



In this video:

- Reasons to fill in planned assessments
- Enter a couple of examples
- Hidden fields / View options



In this video we will discuss the reasons for entering planned assessments into a protocol, demonstrate with a couple of examples, and introduce editor views by utilizing hidden fields.

There are two main reasons for filling in planned assessment ratings in a protocol.

First, this communicates to the trialist what data *must* be recorded. Using the assessment data editor provides a precise definition of what assessments to take and how they should take place, which is superior to a casual description that could be misunderstood.

The second reason is that the data will be returned in a consistent format across trials. There are often several ways to describe the very same assessment in ARM. For example, a simple % Control assessment could be filled out in at least three different ways if given to three different researchers.

Why describe assessments now?

1. **Communicate** what data *must* be recorded
 - Precise definition > casual description
2. Record data **consistently** across trials
 - Required for combining and summarizing data

Pest Code	AMAPA	AMAPA	AMAPA
Rating Type	CONTRO	%CONTROL	
Rating Unit	%	0-100	0-100



By describing the rating ahead of time in the protocol, you ensure that the data is recorded consistently, and thereby can be combined and summarized easily. It is not an overstatement to say that spending 1 more hour to add assessment descriptions can save 10 hours standardizing trial data that was otherwise entered in different ways.

Assessment Data - Line 1	1	2	3	4
Column Number				
Pest Type				
Pest Code				
Pest Name				
Crop Code				
Crop Name				
Description				
Rating Date				
Part Rated				
Rating Type				
Rating Unit				
Sample Size, Unit				
Number of Subsamples				
Assessed By				
Rating Timing				

To demonstrate, let us begin by opening the tutorial protocol 'SpecifyingPlannedAssessments'.

In a protocol, the Assessment Data editor consists of just the assessment headers. This table is used to *describe* the assessment ratings that will be taken in the trial. Once we create a trial, a table will appear underneath the header, for entering actual plot data.

Specifying Planned Assessments



Assessment Data - Line 23	
Column Number	1
Pest Type	W <i>Weed</i>
Pest Code	AMAPA
Pest Name	Palmer amaranth
Crop Code	
Crop Name	
Description	Pest Stand Count
Rating Date	
Part Rated	PLANT <i>P</i>
Rating Type	COUPLA
Rating Unit	PLANT
Sample Size, Unit	1 PLOT
Number of Subsamples	1
Assessed By	

Our first planned assessment is a Pest Stand Count taken pre-emergence. If we have a particular weed that we are studying, we can specify it here. Otherwise it would be up to the trialist to document which weeds were present.

Since we are not assessing the crop, we leave the Crop fields blank. The Description can be used as a short free-text description of the assessment.

We are counting how many weeds are present, so the Part Rated would be whole plants, and then specify that we are rating our pest (not the crop). Now filter the Type list on "Count" to see the Types related to counting. The unit is number of weed plants, and we want the total number of weeds in the entire plot.

Finally, use the Rating Timing to describe when the assessment should be taken within the season. This could be relative to an application, a previous assessment, harvest, or in our case, emergence.

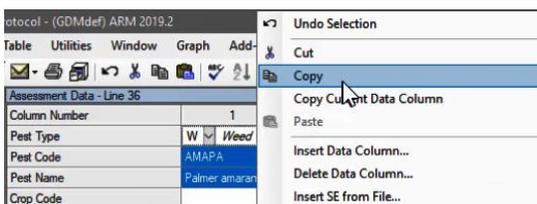
Rating Timing	Description
OL	After Storage
OS	Pre Emergence Shortly After Sowing
OT	Shortly After Setting
OU	Time
OV	Average of X Evaluations
OW	Evaluation: Winter
OX	Total of X Evaluations
P6	4-6 weeks Post Emergence
PC	Shortly Before Closing of Rows
PD	10 - 14 Days Post Emergence
PE	Pre Emergence
PG	Post deposition of Eggs
PH	Shortly Before Harvest
PI	Pre Sowing Incorporated
PM	Just Before Post-Emergence Application
PO	Early Post Emergence
PP	Shortly Pre Planting or Pre Potting
PU	Pre Sprouting
SP	Stop Application

Assessment Data - Line 36			
Column Number	1	2	3
Pest Type	W <i>Weed</i>		
Pest Code	AMAPA		
Pest Name	Palmer amaranth		
Crop Code			
Crop Name			
Description	Pest Stand Count		
Rating Date			
Part Rated	PLANT <i>P</i>		
Rating Type	COUPLA		
Rating Unit	PLANT		
Sample Size, Unit	1 PLOT		
Number of Subsamples	1		
Assessed By			
Rating Timing	PE		
Days After First/Last Applic.			
Tit-Eval Interval			
Days After Emergence			
ARM Action Codes			
Number of Decimals			

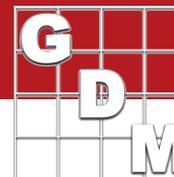
Note that each assessment column corresponds to one individual rating or assessment. You may *record* several assessment values for each plot at one time, but each of these goes into a different column when entering the data.

Our next rating will be a Percent Control knockdown a week after our treatment application.

We are studying the same weed, so just copy those fields across from the previous column. Then enter a description for this assessment.



Specifying Planned Assessments



Assessment Data - Line 5			
Column Number	1	2	
Pest Type	W Weed	W Weed	
Pest Code	AMAPA	AMAPA	
Pest Name	Palmer amaranth	Palmer amaranth	
Crop Code			
Crop Name			
Description	Pest Stand Count	% Control - 1 week	
Rating Date			
Part Rated	PLANT P	PLANT P	
Rating Type	COUPLA	CONTRO	
Rating Unit	PLANT	%	
Sample Size, Unit	1 PLOT	1 PLOT	
Number of Subsamples	1	1	
Assessed By			
Rating Timing	PE		
Days After First/Last Applic.			
Tri-Eval Interval		7 DA-B	
Days After Emergence			
ARM Action Codes			
Number of Decimals			

We are still rating the weed plant, but this time recording the percent of weeds knocked down in the plot, relative to the check. Thus, the untreated plots will be recorded as '0' when data is entered.

The Treatment – Evaluation interval defines the amount of time between a treatment application and this assessment rating. Since we want this rating to occur a week after the last application, enter "7 Days after application code B". Note that in a protocol this field is used to communicate when to take the rating, but in the trial it is used to document the actual timing of the assessment.

Assessment Data - Line 23			
Column Number	1	2	3
Pest Type	W Weed	W Weed	
Pest Code	AMAPA	AMAPA	
Pest Name	Palmer amaranth	Palmer amaranth	
Crop Code			GLXMA
Crop Name			Soybean
Description	Pest Stand Count	% Control - 1 week	Raw Grain Wgt
Rating Date			
Part Rated	PLANT P	PLANT P	GRAIN C
Rating Type	COUPLA	CONTRO	WEIGHT
Rating Unit	PLANT	%	kg
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1
Assessed By			

Our final assessment will be the harvested weight. We want the trialist to simply enter the raw harvested weight, then when we get the data back we can convert the yield to a "per area" basis ourselves.

This time we fill in the Crop information, since we are rating an aspect of the crop.

Again, the Part Rated, Rating Type and Rating Unit are critical for describing the assessment.

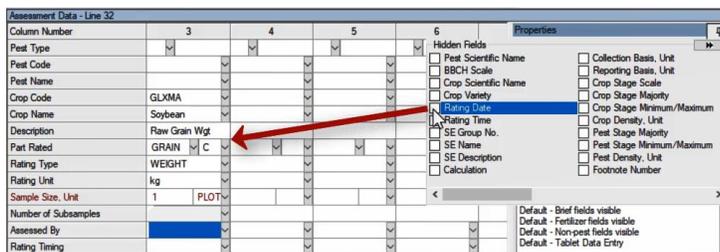
Please note that this not intended to be the BEST way to fill in a Yield data column or a % Control assessment. Everyone may fill the assessment header in differently, but the key is to enter the assessment description IN THE PROTOCOL so that all of your trials will use the same description when data is returned.

Assessment Data - Line 23			
Column Number	3	4	5
Pest Type			
Pest Code			
Pest Name			
Crop Code	GLX		
Crop Name	Soybean		
Description	Raw		
Rating Date			
Part Rated	GRAIN		
Rating Type	WEIGHT		
Rating Unit	kg		
Sample Size, Unit	1		
Number of Subsamples	1		
Assessed By			
Rating Timing			
Days After First/Last Applic.			
Tri-Eval Interval			
Days After Emergence			
ARM Action Codes			
Number of Decimals			

You may have noticed that there several fields that we never filled in, like the Rating Date or Assessed by. In our case these would only be filled in by the trialist, and maybe some of these fields you would never use for your type of research. ARM can hide these fields from your view, so are not visible on the screen.

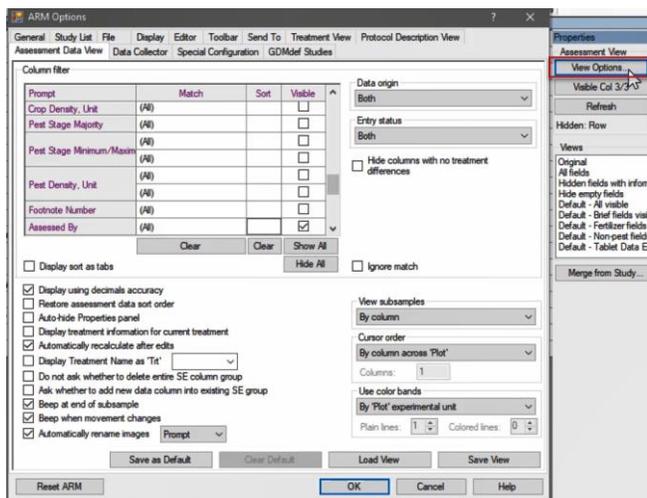
Right-click into a field and choose 'Hide current field' to remove it from the table. You can even hide fields that contain information. Know that this is simply the *view* of the information in the study, so entered information is not actually lost.

Specifying Planned Assessments



Then on the Properties Panel at the right, you can re-enable fields that were previously hidden, by simply clicking on the box next to the field name.

The choice of which data entry fields are visible and the way they are presented on the screen is called the editor **View** in ARM.



Most of the editors in ARM have their own View Options with even more choices for customization. Note that all of these settings are saved to your computer, not within the study file itself. Thus, they apply to any study that you open, and anyone else viewing your studies can have their own view of the information.