What’s New for 2017 IR-4 Field Data Books?

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### 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 6A is paginated as 1, 2, 3... until the last page in Part 6.) When an FDB Part is initially paginated, the total number of pages in that part is entered at the bottom of page 1 next to the words “Total number of pages in this section at initial pagination”. It is not necessary to enter this total on each page within the section. All pages, including those not originally part of the FDB (such as Bills of Lading), should be paginated and identified with the field ID number. Pages in the Protocol/Protocol Changes section do not need pagination, but should be identified with the field ID number.

Pages in Part 6 should be grouped by application, i.e. all of the pages related to application #1 should come first, followed by all of the pages related to application #2 and so on. Additional pages inserted into the Field Data Book after it has been paginated:

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

**Example:**

<table>
<thead>
<tr>
<th>FDB Part</th>
<th>Identity of inserted pages (e.g. 6A-B, 9A)</th>
<th>Initials</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>7A, 14A</td>
<td>GKL</td>
<td>8/18/16</td>
</tr>
<tr>
<td>7</td>
<td>2A, 14B</td>
<td>GKL</td>
<td>10/10/16</td>
</tr>
<tr>
<td>4</td>
<td>3A-C</td>
<td>GKL</td>
<td>10/10/16</td>
</tr>
<tr>
<td>5</td>
<td>1A</td>
<td>GKL</td>
<td>2/28/17</td>
</tr>
<tr>
<td>6</td>
<td>7B-F, 14C, 20A</td>
<td>GKL</td>
<td>2/28/17</td>
</tr>
</tbody>
</table>

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.

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Page 6
Inserted printouts do not need blank areas lined out. This includes pesticide labels, weather data, maintenance chemical application lists, and other documents that are inserted into the FDB.

Labels and shipping documents for test substance and adjuvants should be inserted after the green page that follows 4F. Please paginate that green page and the labels and shipping documents within Part 4.
2A (required) vs. 2C (optional)
5C – The plot map

- The plot map must include 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)
5F – Trial Site Information

- Separate Cells for:
- Seeding Date*
- Date of Transplant
- and Age of Trees or Bushes or other Perennial Crops
- Prompts for Planting Method and Bush/Tree Height have been Deleted

*If the plants were obtained for the trial as transplants and the seeding date is unknown, enter “NR” or “Unknown”
• If treated seed was used, list treatment chemical (Date Applied would be “Seed TRT”). The instructions used to state that Date Applied would be “NA”.

• List tank-mixed chemicals together, if known, and bracket the tank mix on the form.
Part 6 – Application Records

- **6C2** – In the calibration table, the “Output per Second” data prompt has been revised to “Boom Output (mL/Second)”

- **6E** – On the delivery rate calculation page, new prompt: “Protocol Specified Spray Volume (from Part 15, in gallons per acre)” [Liters per hectare is fine for Canadian and other foreign trials]

- **6H** – New prompt: “Cleaned By” (beneath the equipment cleaning description)

- **6I** – New prompt: “Application Was Made By” (beneath the application description)

- **6J** – New prompt: “Was actual spray volume within the protocol range? Yes/No/NA If no, contact the SD immediately.”
Part 6 – Application Records

• Whoops! We prompted for: **Was actual spray volume within the protocol range?**

• But we didn’t provide an example formula!

  • Volume of Tank Mix applied to Plot \( \times \frac{1 \text{ gallon}}{} \times \frac{43,560 \text{ sq ft per acre}}{} = \text{ GPA} \)

  • Or: Determine the %Deviation from the Protocol of the Test Substance Rate, and Multiply that %Deviation by the Pre-Calculated Spray Volume.

  • E.g.: You planned to spray at 40 GPA

  • Your TS rate was 6% above the protocol rate

  • \(+6\% \times 40 \text{ GPA} = +2.4 \text{ GPA}; 40+2.4=42.4 \text{ GPA}\)
# Part 6G – Application Records (current)

**FIELD ID NO:**

**IR-4 FIELD DATA BOOK**

**PART 6. APPLICATION RECORDS**

1. **APPLICATION INFORMATION FOR APPLICATION NUMBER**
   - APPLICATION DATE

2. **HAVE THE APPLICATION EQUIPMENT BEEN USED SINCE THE LAST (Check one):**
   - YES
   - NO

3. **CALIBRATION/RECHECK WAS PERFORMED?**
   - (If yes, state who checked, if applicable)

**INSTRUCTIONS:** Complete a separate form for each application date and for each treatment on any application date (use the Treatment Number as indicated in the protocol). Provide the name of the test substance (common chemical name or chemical code number); the batch or lot number of the test substance; the approximate time the test substance was mixed with the carrier and the approximate time the mixture was applied to the plan; along with the initials of the person(s) mixing and spraying the test mix; the time of application; the time of retreatment (if any); the name of the person who retreated; the distance between the nozzle and the target; the pressure in pounds per square inch; the wind (up to 10 mph); the temperature; and the conditions under which the test was conducted. The information contained in this section will be used to determine the accuracy of the test results.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TEST SUBSTANCE</strong></td>
<td>Name of test substance</td>
</tr>
<tr>
<td><strong>BATCHLOT NUMBER/COMMENT</strong></td>
<td>Batch/lot number</td>
</tr>
<tr>
<td><strong>TIME MENDED/INITIALS</strong></td>
<td>Time the test was completed</td>
</tr>
<tr>
<td><strong>TIME APPLIED/INITIALS</strong></td>
<td>Time the test was applied</td>
</tr>
<tr>
<td><strong>EQUIPMENT IDENTIFIED</strong></td>
<td>Equipment used for application</td>
</tr>
<tr>
<td><strong>PLACEMENT OF TEST SUBSTANCE</strong></td>
<td>Method of application</td>
</tr>
<tr>
<td><strong>TANK MIX AMOUNTS</strong></td>
<td>Total volume of tank mix</td>
</tr>
<tr>
<td><strong>CARRIER (mixing volume of water)</strong></td>
<td>Volume of water used</td>
</tr>
<tr>
<td><strong>TOTAL VOLUME OF TEST MIX</strong></td>
<td>Total volume of test mix</td>
</tr>
<tr>
<td><strong>NOZZLE DISTANCE from TARGET</strong></td>
<td>Distance between nozzle and target</td>
</tr>
<tr>
<td><strong>PLANT TYPE</strong></td>
<td>Type of plant</td>
</tr>
<tr>
<td><strong>INCORPORATION</strong></td>
<td>Method of incorporation</td>
</tr>
<tr>
<td><strong>CARRIER SOURCE TYPE</strong></td>
<td>Type of carrier used</td>
</tr>
<tr>
<td><strong>CARRIER MIX TEMPERATURE</strong></td>
<td>Temperature of carrier mix</td>
</tr>
</tbody>
</table>

**AFTER DATA ENTERED:**

**DATE:**

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*If more than one test substance container was received for the trial, if not, only batch or lot number is needed.*
The instructions require you to enter: *the approx. time the test substance was mixed with the carrier and the approx. time the mixture was applied to the plots, along with the initials of the person(s) mixing and spraying the tank mix; the time of additional agitation (if any)*;

There is no requirement indicated for initialing the agitation entry.

But the data entry cell in the table has:

TIME OF ADDITIONAL AGITATION / INITIALS (if applicable)

We do not usually need initials for this entry! “If applicable” means if the person making this entry is different than the person filling out the rest of the page. This will be fixed for 2018.
Part 6G – Application Records (current)

- MEASURING EQUIPMENT with INCREMENTS*
  *e.g. 1000 mL graduated cylinder/10 ml incr.
- The precision of your measurements should not exceed the precision of your measuring equipment.
- For example, if you are using a cylinder or pipet with 1 mL increments, you should not measure 5.7 mL TS.
- For reporting data that meets GLP standards, we cannot “eyeball” measurements.
- What to do?
  - Our protocols allow a range of -5% to +10% from the target rate.
  - You should measure to the nearest marked increment.
  - If the increments on your cylinder or pipet are too large to keep you within the protocol range, then you need more precise equipment.
The prompt formerly stated as "Minimum Number of Fruit/Heads/Roots/Plants/Other Actually Collected per Sample" has been reworded as "Number of Fruit/Heads/Roots/Plants/Other Actually Collected per Sample"

- Enter the number that really was collected, not necessarily the minimum stated in the protocol.
• 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.

• Were the samples placed in a freezer within one hour of collection? Yes/No

• If no, enter the temperature ranges of the samples during transport and check off °F or °C

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**FIELD ID NO: ___________**

**IR-4 FIELD DATA BOOK**

**PART 7: SAMPLE COLLECTION AND STORAGE**

- A. GENERAL SAMPLING INSTRUCTIONS - Complete a separate form for each sampling data.

- Were harvested crop items collected directly into residue sample bags? YES____ NO____

- IF NO, PLEASE EXPLAIN ________________________________

- DESCRIPTION OF SAMPLED CROP STAGE (if different from harvested crop, such as dried plants, mint oil)

- IF THE SAMPLING OCCURRED AFTER THE HARVEST DATE, DESCRIBE SAMPLE COLLECTION. ALSO, DESCRIBE ANY MODIFICATIONS TO THE HARVESTED CROP SUCH AS TRIMMING, CLEANING, CUTTING, DRYING, AND/OR COMPOSTING SAMPLES. IF THE MODIFICATIONS WERE TOO COMPLEX TO BE DESCRIBED BELOW, ATTACH A SEPARATE SHEET THAT CLEARLY DESCRIBES THE MODIFICATION PROCESSES. 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. Include a description of equipment, duration of procedure(s), temperatures, extended moisture content, etc., as appropriate.

- CHECK ALL PROCEDURES USED TO PREVENT CONTAMINATION OF RESIDUE SAMPLES
  - CONTAMINATED GLOVES WORN AND CHANGED BETWEEN SAMPLES
  - TREATMENTS WERE SAMPLED BY DIFFERENT PEOPLE
  - PHYSICALLY SEPARATED TREATED AND UNTREATED SAMPLES
  - CLEANED SAMPLING EQUIPMENT BETWEEN COLLECTIONS FOR EACH TREATMENT
  - OTHER: __________________

- DESCRIBE HOLDING AND TRANSPORT OF SAMPLES FROM FIELD TO FREEZER (E.g., Sample bags placed in cooler with ice packs, 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? YES____ NO____

- IF NO, ENTER THE TEMPERATURE RANGES OF THE SAMPLES DURING TRANSPORT AND CHECK OFF °F OR °C:

  - Untreated: °F ____ °C ____
  - Treated: °F ____ °C ____

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**ABOVE DATA ENTERED BY:______ DATE:______**

**PART 7 PAGE____ TRIAL YEAR 2017**
An assessment is needed as to whether precipitation and temperatures are within the normal range that is experienced in the location of the field trial. Do not list below the differences from the monthly mean rainfall and temperatures unless these differences are indicative of truly abnormal weather.

Describe it the way you would at the water cooler.
Ideas are welcomed

Feedback received before August can potentially result in changes to the 2018 FDB, but feedback at any time is much appreciated.

Please send your comments to me at: samoil@njaes.rutgers.edu

Or call me at: (732) 932 – 9575 ext. 4614
Thank you for your attention!