Gylling Data Management, Inc.

Providing Research Software Solutions Since 1982!

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Staying Current Newsletter
Tips to keep in the Top Quartile

Inaugural Newsletter

Thank you for taking the time to read through our inaugural newsletter. We will send newsletters every quarter with current topics and tips.

Your feedback is important to us. We will cover several different subjects in the next few newsletters, and would appreciate your ideas on subjects that you would like to read about.

Please contact us at GDM.ARM.Support@gdmdata.com with questions and suggestions.

Other topics in this newsletter:

ARM 2015 release

ARM 2015 has been released. Use 'Check for updates' to upgrade if you have already purchased an ARM 2015 license.

Please visit our website for the latest information on updates made to ARM 2015 here. Check back often for more updates.

Upgrade now

If you have not yet upgraded to ARM 2015, please review the information below about new features and benefits of ARM 2015. Upgrading ARM version 9 costs substantially less in 2015 than it will in 2016.

➢ Use the "Write To Us" link to request a current price list.

➢ Frequently Asked Questions (FAQs) about ARM 2015 can be viewed on our website.
➢ The ARM 2015 Overview explains many of the new features in ARM 2015.
➢ The Feature Comparison chart illustrates the differences between the new ARM 2015 and older versions.

ARM8 End of Support

ARM8 support has ended. View our currently supported software versions and products policy here.

Protocol Basics for 2015 field season

When writing a protocol for someone else who will conduct the trial, the protocols needs to include more than just the treatment list. Both the **Sponsor** and the **Contractor** have important jobs. An extra hour spent on the protocol saves an estimated 10 hours at the end of the season collating data.

To help ensure desired results, a **Sponsor** should provide details for the **Contractor** to appropriately conduct and document the trial:

➢ Clear objectives
➢ Appropriate experimental design
➢ Description of Applications
➢ Key information describing the crops and/or pests
➢ Application details to collect
➢ Assessment Header information
  o Rating timings
  o Plant part rated for pest or crop
  o Rating type/unit
  o Sample size/unit
  o Number of subsamples
  o Other…

Sponsors can achieve this by utilizing the following features in ARM:

Power and Efficiency Planner assists with planning experiments.

➢ Help plan experiments that successfully detect expected treatment differences
➢ Calculates "power" based on:
  o Estimated CV of key assessments
  o Number of replicates
  o Power = level of certainty to detect "real" treatment effects
  o Observed Significance Level
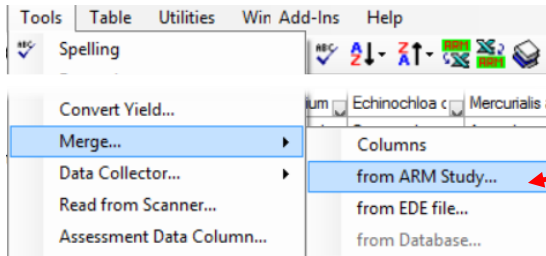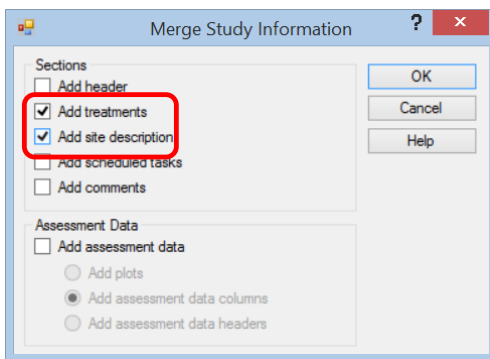 o % Mean Diff = estimated treatment effect

Is the protocol that you are writing similar to one from last year? If so, then use the **Merge** feature in ARM to decrease copy/paste errors.

Example 1: A protocol writer wants to use the same treatments and protocol description in a protocol from last year.
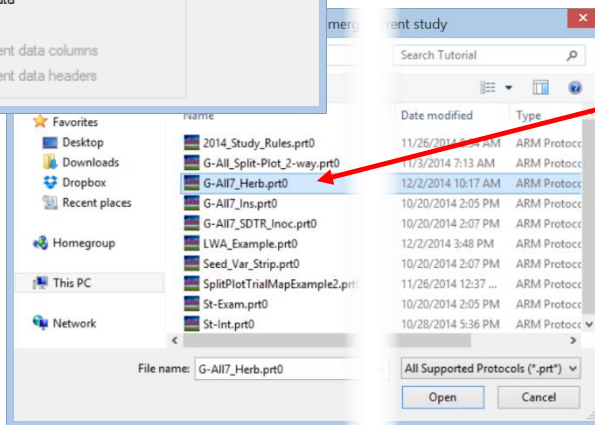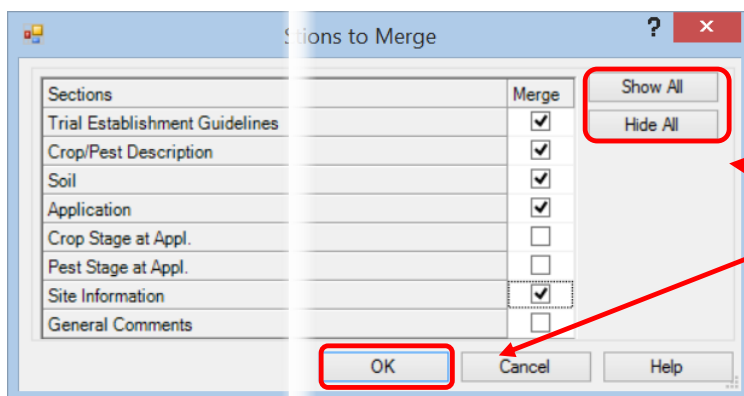
Steps:

1. Create a new protocol
2. Select Tools - Merge - From ARM study…

3. Check sections to merge from existing protocol (in this example we only want Treatments and Protocol Description).
4. Click OK

5. Select the protocol to merge information from
6. Click 'Open'

7. Select sections from Protocol Description to **merge**.
   ➢ Select individual sections
     OR
   ➢ 'Show All' to select all sections
     OR
   ➢ 'Hide all" to remove selection
8. Click 'OK'
9. New protocol now contains treatments and site description

Note: look over treatment list carefully and edit accordingly.

Example 2: A protocol writer wants to add the assessment headers from a prior year study.

Steps:

1. Open G-All7_Ins.prt0 file.
2. Select Tools - Merge - From ARM study…

3. Select 'Add assessment data'
4. Check 'Add assessment headers'
   ➢ Only choice when merging **into** a protocol
5. Click OK.

6. Select the protocol to merge information from
7. Click 'Open'

8. Adds assessment headers only (Example displayed below)

Assessment Data - Line 1								
Column Number	1	2	3	4	5	6	7	8
Pest Type					W Weed	W Weed	W Weed	W Weed
Pest Code					GGGAN	GGGAN	GGGAN	GGGAN
Pest Scientific Name					Annual grasse	Annual grasse	Annual grasse	Annual grasse
Pest Name					Annual grasse	Annual grasse	Annual grasse	Annual grasse
Crop Code	BRSNN	BRSNN	BRSNN	BRSNN	BRSNN	BRSNN	BRSNN	BRSNN
BBCH Scale	BRAP	BRAP	BRAP	BRAP	BRAP	BRAP	BRAP	BRAP
Crop Scientific Name	Brassica napu	Brassica napu	Brassica napu	Brassica napu	Brassica napu	Brassica napu	Brassica napu	Brassica napu
Crop Name	Rapeseed	Rapeseed	Rapeseed	Rapeseed	Rapeseed	Rapeseed	Rapeseed	Rapeseed
Part Rated	PLANT	PLANT	PLANT	PLANT	PLAGRA F	PLAGRA F	PLAGRA F	PLAGRA F
Rating Type	PHYGEN	PHYGEN	PHYGEN	PHYGEN	GROUND	GROUND	GROUND	GROUND
Rating Unit	%	%	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1	1	1
Crop Stage Scale	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH
Footnote Number					1	1	1	1
Trt-Eval Interval	3	7	14	21	0	3	7	14
ARM Action Codes	P	P	P	P	P ES	P ES	P ES	P ES
Number of Decimals	2	2	2	2	2	2	2	2

Use **Standard Evaluation (SE)** files in Assessment Data Header (this is an alternative to **Merge** in previous example).

- ➢ Keeps Assessment Data Headers consistent across trials created from same protocol
- ➢ Pre-fill key fields in Assessment Data Header
  - o Pest/Crop
  - o Plant part rated
  - o Rating timing
  - o Rating type/unit
  - o Sample size/unit
  - o Number of Subsamples
  - o Transformations

Use **Schedule Tasks** editor to:

- ➢ Indicate planting dates
- ➢ Application timings
- ➢ Rating timings
- ➢ Assign a task length

Use **Study Rules**

➢ Identify important data entry fields that should be completed by **Contractor**
➢ Define additional requirements for trials conducted from the protocol
➢ Can be saved into rule sets for easy portability of rules between protocols.

The use of Power and Efficiency Planner, Merge, SE files, Schedule Tasks, and Study Rules by the **Sponsor** can all help to make a complete protocol. Then the **Contractor** can execute that protocol correctly.

Sponsor: Use **Send To – External Sponsor/Cooperator...** to send protocol to **Contractor**
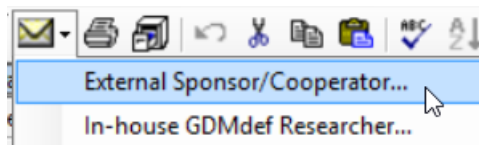
➢ Ensures that the protocol is valid.
➢ Creates an email to send **Contractor** with files attached.
➢ **Contractor** saves all files to their computer.
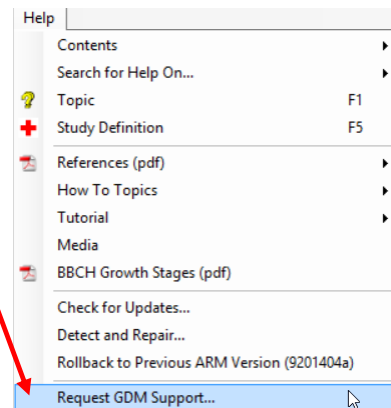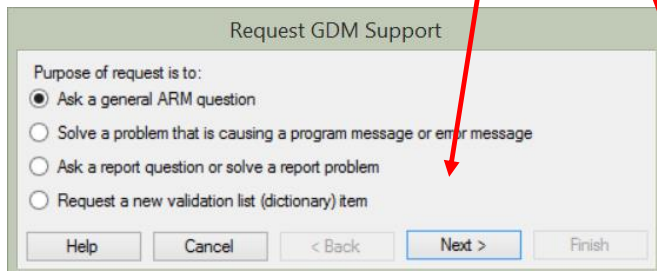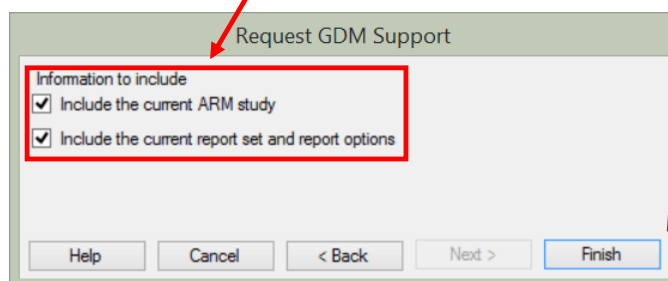
Did you know?

➢ Click Help – Check for Updates often to make sure ARM is the most recent version.
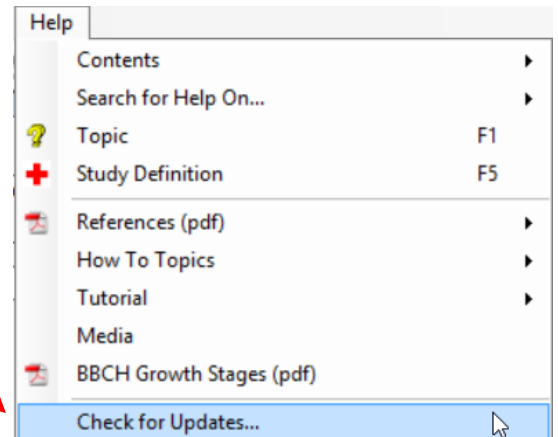
➢ Questions – click Help – Request GDM Support
  o Select a purpose, then click Next

  o Check to include current ARM study and report set options, then click Finish

  o ARM will prepare an email with zip file attached.
  o Write an informative sentence or two about the issue you are having, what you expected to see, what you see and the steps you used to create.
  o Send the email.
  o Our support staff will get back to you with follow-up questions if necessary to answer your issue.