	No	No	Required	No
5C	Plot Plan (e-form)	Required	Yes	No	No
5	Plot Plan (drawing/ diagram)	No		Required	No
5D	Test Crop Records	Required	No	No	No
5E	Site and Soil Information Characteristics	Required	No	No	No
5	Soil Characterization Results or USDA Soil Survey(s) for site	No	No	Required	No
5F	Trial Site History	Required in either locat.	Yes	Required in either locat.	No
5F.1	Source of Trial Site History	Required	No	No	No
5G	Cultural Practices Log	Required in either locat.	Yes	Required in either locat.	No
5H	Maintenance Fertilizers and Pesticides	Required	Yes	Optional	No
5H.1	Source of Maintenance Data and Cultural Practices	Required	No	No	No
5I	Crop Destruction	Required	No	No	No



Part 5: Test Site

TABLE 10-100

eFDB Table of Data Requirements and Locations				IR-4 2026	
Part #	Document Title or Description	eFDB Form?	eFDB Backup PDF / Paper?	Document Upload?	e-Facility File Eligible?
5A & 5B	Directions to Trial Site and Site Maps (e-form)	Required	No	No	No
5	Map of the Region: Test Site, Closest Town, and Highways	No	No	Required	No
5	Map within Test Site: Entrance, distance and direction to plot area, weather station, N. arrow	No	No	Required	No
5C	Plot Plan (e-form)	Required	Yes	No	No

Use software (or paper) to generate these PDF files. **See requirements in Part 5A/5B and Part 5C Paper Notebook Page 13**

1. Satellite image and road map from Google Maps
2. Create Screenshot using Snipping Tool
3. Copy + Paste into Microsoft Powerpoint or Word
4. Add text boxes for additional information **See instructions in eForms for each PDF's required elements**
5. Save generated file as PDF and upload to eFDB Document for the trial



Part 5: Test Site

Upload Soil Documentation to eFDB Documents for the trial

eFDB Table of Data Requirements and Locations					IR-4 2026
Part #	Document Title or Description	eFDB Form?	eFDB Backup PDF / Paper?	Document Upload?	e-Facility File Eligible?
5D	Test Crop Records	Required	No	No	No
5E	Site and Soil Information Characteristics	Required	No	No	No
5	Soil Characterization Results or USDA Soil Survey(s) for site	No	No	Required	No
5F	Trial Site History	Required in either locat.	Yes	Required in either locat.	No
5F.1	Source of Trial Site History	Required	No	No	No
5G	Cultural Practices Log	Required in either locat.	Yes	Required in either locat.	No
5H	Maintenance Fertilizers and Pesticides	Required	Yes	Optional	No
5H.1	Source of Maintenance Data and Cultural Practices	Required	No	No	No
5I	Crop Destruction	Required	No	No	No

- Add **site, soil, and crop** production and destruction details to each form
- Either use provided **Pesticide/ History/ Maintenance logs Paper Notebook Page 14-16** or upload to eFDB Documents equivalent information from site/ grower records
- Add to the **“Source Of”** forms, how these logs were obtained, if verified

Questions?

Next is Part 6. Application





eFDB Table of Data Requirements and Locations

IR-4 2026

Part #	Document Title or Description	eFDB Form?	eFDB Backup PDF / Paper?	Document Upload?	e-Facility File Eligible?
6	Form 11: Spray Equipment Description and Calibration	Required, if applicable	Yes	No	No
6	Form 12: Test Material Calculations	Required, if applicable	Yes	No	No
6	Form 14: Spray Application Rate Verification	Required, if applicable		No	No
6A	Application Calibration Information	Required	Yes	No	No
6B	Diagram of Application Equipment	No	Yes	Required	No
6	Application Equipment Maintenance and Repair Log	No	No	Required in either location	
6C	iAdvantage Application Calculation Instructions for Forms 11, 12, 14	Optional	Yes	No	No
6D	Drench Mix and Rate Calculations	Required, if applicable	Yes	No	No
6E	Field Drench Mix and Rate Calculations	Required, if applicable	Yes	No	No
6F & 6G	Application Information	Required	Yes	No	No
6H	Conditions at Application	Required	Yes	No	No
6I	Irrigation Calibration Information	Optional	Yes	No	No
6J	Irrigation Mix and Rate Calculations	Required, if applicable	Yes	No	No
6K & 6P	Post Treatment Records	Required	Yes	No	No



eFDB Table of Data Requirements and Locations					IR-4 2026
Part #	Document Title or Description	eFDB Form?	eFDB Backup PDF / Paper?	Document Upload?	e-Facility File Eligible?
6	Form 11: Spray Equipment Description and Calibration	Required, if applicable	Yes	No	No
6	Form 12: Test Material Calculations	Required, if applicable	Yes	No	No
6	Form 14: Spray Application Rate Verification	Required, if applicable		No	No

- All applications except for **irrigation and drench** use these forms
- *Paper Notebook Pages 21-22* (only liquid 1 active TS)
- Each eFDB has subparts: A,B,C & D. **Do not need to save between sub-parts**. It acts like one form.
- Use Calc Button to trigger calculation results to appear
- Must save between forms and **enter them in sequential order**: Form 11 -> Form 12 -> Form 14
- **Must resave the rest of the forms** for any calculation updates to trigger



Error Prone Entries in eFDB Part 6

1. **Type of Application:** Directed, Broadcast, Banded, or via Irrigation or drench (also Granular)
2. **Swath Width:** Calculated as Treated Area / Distance travelled during application
 - a. Directed: Row Width ($\frac{1}{2}$ X Row Width if both sides applied)
 - b. Broadcast: No. Nozzles X Nozzle Spacing
 - c. Banded: Band Width
3. **Actual Treated Area:** Calculated per Application Type SOP. (This number is not the “sprayed area”, ignore the word “actual”)
4. **Planned Mix Volume:** Provide what you will use as the total water amount including overage, which then calculates the amount of TS required.



Other Entries Used in Application Result Calculations

IR4

Form 12: Test Materials Calculations

PR Number 08266

Field ID 08266.26-FL01/ Pyridaben/ Lychee

Treatment TRT02

App Timing Application 1

App No. 1

Instructions:

Enter the spray mixture data.

12A - Total Mixture Volume

12B - Material(s)/Formulation(s)

12C - Adjuvant(s)

12D - Final

Calibrated GPA 122.89

Actual Treated Area (ft²) 3000.00

Minimum Mix Volume (mL) 32256

Planned Mix Volume (mL) 38816

1. Calibrated GPA (Form 11 times, output volumes, etc)
2. Amounts of Water, TS, Adjuvant added to tank (Form 12)
3. Pass times, pass distances (Form 14)



Part 6. Applications Form 14B

14A - Spray Application Delivery **14B - Formulation(s)** 14C - Adjuvant(s) 14D - Rate Verification

Formulation	Protocol Rate (US)	Protocol Rate Unit (US)	Actual Application Rate	Actual Application Rate Units	Tolerance % of Protocol	Tolerance - within expected Tolerance (Y/N)
Linex 4L	1	lbs ai/A	0.980	lbs ai/A	98.00	YES

✓ ↶ ✂ 📄 📁 ⏪ ⏩ 🖨

- Tolerance acceptability is +/- 10%. Which will trigger the “Yes” or “No” within expected tolerance.
- If your result is not as expected, confirm if there was a mistake in any entry on Forms 11,12 and 14.
- If there was a mistaken entry, change that data point and save the form. Then return to Form 14 to “calc” and save the new result.
- If there was not a mistake in prior entries and the application was outside the +/- 10% acceptability, contact the Study Director immediately.



Part 6. Applications

IR4

Part 6C. iAdvantage Calculation Form Instructions
Form 11,12, 14

PR Number: 13323

Field ID/ Chemical/ Crop: 13323.26-CA10/ Flazasulfuron/ Peach

Treatment: TRT02

App Timing: Application 1

App No: 1

Instructions:

Use this form as instructions on how to enter the prompts within the application calculation forms. This form has no user input.

Paper Notebook Pages 19-20

		A
1	11A ; Calibration Date	The date of the full calibration data contained in this form. The time and other details of calibration are captured in Part 6A.
2	11A ; Application Equipment Type	Select the appropriate sprayer type or 'other', the actual equipment is described in Part 6A and a diagram (Part 6B) is uploaded to eFDB Documents.
3	11A ; Pressure Source, Pressure (psi; kg/cm2)	Select the method of pressure generation or 'other' and then describe it in the 'Notes' or Part 3A.
4	11A ; Type of Application	Application type determines how treated area is calculated and therefore the entry for 'swath width' in this form, where treated area = swath width x pass length x number of passes.
5	11A ; Nozzle Type, Brand Name, Tip Number	E.g. Nozzle type: 'Flat Fan Extended Range' , Brand Name: Tee Jet, Tip Number: 11003XR
6	11A ; Nozzle Spacing (in; cm)	Enter value as a single number. Special cases: sprayer is single nozzle and this is a broadcast spray, this number must be 'swath of the nozzle at appropriate height' to calculate 'swath width'. If using airblast, with multiple nozzle spacings, it is acceptable to enter the number '1' here as a

✓ ↩ ✂ 🗨 🖨 [Copy Across]

New for
2026!

iAdvantage
Calc Form
Instruction

Online
Version

Change to Adjuvant Information in eFDB

- Adjuvants are no longer being directly inputted into the eFDB iAdvantage App Calc Forms, unless explicitly required by the protocol
- No more liquid adjuvant at the default rate, when no rate is specified in protocol

Here is what Protocols will say in 2026:

- **Include an adjuvant and add the amount measured in the tank plus water, under the Form 12D “Actual Carrier Volume (mL)” prompt** (Form 12C and 14C are not used, if no specifics for adjuvant are in the protocol). **Specify the intended adjuvant rate and actual volume measured in Part 6F and 6G:** Application Information, and upload a copy of the label to the eFDB Documents. Contact the Study Director with any questions.
- **Include a NIS adjuvant at 0.25% v/v (acceptable between 0.225-0.275% v/v) or a MSO at 1 % v/v (acceptable between 0.9-1.1 % v/v).** **Specify the intended adjuvant rate** in Part 6F and 6G: Application Information, and upload a copy of the label to the eFDB Documents. Contact the Study Director with any questions.

No Adjuvant Specified

12A - Total Mixture Volume 12B - Material(s)/Formulation(s) **12C - Adjuvant(s)** 12D - Final

Adjuvant	Concentration Imperial	Concentration Imperial Unit	Protocol Rate (US)	Protocol Rate Unit (US)	Calculated Amount	Calculated Units	Actual Amount	Actual Amount Unit

14A - Spray Application Delivery 14B - Formulation(s) **14C - Adjuvant(s)** 14D - Rate Verification

Adjuvant	Protocol Rate (US)	Protocol Rate Unit (US)	Actual Application Rate	Actual Application Rate Units	Tolerance % of Protocol	Tolerance - within expected Tolerance (Y/N)

12A - Total Mixture Volume 12B - Material(s)/Formulation(s) 12C - Adjuvant(s) **12D - Final**

Calculated Carrier Volume (mL)

Actual Carrier Volume (mL)

Calculated Total Mixture Volume (mL)

Actual Total Mixture Volume (mL)

Include an adjuvant and add the amount measured in the tank plus water here



New Adjuvant Prompts in Part 6F and 6G:

- Specify the intended adjuvant rate and actual volume measured in Part 6F and 6G: Application Information

IR4

Part 6F and 6G. Application Information

PR Number: 13962

Field ID/ Chemical/ Crop: 13962.26-CA51/ Afidopyropen/ Avocado

Treatment: TRT02

App Timing: Application 1

App No: 1

Instructions:

Provide the description of the application not provided on Forms 12 and 14. Upload any hand calculations, Excel formulas or other raw data to the Documents Tab. Equations used in electronic (computer software) calculations in this trial must be described on the file.

⏪ ⏩ 1 ⏪ ⏩

	A	
increments or measurement (unit)		
12 Adjuvant measuring equipment and the increments of measurement (unit)		
13 Amount of Adjuvant Added to Mix (if no Prompt in Form 12C)		
14 How was adjuvant rate and other adjuvant details determined (refer to protocol or adjuvant label)		
15 Intended Adjuvant Rate and Unit		

Paper Notebook Page 25

Adjuvant Specified

Save Data

Calc

Notes

Form Data

Contact Us

IR4

Form 12: Test Materials Calculations

PR Number **13809**

Field ID **13809.25-WI336/ Pyridaben/ Dill**

Treatment **TRT02**

App Timing **Application 1**

App No. **1**

Instructions:

Enter the spray mixture data.

12A - Total Mixture Volume

12B - Material(s)/Formulation(s)

12C - Adjuvant(s)

12D - Final

Adjuvant	Concentration Imperial	Concentration Imperial Unit	Protocol Rate (US)	Protocol Rate Unit (US)	Calculated Amount	Calculated Units	Actual Amount	Actual Amount Units
Nonionic Surfactant (NIS)	100	% v/v	0.25	%v/v	11.25	mL	11.30	mL



Adjuvant Specified

IR4

Form 14: Spray Application Rate Verification

PR Number **13809**

Field ID **13809.25-WI336/ Pyridaben/ Dill**

Treatment **TRT02**

App Timing **Application 1**

App No. **1**

Instructions:

Enter the pass information to ensure that the percentage of tolerance is within limits. In addition, enter the method of disposal of test substance

14A - Spray Application Delivery

14B - Formulation(s)

14C - Adjuvant(s)

14D - Rate Verification

Adjuvant	Protocol Rate (US)	Protocol Rate Unit (US)	Actual Application Rate	Actual Application Rate Units	Tolerance % of Protocol	Tolerance - within expected Tolerance (Y/N)
Nonionic Surfactant (NIS)	0.25	%v/v	0.249	%v/v	99.60	YES



Questions on iAdvantage Calculation Forms 11, 12, 14?

Next are IR-4 irrigation and drench
application forms





eFDB Table of Data Requirements and Locations					IR-4 2026
Part #	Document Title or Description	eFDB Form?	eFDB Backup PDF / Paper?	Document Upload?	e-Facility File Eligible?
6D	Drench Mix and Rate Calculations	Required, if applicable	Yes	No	No
6E	Field Drench Mix and Rate Calculations	Required, if applicable	Yes	No	No
6I	Irrigation Calibration Information	Optional	Yes	No	No
6J	Irrigation Mix and Rate Calculations	Required, if applicable	Yes	No	No

Depending on the protocol, you may receive both calibrated output forms and/ or these special calculation forms (e.g. application option: soil directed high GPA spray or drench)

If you do not spray, do not need to complete the normal application calculation Forms 11, 12, 14 and Part 6A. Instead use these:

Part 6D: GH drench form for per pot area calculation of treated area / mix vol.

Part 6E: Field Drench form for per plant calculation of mix volume (not treated area).

If you conduct an irrigation/drip, one form **Part 6I** for calibration (optional) first, then **Part 6J** for application itself.

Separate versions for liquid, dry, & multiple a.i. Test Substances (due to different calculations). See the form name for the specific version. (Only 1 active liquid in paper)

Part 6D Greenhouse Drench

- 1) Enter the number of pots for this treatment plot and depending on whether the pots are round or square, the pot diameter or pot length. The treated area is calculated automatically.
- 2) Enter from the protocol the drench mix volume required per square meter. The amount of mix per pot, total mix volume and amount of test substance required for the plot is calculated automatically.
- 3) Enter the test substance name and amounts of water and test substance measured for each batch. Then add the times of mixing, additional agitation, and application for each batch.
- 4) Enter the amount of mix measured and added to each pot and how much mix solution remained at the conclusion of the application. The tank mix totals and application results are calculated automatically.

Part 6E Field Drench

- 1) Enter the number of plants for this treatment plot and the treated area.
- 2) Enter the planned drench mix volume per plant. The amount of total mix volume and amount of test substance required for the plot is calculated automatically.
- 3) Enter the test substance name and amounts of water and test substance measured for each batch. Then add the times of mixing, additional agitation, and application for each batch.
- 4) Enter the amount of mix measured and applied to each plant and how much mix solution remained at the conclusion of the application. The tank mix totals and application results are calculated automatically.

Part 6I Irrigation Calibration

- Form is only required if you conduct (system output rate and/or injector rate) calibration to determine application result.
- Certain irrigation systems do not require calibration. See the Application Types IR-4 National SOP for details.
- Form will calculate the irrigation conditions to use during the application:
 - Irrigation water required to achieve target acre inches in protocol
 - Duration of irrigation to achieve acre inch target
- If calibrating the injector, form calculates how much injector mix volume required and the duration of injection during application

Example App Handout Page 24-25

Paper Notebook Page 27

Part 6J Irrigation Mix & Rate Calculation

- The protocol application rate (lbs ai/A) and the nominal test substance concentration (lbs ai/gal) are automatically provided. The amount of test substance (mL) required for the application is provided based on those numbers and the treated area.
- Enter the actual amount of test substance measured and amount of water measured for the injection mix. Save the form and complete the remaining application information forms in Part 6. After the application is completed, enter the duration of the application (time of irrigation) in hours.
- The results of the application are automatically calculated, if the system's output rate is entered. If measuring water in the irrigation per acre by total tank volume of water applied, this amount must be entered to calculate actual inches of water.

Example App Handout Page 26

Paper Notebook Page 28



eFDB Table of Data Requirements and Locations

IR-4 2026

Part #	Document Title or Description	eFDB Form?	eFDB Backup PDF / Paper?	Document Upload?	e-Facility File Eligible?
6	Form 11: Spray Equipment Description and Calibration	Required, if applicable	Yes	No	No
6	Form 12: Test Material Calculations	Required, if applicable	Yes	No	No
6	Form 14: Spray Application Rate Verification	Required, if applicable		No	No
6A	Application Calibration Information	Required	Yes	No	No
6B	Diagram of Application Equipment	No	Yes	Required	No
6	Application Equipment Maintenance and Repair Log	No	No	Required in either location	
6C	iAdvantage Application Calculation Instructions for Forms 11, 12, 14	Optional	Yes	No	No
6D	Drench Mix and Rate Calculations	Required, if applicable	Yes	No	No
6E	Field Drench Mix and Rate Calculations	Required, if applicable	Yes	No	No
6F & 6G	Application Information	Required	Yes	No	No
6H	Conditions at Application	Required	Yes	No	No
6I	Irrigation Calibration Information	Optional	Yes	No	No
6J	Irrigation Mix and Rate Calculations	Required, if applicable	Yes	No	No
6K & 6P	Post Treatment Records	Required	Yes	No	No

Paper Notebook Page 17

Paper Notebook Page 18

SEE EXAMPLES FROM
PRIOR TRIALS FOR MOST
PART 6 FORMS IN
HANDOUT

Paper Notebook Page 25

Paper Notebook Page 26

Paper Notebook Page 29



Final thoughts about using the eFDB Part 6

- Best case scenario, **stay online to use forms**, use hotspot
- Review the forms **ensure you know how to enter** before starting an app
- Ask eFDB Admins, if confused about forms for help
- Ask the Study Director to **review your plot map and any calculations**, if unsure
- Murphy's Law: **plan for technical difficulties, have a backup**

Questions about anything in Part 6?

Next is Part 7 Sampling and Storage





Part 7. Sampling and Storage

eFDB Table of Data Requirements and Locations				IR-4 2026	
Part #	Document Title or Description	eFDB Form?	eFDB Backup PDF / Paper?	Document Upload?	e-Facility File Eligible?
7A.1	General Harvesting Information	Required	Yes	No	No
7A.2	General Sampling Information	Required	Yes	No	No
7B	Specific Sample Information and Inventory	Required	Yes	No	No
7C	Pre-Sample Drying for Percent Moisture Estimation	Optional	Yes	No	No
7D	Crop Drying and Percent Moisture Calculation	Required, if applicable	Yes	No	No
7	Sample Freezer(s) Temperature Logs or Data	No	No	Required in either location	
7	Sample Freezer(s) Contents Logs or Data	No	No	Required in either location	
7	Sample Freezer(s) Maintenance and Repair Log	No	No	Required in either location	

Part 7. Sampling and Storage

- **Part 7A.1. General Harvesting Paper Notebook Page 30**
 - Describe **how you followed protocol requirements** to ensure representative sample and proper timing
- **Part 7A.2. General Sampling Paper Notebook Page 31**
 - Describe modifications to harvested crop, how contamination was avoided, and how transported
- **Part 7B. Sample Info /Inventory Paper Notebook Page 32**
 - Enter each sample in separate row, adding weight, time sample collection ended and time placed in freezer, etc.



Part 7C. Pre-Sample Drying for Percent Moisture Estimation

IR4

Part 7C. Pre-Sample Drying for Percent Moisture Estimation

PR Number: Validation (2026 forms)

Field ID/ Chemical/ Crop: Metric Irrigation Dry

Folder: Other Forms

Instructions:

Use this form with representative crop matrices (not residue samples), for determining total percent dry matter in the crop (i.e. complete dryness) and estimating the duration of time required to achieve a target percent moisture. To demonstrate complete dryness:
 1) Record the weight of a container on the scale, then the container with sample. The initial sample weight is automatically calculated as the difference.

Paper Notebook Page 33

	A	B	C	D				
1	Crop and or Raw Ag Commodity (RAC)	Hops	Hops	Hops	Hops			
2	Drying equipment and Conditions	Dryer	Dryer	Dryer	Dryer			
3	Weight Unit (applies to entire form)	grams	grams	grams	grams			
4	Container wt (see unit)	33.00	33.00	33.00	33.00			
5	Total wt (see unit)	224.00	224.00	224.00	224.00			
6	Initial Fresh Sample wt (see unit)	191.00	191.00	191.00	191.00			
7	Drying Start Time and Date	4:15 pm on 9/5/23	4:15 pm on 9/5/23	4:15 pm on 9/5/23	4:15 pm on 9/5/23			
8	Time 1 (unit)	8 am 9/6/23	8 am 9/6/23	8:00 am 9/6/2023	8:00 am 9/6/2023			
9	After T1 wt (see unit)	97.00	97.00	97.00	97.00			
10	After T1 Remaining wt %	33.5	33.5	33.5	33.5			
11	Time 2 (unit)	9 am 9/6/23	9 am 9/6/23	9 am 9/6/2023	9 am 9/6/2023			
12	After T2 wt (see unit)	93.00	93.00	93.00	93.00			
13	After T2 Remaining wt %	31.4	31.4	31.4	31.4			
14	Time 3 (unit)	11 am 9/6/23	11 am 9/6/23	11:00 am 9/6/2023	11:00 am 9/6/2023			
15	After T3 wt (see unit)	85.00	85.00	85.00	85.00			
16	After T3 Remaining wt %	27.2	27.2	27.2	27.2			
17	Time 4 (unit)	12:45 pm 9/6/23	12:45 pm 9/6/23	12:45 pm 9/6/2023	12:45 pm 9/6/2023			
18	After T4 wt (see unit)	83.00	83.00	83.00	83.00			
19	After T4 Remaining wt %	26.2	26.2	26.2	26.2			
20	Time 5 (unit)	kept going further 1 hour drying	kept going further 1 hour drying	kept going further 1 hour drying	kept going further 1 hour drying			
21	After T5 wt (see unit)	80.00	80.00	80.00	82.00			
22	After T5 Remaining wt %	24.6	24.6	25.7	25.7			
23	Time 6 (unit)	kept going further 1 hour drying	kept going further 1 hour drying	kept going further 1 hour drying	kept going further 1 hour drying			
24	After T6 wt (see unit)	75.00	75.00	79.50	79.50			
25	After T6 Remaining wt %	22.0	22.0	24.3	24.3			
26	Time 7 (unit)	kept going further 1 hour drying	kept going further 1 hour drying	kept going further 1 hour drying	kept going further 1 hour drying			
27	After T7 wt (see unit)	70.00	70.00	79.50	79.50			
28	After T7 Remaining wt %	19.4	19.4	24.3	24.3			
29	Notes / Comments	The end	The end					



Part 7C. Pre-Sample Drying for Percent Moisture Estimation (Optional Form)

- Test samples should **well represent the actual crop** and be **dried in the same way** study samples will be
- Use successive drying intervals and weights until no **further weight changes = completely dry**
- Form will provide the "After T Remaining wt %"
- This **number is copied** in to Part 7D "Dryness Remaining wt % (pre-sample)"
- Then, **target weight** of actual study samples and **final moisture content** can be calculated

Part 7D. Crop Drying & Percent Moisture Calculation

Paper Notebook Page 34

PR Number: Validation (2026 forms)

Field ID/ Chemical/ Crop: Metric Irrigation Dry

Folder: Other Forms

Instructions:

Use this form for documentation but not required to complete. Moisture % in this form is for completely dry biomass after drying. To determine

	A	B
1 Sample ID	A	B
2 Describe Fresh Material	Hops	Hops
3 Weight Unit (applies to entire form)	grams	grams
4 Container wt (see unit)	33.00	33.00
5 Sample + Container wt (see unit)	224.00	224.00
6 Initial Fresh Sample wt (see unit)	191.00	191.00
7 Target Moisture %	8.0	8.0
8 Dryness Remaining wt % (pre-sample)	24.30	24.30

	A	B
8 Dryness Remaining wt % (pre-sample)	24.30	24.30
9 Target wt (see unit)	50.4	50.4
10 Drying Start Time and Date	9/15/23 9am	9/15/2023 9:00 am
11 After Drying Sample + Container wt (see unit)	83.40	83.40
12 After Drying Sample wt (see unit)	50.40	50.40
13 Drying Duration and or Ending Time (unit)	3 hours	3 hours
14 Calc Moisture by Pre-Sample or Sub Sample Dry Down	Sub-Sample Dry Down	Pre-Sample Dry Down
15 Complete Dryness Initial wt (see unit)	191.00	
16 Complete Dryness Final wt (see unit)	79.50	
17 Calculated Moisture %	7.7	7.9
18 Dried Material Description	Dried Hop Cones	Dried Hop Cones
19 Drying Equipment and Conditions	Dryer for 3 hours	Dryer for 3 hours
20 Notes / Comments	Test Passed	Passed

224.00	224.00
191.00	191.00
8.0	8.0
24.30	24.30



Part 7D. Pre-Sample Drying for Percent Moisture Estimation (Required)

- Calculates percent moisture of final dried samples by either **Pre Sample** dryness (Form 7C) or **Sub Sample**
- **Sub sample** requires you to collect **an additional sample from crop** - weight it, dry it completely, and weight it again to calc the % dry matter or dryness (Form 7D)
- Enter a Target Moisture % (if protocol required 10- 14% moisture in the final sample, put "12" here)
- That, a starting weight, and a pre-sample dryness % will calculate the **target weight of sample needed**
- Suggest using paper to enter and then transcribe to eFDB forms (*initial and date all entries on paper!*)



Part 7. Sampling and Storage

eFDB Table of Data Requirements and Locations				IR-4 2026	
Part #	Document Title or Description	eFDB Form?	eFDB Backup PDF / Paper?	Document Upload?	e-Facility File Eligible?
7A.1	General Harvesting Information	Required	Yes	No	No
7A.2	General Sampling Information	Required	Yes	No	No
7B	Specific Sample Information and Inventory	Required	Yes	No	No
7C	Pre-Sample Drying for Percent Moisture Estimation	Optional	Yes	No	No
7D	Crop Drying and Percent Moisture Calculation	Required, if applicable	Yes	No	No
7	Sample Freezer(s) Temperature Logs or Data	No	No	Required in either location	
7	Sample Freezer(s) Contents Logs or Data	No	No	Required in either location	
7	Sample Freezer(s) Maintenance and Repair Log	No	No	Required in either location	

Questions about anything in Part 7?

Next is Part 8 Sampling Shipment



Part 8. Sample Shipment

eFDB Table of Data Requirements and Locations				IR-4 2026	
Part #	Document Title or Description	eFDB Form?	eFDB Backup PDF / Paper?	Document Upload?	e-Facility File Eligible?
8A	Residue Sample Shipping Information	Required	Yes	No	No
8B	Residue Sample Chain of Custody	Required	Yes	No	No
8C	Residue Sample Shipping Inventory	Required	Yes	No	No

Part 8. Sample Shipment

- **Part 8A. Residue Sample Shipping Information Paper Notebook Page 35**
 - Describe how & when you packaged samples
 - To who & when you contacted and shipped to lab
- **Part 8B. Residue Sample Chain of Custody Paper Notebook Page 36**
 - Provide details to lab in box about sample shipment
- **Part 8C. Residue Sample Shipping Inventory Paper Notebook Page 37**
 - Provide details to lab in box about each sample in shipment

Part 8: Printing Sample Shipment Docs

1. Fill out, save all Part 8B and Part 8C sections (except those Lab Use Only)
2. Zoom out your computer display until the entire form is visible (no scroll bars)
3. Click Print and ensure “print headers and footers” is checked
4. Sign and date printed docs, copy to each box, notify, ship
5. Upload the PDF received from lab to eFDB with text box added do not transcribe form

IR4 Part 8B. Residue Sample Chain of Custody

PR Number: 05020

Field ID: Chemical Comp.: 05020-20-CA14: Pyridoxyl Tartrate

Field: Part 8. Sample Shipment

Instructions: Complete the first portions of this form prior to shipment (or hand delivery of samples). Include the paper document in the shipment box to the laboratory. When the samples are received by the lab, they must complete the lab portion on the paper page and provide a scan via e-mail. This scan is uploaded to the trial of DB as a...

NOT ALL FORM VISIBLE

IR4 Part 8B. Residue Sample Chain of Custody

PR Number: 05020

Field ID: Chemical Comp.: 05020-20-CA14: Pyridoxyl Tartrate

Field: Part 8. Sample Shipment

Instructions: Complete the first portions of this form prior to shipment (or hand delivery of samples). Include the paper document in the shipment box to the laboratory. When the samples are received by the lab, they must complete the lab portion on the paper page and provide a scan via e-mail. This scan is uploaded to the trial of DB as a...

ALL FORM IS VISIBLE

Print

Destination: Win-20-Residual-05

Pages: All

Pages per sheet: 1

Layout: Portrait

Color: Black and white

More settings

Paper size: 8.5x11in

Pages per sheet: 1

Margins: Default

Quality: 600-dpi

Scale: Default

Two-sided: Print on both sides

Options: Headers and footers

Print

Printing Shipping Documents

The screenshot shows a web browser window with the URL `estudy.org/in/vim/ASPX/CollectData.aspx?Notebook=2580&Form=51777`. The page title is "Part 8A. Residue Sample Shipping Information". The form includes fields for "PR Number: 05529", "Field ID/ Chemical/ Crop: 0529-25-CA*13/ Pyridate/ Tomato", and "Folder: Part 8. Sample Shipment". A table with 15 rows and 2 columns is visible, with the first row highlighted in blue. The first row contains the question "Were samples kept frozen from sample collection date to shipment?" and a column header "A".

The browser's print menu is open, showing options like "New tab", "New window", "New Incognito window", "Zoom", "Print...", "Search with Google Lens", "Translate...", "Find and edit", "Cast, save, and share", "More tools", "Help", "Settings", and "Exit".

1) Click the three dots at the top of your browser

2) Then reduce the zoom such that all rows are visible on your computer screen

3) Click Print



Printing Shipping Documents

The screenshot shows a web browser window with the URL `esludy.org/ir4/elm/ASPX/CollectData.aspx?Notebook=2582&Form=51858`. The page title is "Part 8A. Residue Sample Shipping Information". The form includes fields for "PR Number: 06529", "Field ID# Chemical/ Crop: 06529-25-CA10/ Pyridate/ Tomato", and "Folder: Part 8. Sample Shipment". A table with columns "A" and "B" is visible, with a red arrow pointing to the "Print..." option in a right-click context menu. The menu also includes options like "Back", "Forward", "Reload", "Save as...", "Print...", "Cut...", "Search with Google Lens", "Open in reading mode", "Send to your devices", "Create QR Code for this page", "Translate to English", "View page source", and "Inspect".

IR4

Part 8A. Residue Sample Shipping Information

PR Number: 06529

Field ID# Chemical/ Crop: 06529-25-CA10/ Pyridate/ Tomato

Folder: Part 8. Sample Shipment

Instructions:
Enter the following information for the shipment of the samples. Add additional columns if there are other multiple shipment dates and when other information needs to be identified separately.

Right Click
with your
mouse to
see menu:

Click Print



Printing Shipping Documents

The screenshot shows a web browser window with a shipping form on the left and a print dialog box on the right. The print dialog box is open to the 'Options' section, where the 'Headers and footers' checkbox is checked. A red arrow points from the text on the right to this checkbox.

Print dialog box settings:

- Destination: V4-204-MinotabH55
- Pages: All
- Copies: 1
- Layout: Portrait
- Color: Black and white
- Paper size: 8 1/2x11
- Pages per sheet: 1
- Margins: Default
- Quality: 600 dpi
- Scale: Default
- Two-sided: Print on both sides
- Options: Headers and footers

Please remember to ensure that the Headers and footers Option is clicked prior to printing



Printing Shipping Documents

- Always sign and date printed/ paper docs, copy papers to each box!
- Notify the lab and ship per protocol Section 2.5 Residue Sample Handling and Shipping
- Once samples are received: upload the PDF received from lab to eFDB with text box added
- Don't transcribe any lab sections back into eForm

Questions about anything in Part 8?

Next is Part 9 Weather and Irrigation



Part 9 Weather and Irrigation

Daily temp mix/max, precipitation/ irrigation, (if greenhouse, RH%)

eFDB Table of Data Requirements and Locations					IR-4 2026
Part #	Document Title or Description	eFDB Form?	eFDB Backup PDF / Paper?	Document Upload?	e-Facility File Eligible?
9A	Meteorological Information	Required	No	No	No
9B	Additional Meteorological Information	Required	No	No	No
9	Daily Weather / GH Records for Trial Period	No	No	Required	No



Ready to Complete an eFDB

- Ensure all **(required) forms** are completed and marked as complete
- Check that all **required PDF documents** have been properly uploaded
- **E-mail your RFC, SD, and David** that you are ready for a QC review
- The QC reviewer will respond with a list of **suggested corrections** to make

PR Number: 13035

Page Icon is other Location for Form Data

Field ID: 13035.23-CA23

Collapse All

Export to Excel

Completed By

Date Completed

Transcribed

Part 1. GLP Compliance

Part 1A. Research Director Agreement

DJE

08-Dec-2023

Yes

Part 1B. GLP Compliance Statement

DJE

13-Dec-2023

No

Part 2. Personnel

Part 2A. Personnel Involved in Trial

DJE

08-Dec-2023

Yes

Part 2C. Training Summary for Temporary Personnel

DJE

11-Dec-2023

N/A

Part 3. Use the Notes Button/ Document Uploads

Part 4. Test Substance and Adjuvant

Part 4A and 4E. Test Substance Receipt and Storage

DJE

11-Dec-2023

Yes

Part 4B. Test Substance Use Log

DJE

11-Dec-2023

Yes

Part 4C. Disposition of Test Substance Containers

DJE

11-Dec-2023

Yes

Part 4D. Identification and Receipt of Adjuvants

DJE

11-Dec-2023

Yes



Mark all Forms as Complete

ments Audit Trail Mobile Edition Documents Print Utility

Number: 08266
Crop: 08266.26-FL017 Pyridaben/ Lychee

Part 3A. Notes and Communications Log

Completed By

Transcribed

Date Completed

Close Save

- **Add your initials & date** to signify that you are done entering data in form and any blanks remaining were intentionally left blank
- **Transcribed here** means at least one variable in this form was entered on paper first then copied into this form.

Do this for every form!



QC Review then Ship to HQ-QA

eFDB QC Review for Trial 08284.23-CA14

FRD Nathan Leach

PM 8/8/2024

1. eFDB Form Part 1B: consider adding to the compliance exception other which maintenance records were not done per GLP – I believe this is regarding the airblast sprayer.
Corrected in eFDB. NL 8-8-24
2. eFDB Form Part 5F: no trial history was provided and the note on Part 5F.1 indicates there are no records for this field. Please confirm whether there were no maintenance chemicals applied to the field in the prior year or that there was but there is no documentation of this. Consider adding a line to this form to denote no chemicals applied in the prior year, if that is the case.
Correction made in 5F.1. NL 8-8-24
3. eFDB Form Part 5H: as for history, please add a line to this form that provides no chemicals applied during the trial period, if that is the case.
Note added in 5H. NL 8-8-24
4. eFDB Form Part 5H.1: the entry provides no records during the trial. Consider changing this entry to clarify it pertains to maintenance chemical records and whether this information was transcribed, verified, or verbally obtained.
Corrections made in eFDB. NL 8-8-24
 - a. There was the entry on Part 5G indicating cultural practice – pruning occurred. So please add a line to the form Part 5H.1 for describing the source of cultural practice info and please indicate, based on the instructions, whether that data was transcribed, verified, or verbally obtained.
Corrections made in eFDB. NL 8-8-24

Application 1

5. eFDB Form 11: it would be helpful to add a note to the form that the number of nozzles entry and nozzle spacing are not accurate, but based on the eFDB instructions for airblast and to see the application diagram for the nozzle information.
Note added in eFDB. NL 8-8-24

- After notifying RFC, SD, and David, **QC reviewer will remotely access your files**
- QC will send you an email of **corrections needed**
- You **make the corrections and respond** to each via email with initial & date
- **QC confirms** and notifies you to **prepare the file to ship** to HQ - QA for Audit




QC Review then Ship to HQ-QA

- Any paper raw data from trial is shipped with *Paper Notebook Pages 1-7*
- Fill out the *CoC Paper Notebook Page 2*
- Add Field ID Number to all pages
- Paginate all pages after 7
- Ship to IR-4 HQ QA (retain a scan for your records)



eQA will send Field Raw Data Audit Notice

 **QUALITY COMPLIANCE SOFTWARE**
Logon Page

User Name:

Password:

[Forgot Password?](#)

Finished with response

Field Raw Data Checklist 3. OA Findings/Recommendations 4. Res
Findings 5. SD/TFM Approval Page
[Go To Bottom](#)

Form Group: Field Raw Data Audit
Packet ID: FRDA-011022
Audit Type Chem/Crop/PR#(ID) : FRDA Quizalofop/Hemp/13017.23-OH231
Location: NCR Field Ohio State Univ.
Date: 7/2/2024 8:10:15 PM
Closed: No

Field Research Director

QA findings for FRD. Please respond. Initial and Date each response.:

Field Raw Data Audit	Martin Beran
Quizalofop - Hemp	530 754
13017.23-OH231	8525

Allison,

Please read the following findings. Place your

Editor - Google Chrome

ir4-eqa.cals.ncsu.edu/tms/input_text.asp?OptionID=OptionID&FieldLabel...

QA findings for FRD. Please respond. Initial and Date each response.:

Field Raw Data Audit Martin Beran

Quizalofop - Hemp 530 754 8525

13017.23-OH231

Allison,

Please read the following findings. Place your response after the finding and initial and date each of your responses.

To save your entered responses, please remember to **submit** (click the submit icon to close the text editor) and then **save** (on next screen, to save your entries).

ATTACH all corrected pages, new pages, etc. to this section!

FOR FRDA - Send originals to IR-4 HQ QA.

Please call me if you have any questions

1. Part 4E; The temperature range for the test substance storage appears to be 68° to 77F. This is the range spanning TS arrival on 6/21/23 thru the last application on 8/9/23. Please

**After all findings are addressed.
SD and MNGT will approve Audit**

**The notebook will remain
accessible until SD archives Raw
Data ...*Final Report signing***

Questions about the eForms and Basic eFDB Process and Requirements?

Next is Mobile Edition!



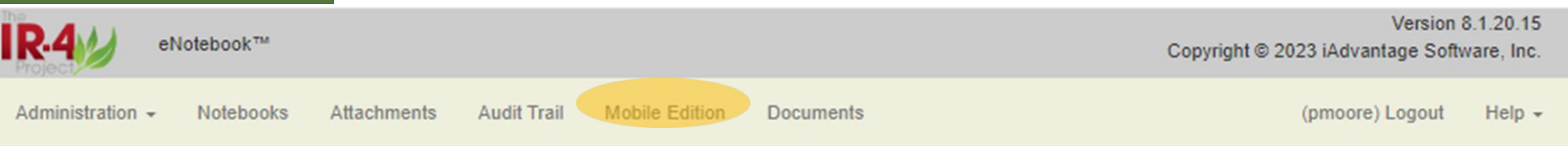
Mobile Edition Available for Windows

- Use this anytime you are without internet access and need to enter data
- Will provide all the data / forms and most all the functionality of the website
 - If you pre-enter data or upload a document
 - That data will be provided when you “check out” a form
 - Locks that website form page from being accessed
 - Must “check in” the form to be able to see that online again
- Otherwise, the Admin must **force** the form back, which **looses any data** entered on the local device



Mobile Edition Available for Windows

- Ipad Mobile Edition under redesign, expected in 2026
- Windows version will be revised as well when released
- For now, software is dated, but works



Mobile Edition for Windows

Open this link to load the Microsoft.net Framework 4.6.1; this must be done before installing the Mobile Edition.

Open this link to load Mobile Edition on your Microsoft Windows device
Copy this URL into the "Server URL" box during setup

Server Location (will need later)

Click Here Mobile Edition Download



Mobile Edition for Windows

- Guide from iAdvantage for Mobile in Help Tab
- See training recording on ir4intranet.org/efdb-training-resources/ Day 3



eNotebook

Version 8.2.20.22

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Administration ▾

Notebooks

Attachments

Audit Trail

Mobile Edition

Documents

(pmoore) Logout

Help ▾

PR Number:

-- All --



Contact Us

Administration User's Guide

User's Guide

iPad User's Guide

Windows Mobile User's Guide

Account Help

PR Number

Field ID/ Chemical/ Crop:

06529

[06529.25-CA10/ Pyridate/ Tomato](#)

06529

[06529.25-CA11/ Pyridate/ Tomato](#)



What about Protocol Deviations?

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) _____

THE DEVIATION IS FROM *(check appropriate)* PROTOCOL _____ SOPS _____

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: _____ Trial Year 2026

This protocol change form when copied on colored paper is an exact copy of the original.

- Must still use paper and ship to SD at HQ after FRD signs
- You can pre-enter data in eFile, but must still print, sign, and date it with wet ink and ship
- Send a draft to SD via email to confirm agreement before signing

Paper Notebook Page 38

“All we’re ever asked to do in this life is to treat our neighbor—especially our neighbor who is in need—exactly as we would hope to be treated ourselves. That’s our ultimate responsibility.”



Philip Moore
Jimmy Byrtus
David Schnatter

pmoore@ncsu.edu
jbyrtus@ncsu.edu
dschnatter@ncsu.edu



**NATIONAL EDUCATION
CONFERENCE** February 3-5, 2026

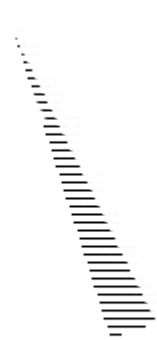
eFDB Tips & Tricks

Contributors: Nicole Soldan, Celeste Wheeler & Megan James Hickman



HARDWARE

**Hardware options that make
electronic field data book
MAGIC happen?**



Bluetooth Keyboard With Protector



Rugged Laptop and Arm Mount



HARDWARE

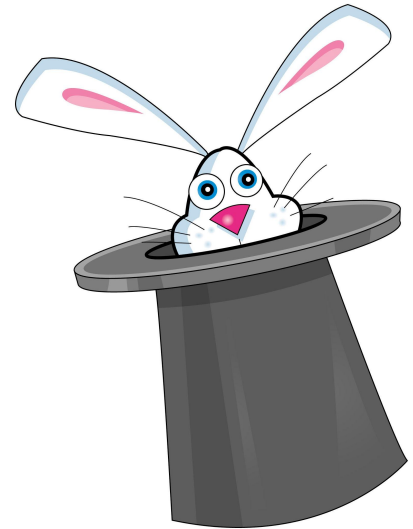
**iPad and
Protective Case with
Strap**

***Stylus/Pen not
recommended**



A few more tricks up our sleeve...

- ★ Protect your device from overheating
- ★ Keep device out of direct sunlight



Do you have a hardware tip or trick to share?



APPLICATIONS

Tips to be efficient when making your application

- Minimize time wearing PPE. Use a checklist of forms to fill in the field.
- Devices fully charged
- Contact information on hand for SD/HQ
 - Program numbers into your cell phone
 - Protocol might just have general HQ number
 - Email signatures usually have SD phone numbers as well if not listed on protocol
- Printed forms on hand - just in case
 - All paper application forms
 - 4B test substance use log
 - Note- TS formulation liquid vs dry calculations.
 - Dry formulation calculations not available in paper form

Checklist of forms to fill out in the field

Calibration:

Form 11: calibration forms

6A. Time Calibrated , procedures used to calibrate

Measure and Mix spray and make the application:

Form 12: Test Substance, Adjuvant, Carrier measured

Part 6F and 6G: equipment used to measure test substance, order of tank mix

Don't forget to log 4B Test Substance Use Log

Form 14: pass times and Application Rate verification

Application is finished.. More paperwork before heading inside to AC

Part 6H: conditions at application

How can you minimize time in PPE and be more efficient with eFDB forms?

Form 11 calibration forms example

Applications

PR Number 13847

Field ID 13847.25-MI153/ Terbacil/ Peach

Treatment Treatment02

App Timing Application 1

App No. 1

Inst

Ente
equ
fron
GP/

11A - Description of Spray Equipment

11B - Time & Distance

11C - Calibration Collection

11D - Calibration Calculations

Calibration Date	<input type="text" value="07/08/2025"/>
Application Equipment Type	<input type="text" value="Backpack"/>
Pressure Source	<input type="text" value="CO2"/>
Pressure (PSI)	<input type="text" value="33.0"/>
Type of Application	<input type="text" value="Banded / Row Middle soil spray"/>
Nozzle Type	<input type="text" value="Extended Range Flat Fan"/>
Brand Name	<input type="text" value="Tee Jet"/>
Tip Number	<input type="text" value="11002"/>
Nozzle Spacing (in)	<input type="text" value="16.0"/>
Swath Width (ft)	<input type="text" value="5.33"/>
List Calibration SOP(s) followed	<input type="text" value="M.021.01"/>

Fill out
beforehand if
possible

PR Number **13847**

Field ID **13847.25-MI153/ Terbacil/ Peach**

Treatment **Treatment02**

App Timing **Application 1**

App No. **1**

Instruc

Enter
equipr
from th
GPA o

11A - Description of Spray Equipment

11B - Time & Distance

11C - Calibration Collection

11D - Calibration Calculations

Number of Nozzles

Update

Number of Runs

Update

	Run 1	Run 2	Run 3		
Collection Time (sec)	29.82	30.12	30.08	90.02	Total Run Collection Time (sec)
Nozzle #1 (mL)	325	325	325		
Nozzle #2 (mL)	325	325	325		
Nozzle #3 (mL)	320	325	320		
Nozzle #4 (mL)	320	325	320		
Total Volume Output (mL)	1290	1300	1290	3880	Total Catch Volume (mL)



Discharge Calibration before Speed calibration

IR4 Form 11. Spray Equipment D

PR Number **13847** Field ID **13847.25-MI153/ Terbacil/ Peach**

Treatment **Treatment02** App Timing **Application 1**

App No. **1**

Instructions:
Enter the data the equipment used ;
from the nozzles
GPA or L/ha.

11A - Description of Spray Equipment **11B - Time & Distance** 11C - Calibration Collection 11D - Calibration Calculations

Time (sec): 1	<input type="text" value="10.65"/>
Time (sec): 2	<input type="text" value="10.63"/>
Time (sec): 3	<input type="text" value="10.70"/>
Average Time (sec)	<input type="text" value="10.66"/>
Calibration Distance (ft)	<input type="text" value="50.00"/>
Calibrated Speed (ft/sec)	<input type="text" value="4.69"/>
Calibrated Speed (mph)	<input type="text" value="3.20"/>

Speed calibration wearing PPE and spray equipment

Applications

PR Number **13847** Field ID **13847.25-MI153/ Terbacil/ Peach**

Treatment **Treatment02** App Timing **Application 1**

App No. **1**

Inst
Ente
equi
from
GP#

11A - Description of Spray Equipment 11B - Time & Distance 11C - Calibration Collection **11D - Calibration Calculations**

Target GPA Min	10
Target GPA Max	40
Calibrated Spray Rate (mL/sec)	43.102
Calibrated GPA	19.84
Delivery Rate within Target Rate?	YES

**Calculations
then on to
measure test
substance
and make
the
application**

Prepare for calculations

Be aware that the paper forms may not include the calculation you need.

Example: Liquid test substance vs Dry test substance

Treatment and Application No _____ Field ID No _____

Part 6. Form 12: Test Materials Calculations (2025)

Part 6. Form 14: Spray Application Rate Verification (2025)



Instructions: Enter the spray mixture data and pass information.

Calibrated GPA

Calculate: (Calibrated Spray Rate X 43560) / (Calibrated Speed) X Swath Width x 3785)

Actual Treated Area (ft²)

Planned Mix Volume (mL)

Actual Amount of Test Substance

Calculate: (Protocol Rate (lbs ai/A) X Planned Mix Volume) / TS Concentration (lbs ai/gal) X Calibrated GPA

Actual Amount of Adjuvant (mL)

Calculate: (Protocol or Label Rate (% V/V) X Planned Mix Volume) / 100

Actual Carrier Volume (mL)

Total Mixture Volume (mL)

Actual Speed (ft/sec)

Calculate: (Total Pass Length / Total Pass Time)

Actual GPA

Calculate: (Calibrated Spray Rate X 43560) / (Actual Speed X Swath Width x 3785)

Actual Application Rate (lbs ai/A)

Calculate: (Actual GPA X Planned Mix Volume X Protocol Rate) / (Calibrated GPA X Total Mixture Volume)

	Length (ft)	Time (sec)	Direction
Pass 1			
Pass 2			
Pass 3			

Treatment and Application No _____ Field ID No _____

Part 6. Form 12: Test Materials Calculations (2025)

Part 6. Form 14: Spray Application Rate Verification (2025)

**Instructions:** Enter the spray mixture data and pass information.

Calibrated GPA

Calculate: (Calibrated Spray Rate X 43560) / (Calibrated Speed) X Swath Width x 3785)Actual Treated Area (ft²)

Planned Mix Volume (mL)

Actual Amount of Test Substance

Calculate: (Protocol Rate (lbs ai/A) X Planned Mix Volume) / TS Concentration (lbs ai/gal) X Calibrated GPA

Actual Amount of Adjuvant (mL)

Actual Amount of Test Substance for solid:
$$\frac{(\text{Protocol rate (lb ai/A)} \times \text{Planned mix volume (mL)} \times 454 \text{ g/lb} \times 100)}{(\text{TS Concentration} \times \text{Calibrated GPA} \times 3785 \text{ ml/gal})}$$

**Do you have an application tip or
trick to share?**

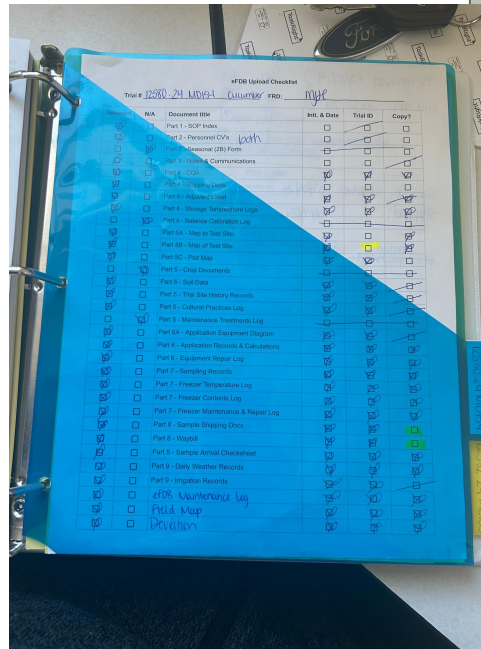


FILING & UPLOADS

Use a checklist to help keep track of files and uploads for each trial.

How I use it:

- Print one/trial
- Keep it with paper raw data
- Update it throughout the year as things get uploaded



eFDB Upload Checklist					
Trial # _____					
Uploaded	N/A	Document title	Init. & Date	Trial ID	Copy?
<input type="checkbox"/>	<input type="checkbox"/>	Part 1 - SOP Index	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 2 - Personnel CV's	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 2 - Seasonal (2B) Form	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 3 - Notes & Communications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 4 - COA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 4 - Shipping Docs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 4 - Adjuvant Label	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 4 - Storage Temperature Logs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 4 - Balance Calibration Log	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 5A - Map to Test Site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 5B - Map of Test Site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 5C - Plot Map	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 5 - Crop Documents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 5 - Soil Data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 5 - Trial Site History Records	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 5 - Cultural Practices Log	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 5 - Maintenance Treatments Log	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 6A - Application Equipment Diagram	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 6 - Application Records & Calculations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 6 - Equipment Repair Log	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 7 - Sampling Records	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 7 - Freezer Temperature Log	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 7 - Freezer Contents Log	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 7 - Freezer Maintenance & Repair Log	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 8 - Sample Shipping Docs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 8 - Waybill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 8 - Sample Arrival Checklist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 9 - Daily Weather Records	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Part 9 - Irrigation Records	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	eFDB Device Maintenance Logs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Dynamic Stamp in Adobe

Exact Copy of Original Document

Original in: _____

Initials & Date: _____



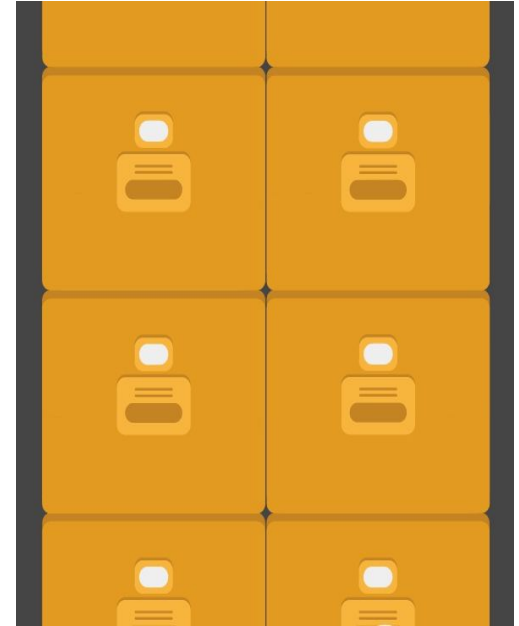
Pros	Cons
Time saving	Very hard to set up...
Easy to resize and place on document	Time consuming to set up.
Brings uniformity to document	

I can provide [the graphic](#) created. This [youtube video](#) is helpful.

FILING & UPLOADS

Tips for Naming Files

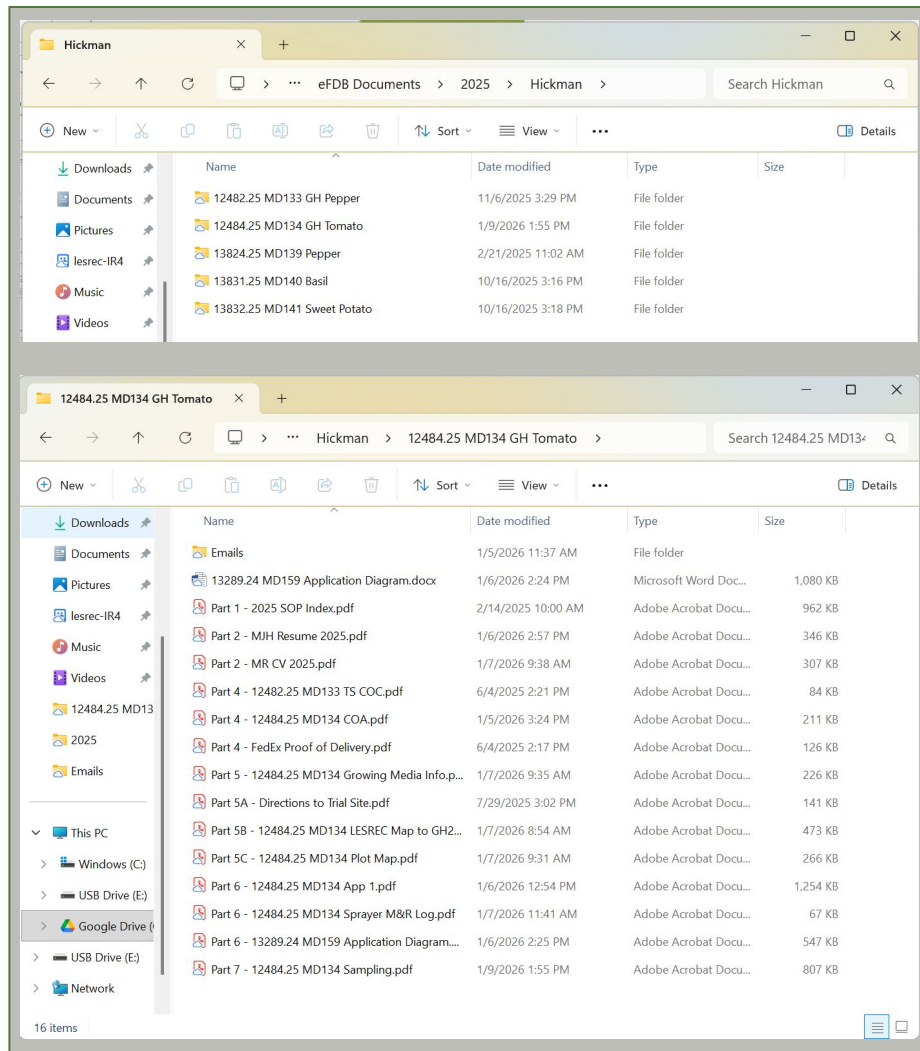
- Part # at the beginning of the file title
 - “Part 1 - XXX” or “Part 1. XXX”
- Add trial ID number to files that are trial specific
- eFacility Files... make titles relatable to applicable content (avoid building numbers or anything too specific)
- When naming files keep a consistent filing system





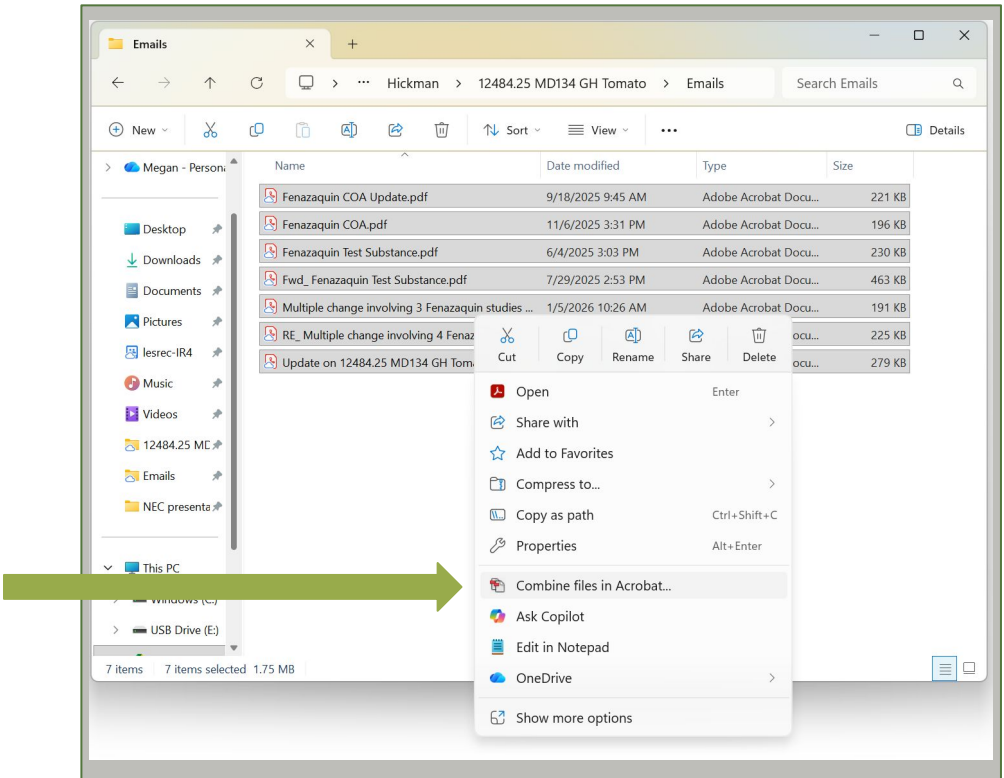
How I file...

- Make a new folder each year
- File folder for each trial
- Within each file folder:
 - Utilize the same naming system that I would when uploading
 - Put all trial specific info in trial folder (including working docs that will get turned into PDFs for upload)



A closer look at emails...

- Save emails throughout the year in the appropriate trial folder
 - Save them using the email subject line as title
 - Save attachments also
- At the end of the trial, I compile them into one PDF document using Adobe
 - Trying to keep documents in chronological order





**Please write down any tips & tricks
that you would want to share!**

Thank you!

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