

Gylling Data Management, Inc.

Providing Research Software Solutions Since 1982!

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June, 2015

Vol. 1, Issue 2

Staying Current Newsletter Tips to keep in the Top Quartile

Newsletter

Thank you for taking the time to read through our inaugural newsletter, published in March. We will publish newsletters every quarter with current topics and tips. Previous versions can be located on our website here: http://gdmdata.com/Resources/Newsletters.

Please contact us at <u>GDM.ARM.Support@gdmdata.com</u> with questions and suggestions.

Other topics in this newsletter:

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'Check for Updates' to keep current

Run the 'Check for Updates' (**Help - Check for Updates**) often to keep your ARM 2015 on the most current version. Issue fixes and all enhancements are distributed via 'Check for Updates'.

Please visit our website for the latest information on updates made to ARM 2015 here: <u>http://gdmdata.com/media/documents/ARM_Change_Log.txt</u>. Check back often for more updates.



Need room to write in a printed Site Description Report?

Thanks to a client for asking this question: How can I print an **empty Site Description** report with enough room to hand write? The **solution** is printing the ARM report to Word, and then setting line spacing to Double. Here are the steps:

ARM:

- Open a newly created trial, which will contain only information that was defined in the description section of the protocol used to create the trial. Then, select File - Print Reports and set up the report options as desired; Click 'Next' to view the Print dialog.
- 2. Select the 'Word Processor' tab in the Print options.
- 3. Make sure that 'Columns as tables' radio button is selected.
- Click the 'Word Processor' button on the right to print the report to Microsoft Word.

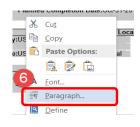
Word:

- Once in Word, click anywhere in the report and select CTRL + A to select the entire document.
- 6. Then right-click and select 'Paragraph'.
- Next, click on the 'Line spacing' option and select 'Double'. Then click 'OK'.

Now, the entire document is double-spaced, which should allow plenty of room to handwrite information.

All screen shots are from ARM 2015 and Word 2013.

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Data Quality checking tools

ARM 2015 includes several **data quality tools** that are simple to use.

The Data Quality tools only display when a trial is open in ARM 2015.

In **Assessment Data**, use the Tools in the **Properties panel**, located along the right-side of the screen.

If the Properties panel is not already open, click on the 'Properties' tab located near the top right side of Assessment Data screen.

Then 'Pin' the tab by clicking on the 'pin' in the top right corner.

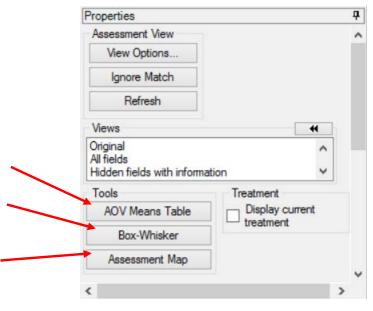
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Properties

- AOV Means Table
 - Click to create an AOV Means Table based on current report options. Select File - Print Reports, then click on AOV Means Table report to display report options.
- Box-Whisker
 - Click to create a Box-Whisker graph of each data column.
- Assessment Map
 - Click 'Assessment Map' to display a trial map based on ratings for a single data column, sometimes called a 'heat map' because dark of light color zones indicate areas that may be influenced by site differences.

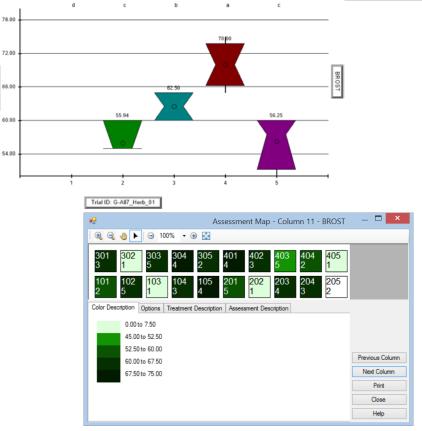
See next page for examples of each.

For additional information on how to interpret the Data Quality tools, please refer to Help -References - Recommended Assessment Review Methods.



Example	Box-Whisker
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Determination of the e weeds in Winter Rape wh Title No. 2: Expanded title Trial ID: G-AII7 Herb 0 Protocol ID: G-AI7 Herb Project ID: Dicamba	nen applied i section 1 Lo Inves Study D	n Sprin ocation stigator birector	
Pest Code Crop Code Rating Type Rating Unit Rating Date ARM Action Codes			BROST BRSNW CONTRO % May-1-2014 EC P
Trt Treatment No. Name	Rate Rate Unit	Appl Code	11
1Untreated Check	70.5		0.00
2 Banvel 720 3 FallowMaster	72.5 oz ai/ 87.5 oz ai/		55.69b 62.50b
4 Marksman	73 oz ai/		70.00a
5 Clarity Potassium sulfate 0-0-5	25 oz ai/		56.25 b
LSD P=.05 (% mean diff) Standard Deviation CV Bartlett's X2 P(Bartlett's X2) Skewness Kurtosis Minimum Replicates (powe Largest Mean Difference (9	r = 80)		5.684 (10%) 3.486 5.7 0.932 0.818 0.3085 -0.2193 2 14.306 (23%)
Replicate F Replicate Prob(F) Treatment F Treatment Prob(F)			1.733 0.2373 12.971 0.0019



Additional data quality checking tools in Assessment Data, 'Column Properties'.

6 CONTRO

To access the 'Column Properties', roperties click on the 'Column Properties' tab Assessment View Hidden Fields located near the top right side of Crop Variety View Options. ~ Column 1 Properties Description Ignore Match Assessment Data screen, next to the Rating Date Previous Next Rating Time Refresh 'Properties' tab. Sample Size, Un ⊻ Column Flags: Original Hidden: Row 125 Low/High value: 6 **Descriptive Statistics** Refresh LSD P=.05: 8.93 Standard Deviation: 5.80 CV: 17.03 Presents analysis of the current data column. Grand Mean: 34.05 P(Bartlett's X2): 0.016 P(Friedman's X2): 0.007 Skewness: 1.6078 Kurtosis: 1.0506 Replicate Prob(F): 0.0087 Treatment Prob(F): 0.0001 Does not meet assumptions of X AOV: data has heterogeneity of variance/skewness Allows user to fix violations of AOV assumptions by selecting the 'Fix' button. Fix Outliers Box-Whisker >+/-2 standard deviations from grand mean >+/- 3 standard deviations from Find statistical outliers - select the 'Find Next' button to locate grand mean Skip damaged assessments each outlier. Based on subsample values Find Next

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Attaching pictures in Assessment Data

One or more pictures can be attached to each assessment value grid cell in Assessment Data for a trial.

1. In the **Assessment Data** screen, click on the 'Attach' button near the bottom of the Properties panel.

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Organize •

Desktop

Drag an image to a new cell to change the 'Plot' and data column linkage

↑ 🎍 « Pictures → Training

New folde

- 2. A window opens to select pictures to attach.
 - a. Select the drive and folder location where pictures are located.
 - b. Sort folder contents if necessary.
 - c. Select one or more pictures to attach.
- 3. Then click 'Open'.

Documents Downloads P momanddad (sta Music Pictures Standish (standis Videos b trt 5 vs trt Windows8_OS (C 10.ipg ----All Image Files (*.bmp;*.dib;*.jp 🗸 "b trt 5 vs trt 10.jpg" "001.jpg" "002 🗸 Open Cancel Image Import Preview Direction Copy to trial folder 📝 Rename image By column across 'Plot' experimental unit File name components Across columns within 'Plot' experimental unit ✓ Trial ID: 1 💠 🖌 Plot: 4 🜩 Columns 1 Trt: 2 🜲 🗌 Sub: 5 🌲 D Sort order Asm. Date: 3 🜲 Plot' experimental unit Assessment B) Treatment Harvest Add T, P, S (Trt, Plot, Sub) prefix to file name components Number of images per 'Plot' experimental unit within an assessment column: 1 -AUDPC_3_T0001_Jun-8-2014_P101 Sub Rep Col Plot Trt 101 1 1 1 2 102 2 1 E 3 103 3 1 4 104 4 1

Open - Select image to attach

V C Search Training

OK

Cancel

Help

The 'Image Import Preview' screen is displayed.

- a. Specify the **direction** multiple images are attached relative to the assessment data grid.
- b. Select the **arrangement** of the rows for importing images.
- c. To attach more than one image per plot, use this option.
- Define the way images are renamed when they are attached to a study.
- e. Drag and drop to change order of pictures attached as well.

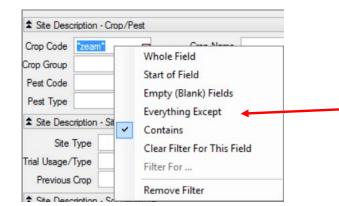
Once all options have been selected, click OK to attach images.

Use Study List to help with File Management

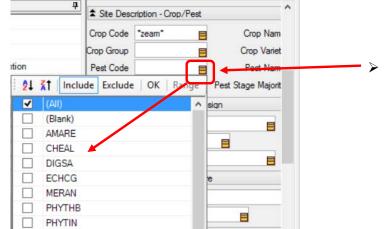
The Study List is a table summarizing information for each study and is highly customizable for individual needs.

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- Drag and drop column
 headers to move
 fields.
- Sort columns by clicking on column header. For example, sort by 'Last Changed' to keep recently edited files at top of list.



Use right-click menu options to automatically filter by a specific field or clear a filter.



- Also filter by clicking on gold box for a unique filter list.
 - o Multi-select
 - Include/Exclude

0

Use 'Send To' for exchanging data

Cooperator: Use Send To – External Sponsor/Cooperator... to send data to Sponsor.

		Send To
	External Sponsor/Cooperator	External Sponsor/Cooperator Sending a trial Files to attach:
	Ensures that the study is valid and required fields are completed.	<u>Reports as RTF < EDP</u> Report set: %DefRootPath%\GDMdef\Trial Summary.set Mail subject:
۶	Creates an email to send Sponsor with files attached.	ARM Trial Results Zip file options ✓ Zip attachments
	Sponsor saves all files to their computer.	Save folder information Encrypt and password protect files Password:
	ARM 'knows' to send both ARM 9 and ARM 2015 study versions, plus include attachments such as pictures and additional files.	Verfy Password:

Meeting Calendar

GDM will be at the following meetings in the next few months. Visit our website for all the current information: <u>http://gdmdata.com/Resources/Meeting%20Calendar</u>.

American Phytopathological Society (APS) August 1-5, 2015 in Pasadena, California.

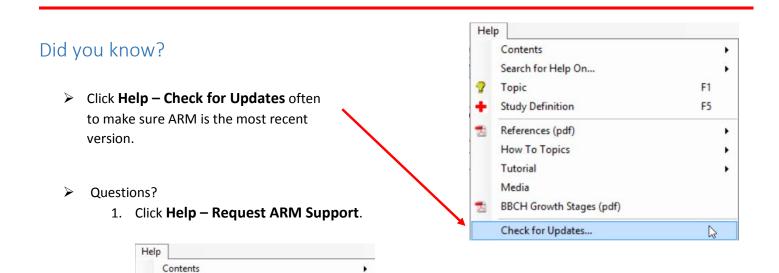
- **GDM New ARM Features Workshop** August 1, 2015 from 1:00PM 5:00PM.
 - Please register for free workshop on our website.
- ARM Trial Management for 2016, August 4, 2015, New Products & Services section, Section begins at 8:30am

American Society for Horticultural Science (ASHS) August 4-7, 2015 in New Orleans, Louisiana.

• Assessment Review Tools and Methods, August 6, 2015, Section begins at 1:45 in New Innovations in Commercial Horticulture Applications section.

International Plant Protection Congress (IPPC), August 24-27, 2015 in Berlin Germany.

• Better Data Quality from Field Experiments using Electronic Data Capture in the Field, August 25 19:00-22:00 (7:00PM - 10:00PM), room K I.



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F5

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2. Select a purpose, then click Next.

Rollback to Previous ARM Version (9201404a)

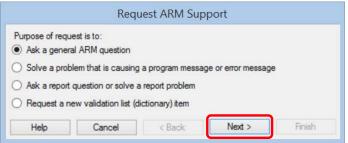
Search for Help On...

Study Definition

Detect and Repair...

Deactivate this ARM... Request ARM Support...

Topic



3. Check boxes to include current ARM study and report set option, then click Finish.

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Include the	current ARM study		
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include the	current report set an	nd report options	
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- 4. ARM will prepare an email with zip file attached.
- 5. 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.

- 6. Send the email.
- 7. Our support staff will get back to you with follow-up questions if necessary to answer your issue.

Still time to upgrade to ARM 2015

There is still time to upgrade to ARM 2015. Upgrading ARM version 9 costs substantially less in 2015 than it will in 2016.

- ➤ Use the '<u>Write To Us'</u> link to request a current price list.
- Frequently Asked Questions (FAQs) about ARM 2015 can be viewed on our website.
- > The <u>ARM 2015 Overview</u> explains many of the new features in ARM 2015.
- > The Feature Comparison chart illustrates the differences between the new ARM 2015 and older versions.

ARM 8 End of Support

ARM 8 support has ended. View our currently supported software versions and products policy: http://gdmdata.com/Support/Supported%20Products/.