

ARM 2011 Products Update



Gylling Data Management, Inc.

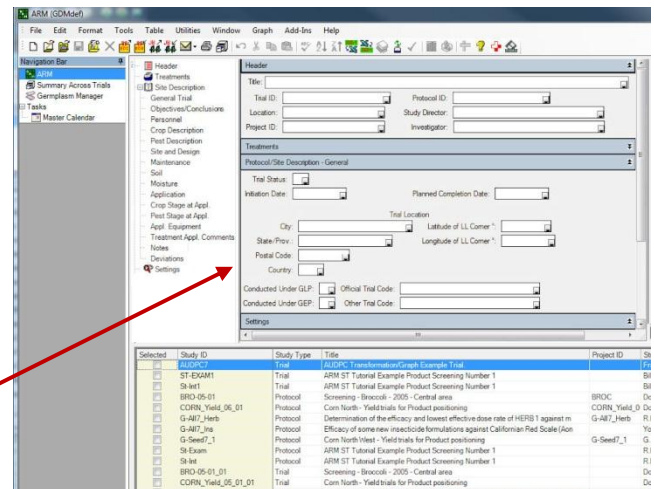
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ARM 9 Planned Features

ARM 9 is in development, and is planned for release in early 2012. ARM 9 is an "evolution" of ARM 8, using a newer version of the Microsoft .NET technology in ARM 8. This is a pay upgrade for current ARM 8 or ARM 7 licenses.



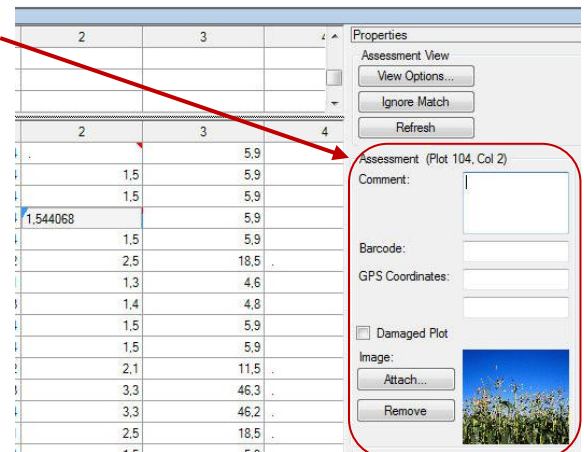
ARM 9 planned features include:

1. Study list:

- Easier filtering method to locate ARM studies that meet desired criteria.
- More study list entry fields, giving more flexible filters and sorts.
- Use study list as the ARM desktop when current study is closed, so your list of studies is always visible.

2. Assessments:

- Much greater flexibility to link related information to an assessment, such as:
 - "Damaged plot" marker (plot drowned out or treatment was misapplied).
 - Digital photograph.
 - Bar code label ID.
 - GPS coordinates
 - Comment.
- Enter dates as assessment values, such as date of first flowering or date when crop matured (for variety trials).



3. Trial Map:

- Click-and-drag to move objects (plots, treatments, replicates, factor levels).
- Define color to use for each treatment (a frequent request for orchard trials).
- Zoom in/out.
- Auto-fit trial map dialog to current map size and shape.
- Save trial map dialog size and zoom level in each trial.

4. Reports:

- Temporarily exclude a replicate from analysis.
- Suggesting or automatically apply a method to solve heterogeneity or non-normality (typically a transformation or excluding certain treatments).
- Additional statistical analysis options.
- Any report macros written in Word or Excel for standard ARM 8 reports can still work with ARM 9 reports.

5. Connect ARM tasks to Outlook calendar.

6. Display Recommended/Required fields in special background colors such as yellow, with difference colors for recommended/required now vs. recommended/required at a later time.

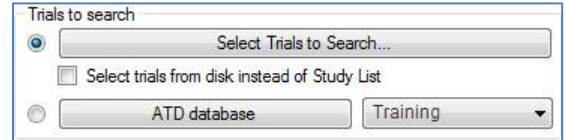
Please visit our <http://gdmdata.com/products/ARM9.htm> as we continue to update our plans on the latest ARM revision. ARM 9 is available to pre-purchase the upgrade or purchase new.

ARM ST (Summary Across Trials)

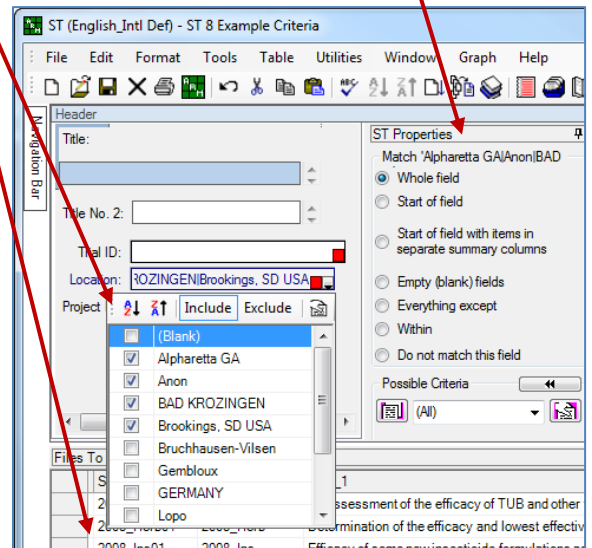
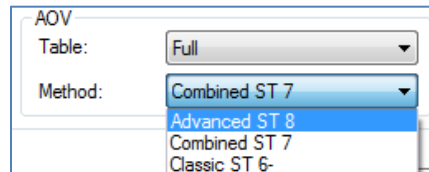


Version 8 of the ARM ST multi-trial summary tool will be released this fall as an add-in to an ARM 8 or ARM 9 license. ST 8 is a pay upgrade to current ST licenses. Features include:

- Automatic connection to study list or the optional ARM Trial Database, to quickly and easily view and select trials based on information present in the trials.
- New ST Properties panel shows the choices for matching selection information that you define for trials to include in a multi-trial summary.



- A simple Excel-like interface makes it very easy to review and choose trials from the same trial data entry fields used in ARM.
- The list of currently selected trials displays on each study editor as match information is defined.
- New "Advanced ST 8" analysis method uses the R statistics tool to give an accurate, statistically adjusted analysis of trials with missing data or different number of replicates. Analysis method automatically adjusts according to experimental design of each summarized trial.

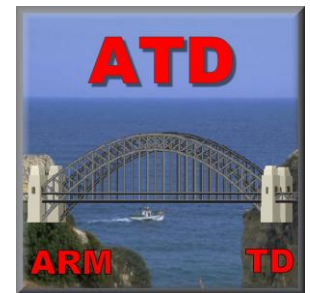


ARM TD (Trial Database)

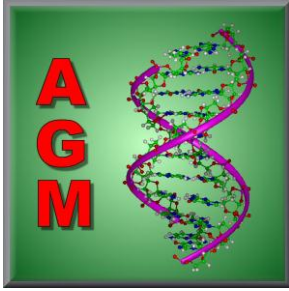
A new relational Access database for storing and retrieving trials based on standard "GDMdef" ARM study definitions. ARM directly exports and imports trials in the database, and Microsoft Office™ products can be used to build customized reports for trials extracted from the database.

Use ATD to:

- Make a full backup of all information in an ARM trial, including attachments.
- Share ARM trials across a network.
- Directly connect ATD trial databases with ST 8 or newer, so ST 8 can instantly select and quickly summarize a trial series.
- Select trials in ATD, and use Microsoft Word™ to print multi-trial documents summarizing site or application details for sponsor reports or to support product registrations.
- Select trials in ATD, and then summarize all assessments in those trials with ARM ST.



AGM (ARM Germplasm Manager)



AGM is a new database system tightly integrated with ARM 8 to provide for germplasm improvement projects and crop performance trials.

- AGM can store and organize thousands of cultivar names, population designations, variety selections, and crosses.
- Easily sort and select lines from phenotypic information such as qualitative traits, markers, patents, and breeding cycles.
- AGM integrates with ARM for conducting trials.
- AGM is an add-in for ARM research management software and ARM ST.

AGM is scheduled to be released as an add-on to ARM and ARM ST. GDM will be offering a pre-release sale price when available.

Enhanced GDMdef Rating Shell for Psion Workabout Pro Color

Enhanced GDMdef Rating Shell is the data collection interface for the Psion Workabout Pro package, supported through ARM 7 Push and Pull using G-All7 or G-Seed7 study definitions.

Enhanced GDMdef Rating Shell includes:

- Sheets to enter essentially all information in G-All7 site description including: crop planting, crop and pest stage at application, weather, soil information, location and site details, application comments, and deviations.
- Full support of subsample data entry, with a line after the last subsample of each plot.
- Automatic calculation of treatment means and standard deviation.

Contact GDM or your GDM Representative for ordering information. Psion Generation 2 unit has been available since fall 2007.

	B	C	D
12	# Subsample	10	
13	Pest Code	SEPTTR	
14	Rating Type	PESSEV	
15	Rating Unit	%	
17		101	
18		102	
19		103	
20		104	
21		105	
22		205	
23		204	

Statistical Handbook

[A Statistical Handbook for Agricultural Field Trials Specialists](#) by Gerard de Kerchove uses ARM for examples in practical statistics and trial data analysis and reporting.) www.gdmdata.com/documents/StatsOrderForm-GDM.pdf

See How ARM Has Grown!

The graph below shows total (accumulative) number of ARM user licenses over time, since HRM version 1 was released in 1982. The line in 1995 indicates when PRM 5 was offered in both DOS and Windows versions, and program logos for each version are placed at the year each version was released.

Thank you to all of our clients who have purchased software licenses, and whose ideas and requests are a very important part of ARM's growth!

GDM will be celebrating our 30th anniversary in 2012. Thank you for your continued support of our software.

