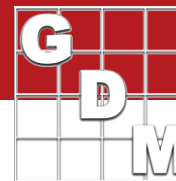# Entering Trial Data into ARM

In this video:

◦ Assessment header

◦ Data entry and shortcuts

◦ Extended 'plot' experimental unit information

◦ Spreadsheet: paste data, edit randomization

In this video, we discuss the process of entering data into ARM trials.

We will fill in the assessment header description, demonstrate data entry and keyboard shortcuts, enter additional experimental unit information, and use a spreadsheet to paste data into ARM. We will also use a spreadsheet to edit the trial randomization.

To follow along with this video, open the tutorial trial 'EnterTrialData'. The Assessment Data editor in a trial has both the headers to describe the ratings, and the table for entering the observed values.

Each column in ARM corresponds to one individual rating or assessment. You may *record* several assessment values for each experimental unit at one time, but each of these goes into a different column when entering the data.

Here we have 3 assessments already defined. These came from the protocol, a way to communicate what data *must* be recorded in this trial.

Let's say we want to take a phytotoxicity rating of the crop after an application. Right-click on a column to insert a blank column to the left.

We are not assessing the pest, so we can leave that portion blank. Then fill in the Crop information (or copy from another column).

The Description can be used as a short free-text description of the assessment.

The Rating Date field is highlighted in red because there is a study rule defined that requires the date be filled when assessment data is entered. (We cover study rules in more depth in a later video). Let's say our rating actually took place yesterday, and we are just putting in the data today.
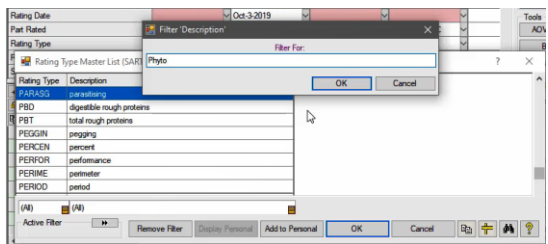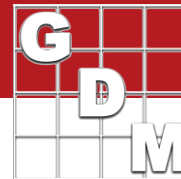
Next, we are evaluating the entire crop plant, so the Part Rated is 'PLANT' and 'C'. Then filter down the Rating Type list and choose 'PHYGEN'.

It is important to use the provided validation lists to describe assessments, because free-hand descriptions create inconsistencies and will be misinterpreted. A header filled in from ARM lists ensures consistent and accurate descriptions that are easily combined with other trials.


The Unit is simply percent, with the whole 'plot' experimental unit as the sample size. (For more complicated sampling situations, view our help topic on sample size.)

Now that we have the description of the rating, we can enter the data in the table below. Type the value, then press Tab to move to the next column. Or press Enter to move down to the next cell in the same column.
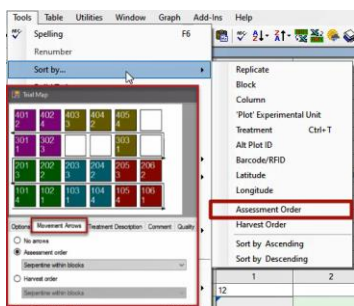
Be sure to sort the table to match the order of the data source. You can sort by replicate or plot number or treatment, or use the 'assessment order' defined on the Trial Map.
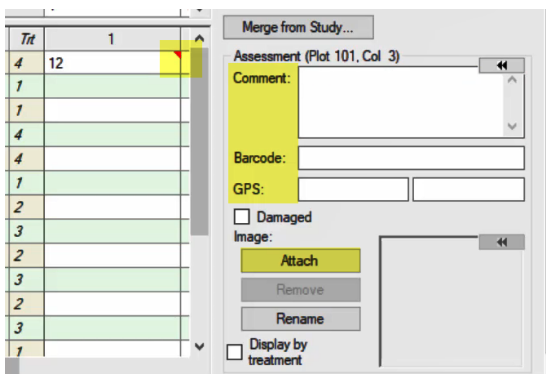

In ARM, an assessment value can have more information than just a number. On the Properties panel to the right, enter a text comment, barcode, or a GPS coordinate for this specific assessment value.

Attach images to the values as well – ARM even renames the picture files automatically.

If a cell has any of this additional information included, ARM displays a red triangle in the corner of the cell.
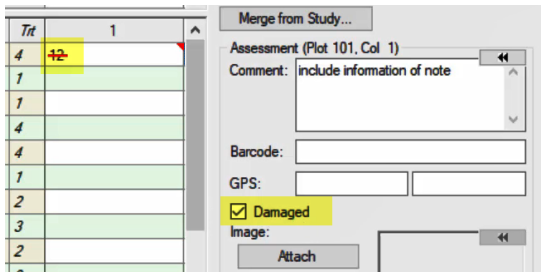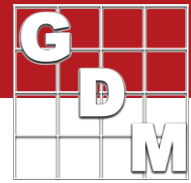
You can also mark the assessment as damaged, which removes the value from the analysis (just like a missing data point), while still retaining the entered value. Note that a damaged value is denoted with a red strikethrough.
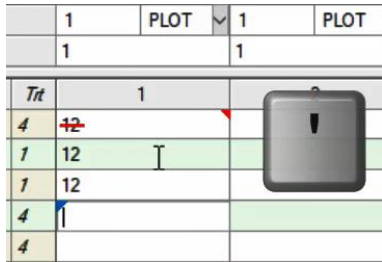

There are a few shortcuts for entering data by hand:

The single quote key duplicates the value in the cell immediately above, just like in the treatments editor. It also moves the cursor to the next cell automatically, without having to press Enter.
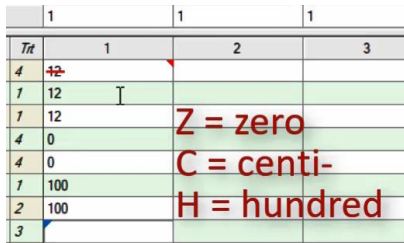

Press the letter 'z' key to enter a zero, or the 'c' or 'h' key for one hundred. (Z for zero, c for centi-, and h for hundred) Again, these advance the cursor automatically as well.
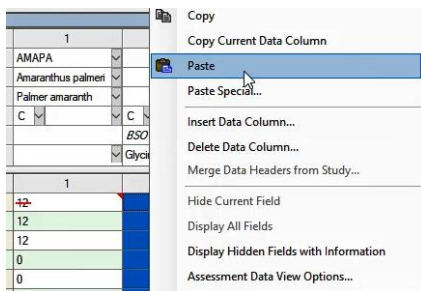
Copy a value and paste into a block of multiple cells or an entire column.
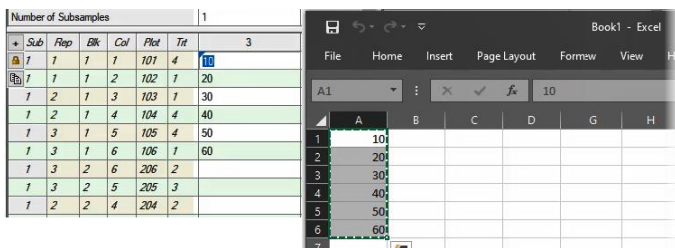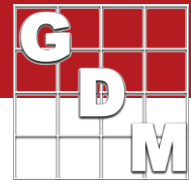

You can also copy/paste columns of data from a spreadsheet into ARM. If you copy only data without any identifiers, ARM pastes the values directly where the cursor resides, so be sure both ARM and the data source are sorted the same way.
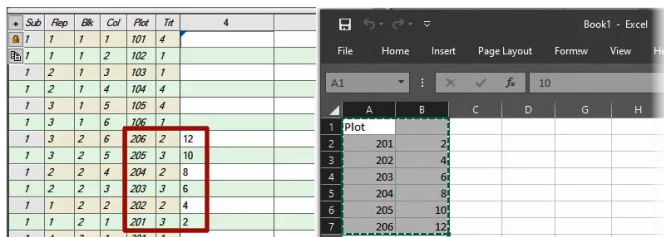
The better approach is to include a column of plot numbers, matching the 'Plot' column heading from ARM. The pasted data is then matched with the proper cell, regardless of how ARM is sorted at the time.
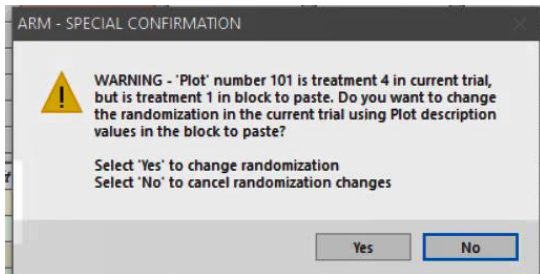
You can set or modify the trial randomization with Excel. Include a column of plot numbers and treatment numbers, with or without data, and paste into an empty ARM column. Here we are switching the treatment assignment of experimental units 101 and 102 around, so treatment 1 moves from 102 to 101.

Upon comparing the pasted Plot and Treatment numbers, ARM recognizes that the randomization is different. Select Yes to change the randomization of the trial, which updates the plot description section as well as the Trial Map.

(For other languages, be sure to match the heading of ARM's Plot and Treatment columns with the spreadsheet contents, so ARM recognizes those columns.)