

# ARM 9 Trial Management Features & Enhancements

See [www.gdmdata.com/resources/meetings.htm](http://www.gdmdata.com/resources/meetings.htm) for presentation copy  
(Meeting Calendar link on left navigation panel of [www.gdmdata.com](http://www.gdmdata.com))



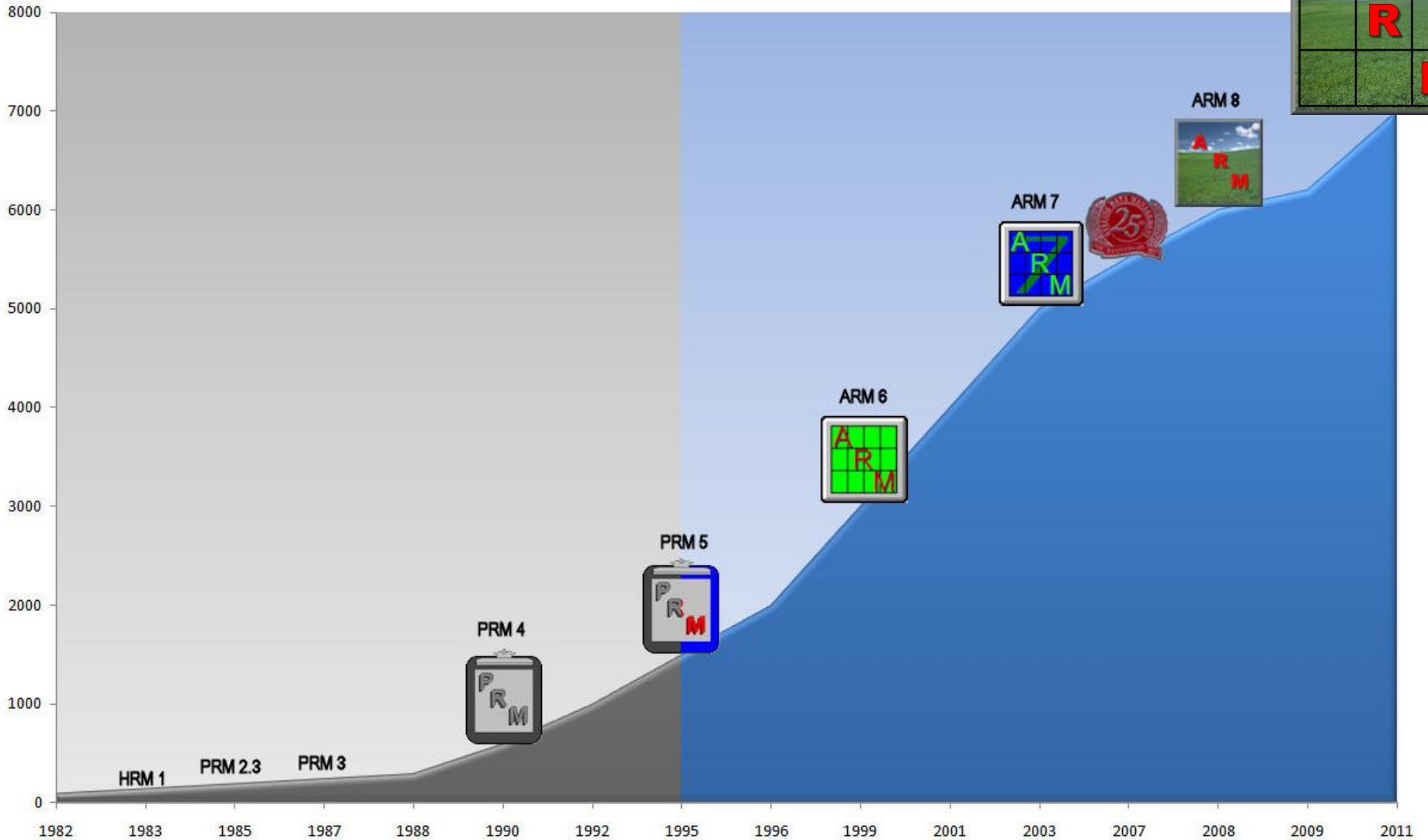
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# ARM 9 – Evolution of ARM Software

## Total ARM User Licenses Over Time





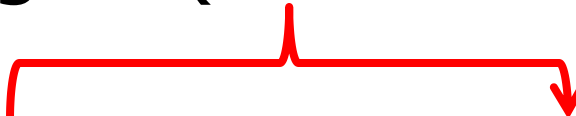
# ARM 9 Design Objectives

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- More user friendly  
e.g. automation and “guides”
- More manageable  
e.g. connect tasks to Outlook
- Better data quality  
e.g. automatic data checking

# Treatments Editor

- Color bands also display in non-scrolling region (Trt No. to Treatment Name)



Trt Line	Trt No.	Type	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit
1	1	CHK	Untreated Check					
2	2	FUNG	TUB	250	G/L	EC	0.5	L/ha
3	3	FUNG	TUB	250	G/L	EC	1	L/ha
4	4	FUNG	TILT 250	250	G/L	EC	0.5	L/ha
5	5	FUNG	MICO 60	600	G/L	EC	1.5	L/ha
6	5	FUNG	FUNGOL	200	G/L	SC	1.25	L/ha



# Assessments

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- Much greater flexibility to link additional related information to an assessment, such as:
  - Digital photograph.
  - “Damaged plot” marker (plot drowned out or treatment was misapplied).
  - Bar code label ID.
  - GPS Coordinates.
  - Comment.
- Enter dates as assessment values

# Assessments – Linked Image

ARM 9.1.3 (GDMdef) - G-All7\_Fung Trial

File Edit Format Tools Table Utilities Window Graph Tablet Add-Ins Help

Navigation Bar

Assessment Data - Line 1

Properties

Treatment

Display current treatment

Assessment (Plot 101, Col 4)

Comment: plot damaged due to excessive rain that puddled in a low spot

Barcode:

GPS:

Damaged Image:

Attach

Remove

Rename

Display by treatment

Table:

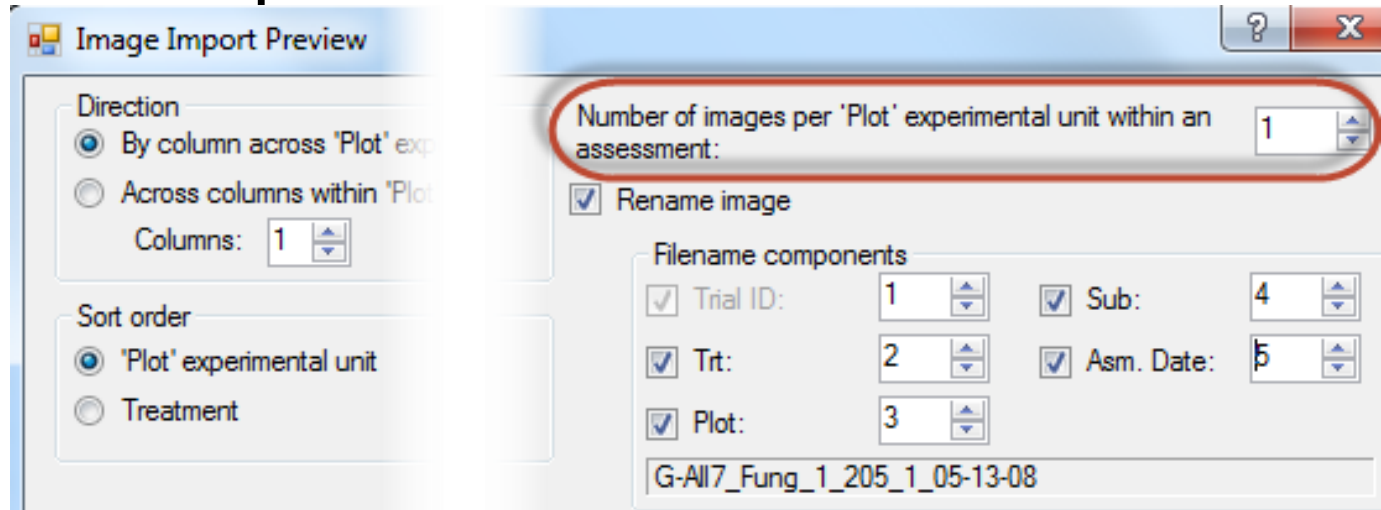
	Sub	Rp	Bk	Col	Plot	Tit	4 (Calculated)
	1	1	1	1	101	3	54
	1	1	1	2	102	1	0.00
	1	1	1	3	103	4	72.00
	1	1	1	4	104	2	74.00
	1	1	1	5	105	5	46.00
	1	2	2	1	201	2	80.49
	1	2	2	2	202	3	73.17

Image:

August 2013

# Assessment Data Images

- Enhanced for defining multiple images per plot
  - Specify number of images per plot when subsamples are defined



# Assessment Data Images

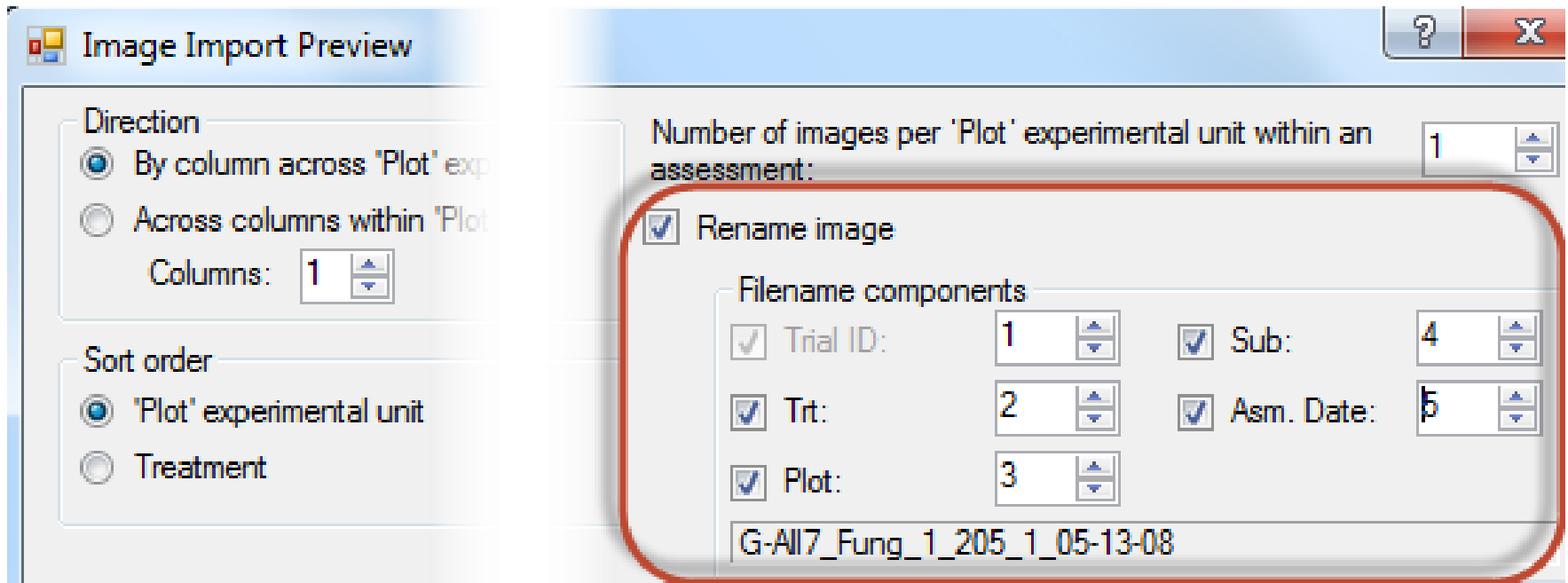
- Example of 2 images for plot 101 col. 6

v	Plot	Tit	6 (Calculated)						
	101	3	83.00133	0.40	98.73	20.00	8.70	13.0	8.99
	102	1	0.00	9.90	0.00	10.00	8.25	12.1	8.62



# Assessment Data Images

- More 'Rename images' choices



# Assessment Data Images

- View data images grouped by treatment

The screenshot displays a software interface for agricultural assessment. On the left, a data table lists various parameters for different plots. Two image windows are open, showing field views for 'Trt 2 (Plot 102, Col 9)' and 'Trt 2 (Plot 205, Col 9)'. The right-hand panel contains a form for 'Assessment (Plot 10)' with fields for 'Comment', 'Barcode', and 'GPS'. Below these fields are 'Attach' and 'Remove' buttons, which are circled in red. A 'Display current treatment' checkbox is also present and checked.

75.00		70.00	
60		55.00	
70.00		60.00	
65.00		65.00	
0.00	10.00	0.00	28.00
65.00		55.00	
70.00		65.00	
70.00		60.00	
0.00	15.00	0.00	22.00
55.00		50.00	
65.00		60.00	
60.00		60.00	
0.00	13.00	0.00	25.00

# Assessment Data Editor (8.5.0+)

- When cursor is in a calculated column, column heading of source column(s) are highlighted (like Excel formulas)

P	P	P	T1 AUDPC
0	0	0	1
8	9	10	11 (Calculated)
30	50	80	1765.0
80	90	94	3949.0

- Calculated columns also identified



# Experimental “Plot” Unit ID

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- Expanded flexibility to describe an experimental “plot” unit:
  - Plot ID (number) that is number or text e.g. A1
  - Globally unique plot ID assigned centrally by corporate headquarters
  - Permanent ID (bar code, RFID tag, or tree ID)
  - GPS boundaries of experimental unit
  - Database Globally Unique ID (e.g. Microsoft GUID)

# Assessment Review Tools

- Shortcuts to data review & quality checks
- Check treatment variability and differences
- Look for spatial effects/influences

The screenshot displays a software interface for reviewing assessment data. The main window is titled "Assessment Data - Line 12" and contains a table of fields and their values. To the right, a "Properties" panel is visible, which includes sections for "Assessment View", "Views", "Tools", and "Treatment". The "Tools" section is highlighted with a red circle, containing three buttons: "AOV Means Table", "Box-Whisker", and "Assessment Map".

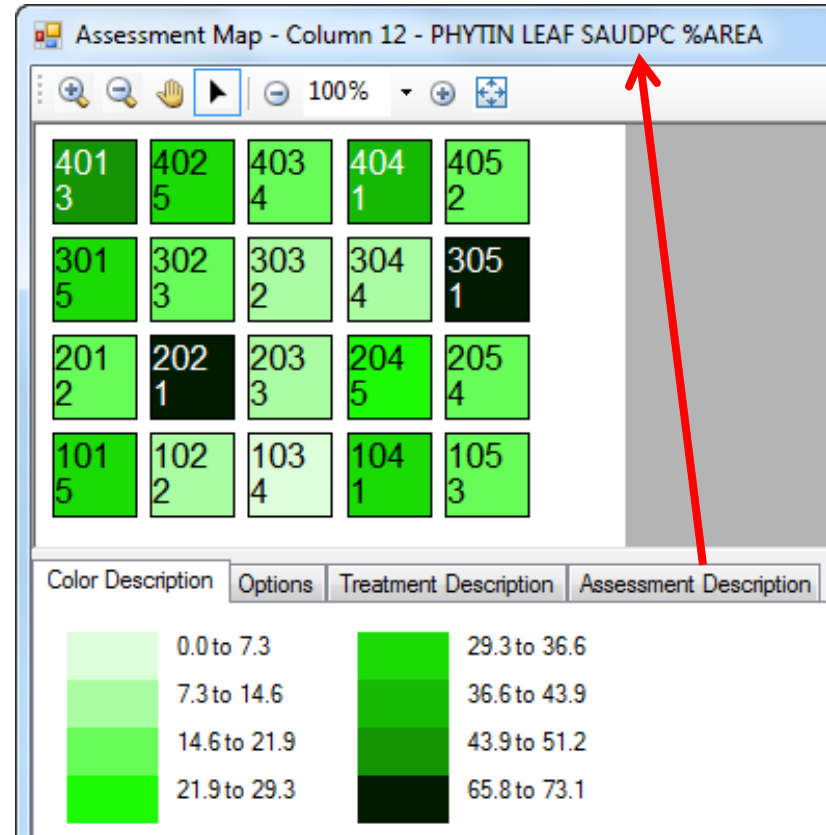
Column Number	4 (Calculated)
Pest Type	D <i>Disease</i>
Pest Code	SEPTR
Pest Scientific Name	Mycosphaerella graminicola
Pest Name	Speckled leaf blotch of wheat
Crop Code	TRZAW
Crop Scientific Name	Triticum aestivum (winter)
Crop Name	Winter wheat
Crop Variety	
Part Rated	LEAF3 P
Rating Date	9-Aug-2013
Rating Type	PESSEV
Rating Unit	%UNCK
Sample Size, Unit	10 LEAF

**Properties Panel:**

- Assessment View: View Options..., Ignore Match, Refresh
- Hidden: Row
- Views: Original, All fields, Hidden fields with information
- Tools: **AOV Means Table**, Box-Whisker, Assessment Map
- Treatment:  Display current treatment

# Assessment Map

- Assessment Description tab selects data header fields to describe each column on map and map report



# Trial Map Enhancements

Check/Ref  
(read from  
Settings)

Color  
palette

The screenshot shows the 'Trial Map' software interface. At the top left, there is a grid of 20 plots arranged in 4 rows and 5 columns. Each plot contains a treatment code (e.g., 401, 301, 201, 101) and a replication number (e.g., 1, 3, 2, 3). The plots are color-coded: 401 is white with diagonal lines, 402 is teal, 403 is green, 404 is red, 405 is white with diagonal lines, 301 is teal, 302 is green, 303 is white with diagonal lines, 304 is red, 305 is red, 201 is green, 202 is teal, 203 is white with diagonal lines, 204 is red, 205 is white with diagonal lines, 101 is teal, 102 is white with diagonal lines, 103 is red, 104 is green, 105 is white with diagonal lines.

Below the grid is a table with the following data:

Trt	Trt Code	Trt Description
1	CHK	Untreated Check
2	Tu.5	TUB 0.5 L/ha
3	Tu1	TUB 1 L/ha
4	Tilt	TILT 250 0.5 L/ha
5	M+F	MICO 60 1.5 L/ha; FUNGOL 1.25 L/ha

At the bottom right, there is a color palette with a grid of colored squares. A legend above the palette shows 'CHK' with a white square with diagonal lines and 'REF' with a red square with diagonal lines. The 'Identify Untreated and Reference' checkbox is checked.

On the right side, there is a 'Properties' panel with the following options:

- Color by:
  - Replicate
  - Treatment
- Auto-select for move
  - Treatment
  - 'Plot' Experimental Unit
  - Replicate

At the bottom right, there are several buttons: 'Settings...', 'Re-Randomize', 'Re-Number 'Plots'', 'Print', 'Accept Current', 'Cancel', and 'Help'.

# Trial Map Enhancements

Outside border plots

Numbering

Define custom palette

The screenshot shows the 'Trial Map' software interface. A context menu is open over the grid, with 'Insert Outside Border 'Plots'' highlighted. The grid contains plots with numbers and colors: 606, 607, 506 (dark blue), 507, 406 (green), 407, 306 (hatched), 307, 206 (pink), 207, 106, 107. The 'Properties' panel on the right has 'Color by' set to 'Treatment' and 'Display border 'Plot' numbers' checked. The 'Options' panel at the bottom has 'GemplerStd' selected in the 'Color by' dropdown. A table at the bottom left shows treatment details:

Trt	Trt Code	Trt Descr	Reset
1	CHK		
2			
3			
4			
5			

Buttons on the right include 'Settings...', 'Re-Randomize', 'Re-Number 'Plots'', 'Accept Current', 'Cancel', and 'Help'.

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# Trial Map Enhancements

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- Click-and-drag to move objects.
- Define color to use for each treatment.
- 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.



# Trial Map Enhancements

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- Special colors to identify check and reference treatments - map and graph
- Treatment color selection palette of 999 unique color + symbol combinations
- Border plot options on right-click menu

# Tasks

- Assessment Data
- Trial Map
- Schedule Tasks**
- Calendar
- Comments
- Attachments
- Settings

- Re-designed Schedule Tasks editor

**Schedule Tasks**

**Type**

Treatment application - for Appl Code: A ▼

Assessment - for Rating Timing: ▼

Other ▼

Description:

Assigned to:

Previous

Next

New

Delete

**Timing**

Date:

Interval:

Application Date

Completed

Duration

Length:  Hours per day

Multiple days

Duration:  Days

Timing deviation allowed: -  4/15/2013 +

	Completed	Type	Description	Timing	- Planned	+ Completed	Assigned to	Length (h)
1	<input type="checkbox"/>	Treatment application - for A	First application - Regrowth	04/15/13	04/15/13			2.25
2	<input type="checkbox"/>	Assessment - for 1	% control and phyto assessment	7 Days After A	04/22/13			1
3	<input type="checkbox"/>	Assessment - for 2	% control and phyto assessment	14 Days After A	04/29/13			1
4	<input type="checkbox"/>	Assessment - for 3	% control and phyto assessment	21 Days After A	05/06/13			1

# Tasks

- Schedule tasks relative to:
  - Fixed date
  - Application Date
  - Emergence Date
  - Planting Date

The screenshot shows a software interface for scheduling tasks. At the top, there are columns labeled 'Timing', '- Planned', '+ Completed', and 'Assign'. Below this, there are rows with dates: '7 Da', '14 D', and '21 D'. A dialog box is open, allowing the user to select a scheduling method. The 'Interval' option is selected with a radio button. The 'Interval' field is empty, and the unit is set to 'Days'. A dropdown menu is open, showing three options: 'Application Date' (highlighted), 'Emergence Date', and 'Planting Date'. To the right of the dropdown, there is a field containing the letter 'A'.



# Tasks

- Relative tasks adjust to date changes
  - Initial planned dates:

Type	Description	Timing	-	Planned	+	Completed
Treatment application - for A	First application - Regrowth	04/15/13		04/15/13		
Assessment - for 1	% control and phyto assessment	7 Days After A		04/22/13		
Assessment - for 2	% control and phyto assessment	14 Days After A		04/29/13		
Assessment - for 3	% control and phyto assessment	21 Days After A		05/06/13		

- Revised plan after application is made:

Type	Description	Timing	-	Planned	+	Completed
Treatment application - for A	First application - Regrowth	04/15/13		04/15/13		4/20/2013
Assessment - for 1	% control and phyto assessment	7 Days After A		04/27/13		
Assessment - for 2	% control and phyto assessment	14 Days After A		05/04/13		
Assessment - for 3	% control and phyto assessment	21 Days After A		05/11/13		

# Tasks

## Display tasks on Master Calendar

The screenshot displays a software interface for managing tasks on a Master Calendar. The interface is divided into several sections:

- Navigation Bar:** Located on the left, it contains a tree view of the application structure. The 'Master Calendar' item is highlighted with a red circle.
- Master Calendar:** The main area shows a calendar for April and May 2008. The calendar is currently set to 'Month' view. Tasks are represented by colored boxes with text labels: '00 Assx', '00 MIP', '00 Assr', '00 Asse', '00 7', '00 Assr', '00 folla', '00 Assr', '00 Assr', '00 2', '00 1st', '00 2nd', '00 3rd', and '00 4th'.
- Properties Panel:** Located on the right, it contains various filters and settings. The 'Studies' section is highlighted with a red circle and includes radio buttons for 'All protocols', 'All trials', and 'Selected studies'. Below this is a 'Reselect' button and a list of study identifiers: 'Rate\_Unit\_Examples', 'DEM-V-2009-US-001-A-01.C', 'HR99DEUAG11234', 'EGDK012652009', and 'FA22WI 01231234'. There is also a 'Color code' dropdown menu set to 'Type' and a 'Print' button at the bottom.

# Tasks

- Create Outlook appointments from tasks

**Schedule Tasks**

Type

Treatment application - for Appl Code:

Assessment - for Rating Timing:

Other

Timing

Date: 04/15/13

Interval: Hours

Application Date

Timing deviation allowed: 4/7

**Properties**

Total hours: 5.25

Outlook

Profile name:

Password:

Calendar name:

Create Appointments

Calendar Print Help

Include completed tasks

	Completed	Type	Duration (h)	Duration (d)	Outlook Profile
1	<input type="checkbox"/>	Treatment application - for A	2.25		
2	<input type="checkbox"/>	Assessment - for 1	1		
3	<input type="checkbox"/>	Assessment - for 2	1		
4	<input type="checkbox"/>	Assessment - for 3	1		



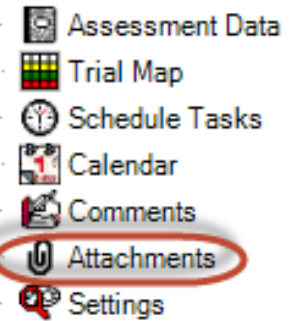
# Linked Outlook Appointments

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- Changes to scheduled task dates in ARM are automatically applied to linked Outlook tasks when trial is saved.
- Changes made by moving ARM-linked Outlook appointments are copied back to tasks in ARM trial the next time that trial is opened in ARM



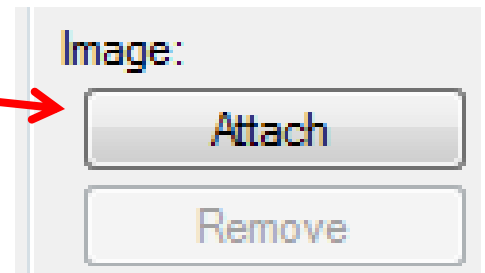
# Attachments



- Attachments editor is an index of photos, documents, other related files
- To attach:
  - Drag-and-drop files from Windows Explorer
  - Select "Attach" button on editor, then browse to file to link
  - Paste image into rich text field such as Comments or Conclusions

# Attach Assessment Images

- Images/photos of assessments should be attached in Assessment Data editor:
  - Click into relevant plot and data column
  - Select Attach button on Properties panel
  - Select image in Open dialog
  - Confirm position on Image Import Preview
  - Select image file rename options to clearly identify trial and plot linkage



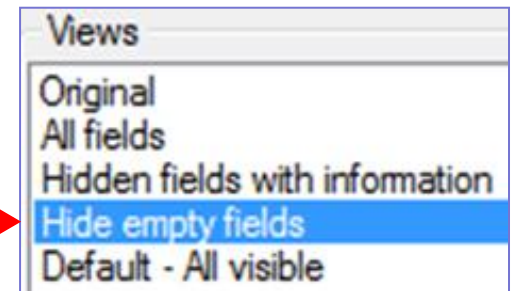
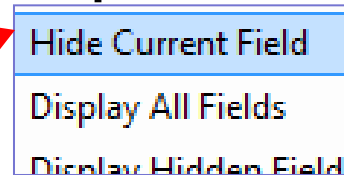
# Editor Views to Simplify/Tailor

Create saved editor views hide unused editor fields (simplify editor screens).

1. To hide un-needed fields either:

Treatment Field	Visible
Form Type	<input checked="" type="checkbox"/>
Lot Code	<input type="checkbox"/>
Density	<input checked="" type="checkbox"/>
Registration Num	<input type="checkbox"/>
Re-Entry Interval	<input type="checkbox"/>
Description	<input checked="" type="checkbox"/>
Cost	<input type="checkbox"/>

- Clear checkboxes on View Options dialog for the editor.
- Right-click and Hide Field on editor itself.
- Fill desired fields, then use "Hide empty fields" view.





# Editor Views to Simplify/Tailor

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2. On View Options dialog for the editor select "Save View" button
  3. Assign a useful name:  
"My view", "Turf view", "Cereals", etc.
- Also use views to select site description, assessment header, and treatment fields to print on reports

# Create Protocol – Design tab

- Define number of treatments in single-factor protocols in Design tab of Settings dialog
- Treatments editor is pre-filled

Protocol Settings

General Design Treatment Application Layout

Randomized Complete Block (RCB)

Factors: 1

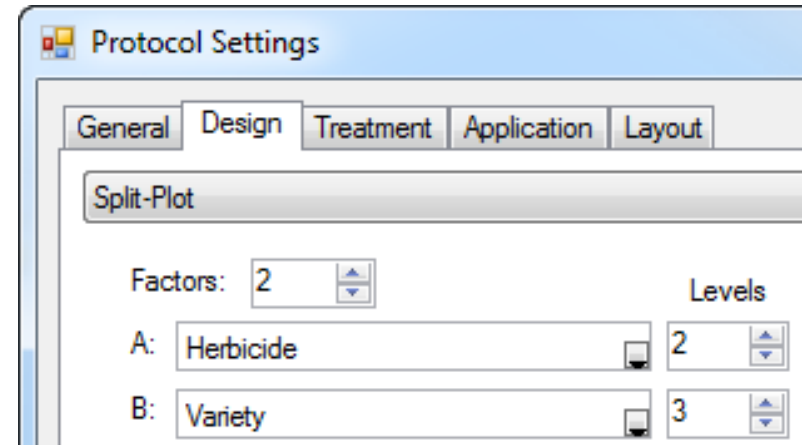
Treatments

A: 8

Trt Line	Trt No.	Type	Treatment Name
1	1		
2	2		
3	3		
4	4		
5	5		
6	6		
7	7		
8	8		

# Create Protocol – Design tab

- Define number of levels per factor
- Treatments editor is pre-filled



Protocol Settings

General Design Treatment Application Layout

Split-Plot

Factors: 2

Levels

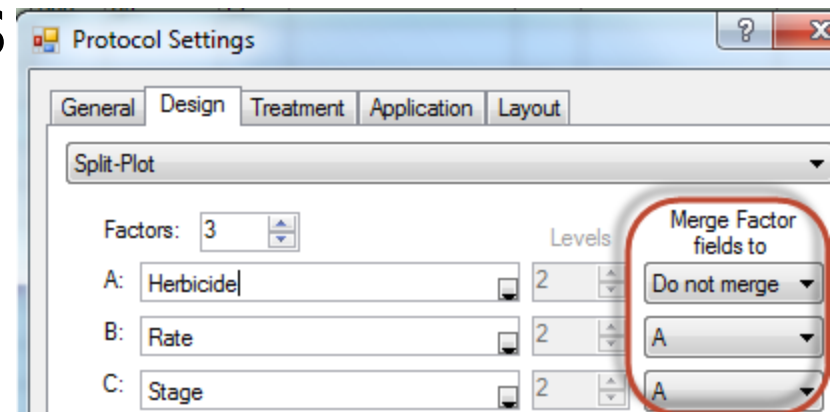
A: Herbicide 2

B: Variety 3

Treatments - Line 2			
Trt Line	Trt No.	Type	Treatment Name
1			Start of Factor A (Herbicide)
2	1	HERB	
3	2	HERB	
4			Start of Factor B (Variety)
5	1	VAR	
6	2	VAR	
7	3	VAR	

# Create Trial - Merge Factor to

- New Settings option to define auto-merge actions for combining factors when creating a multi-factor trial (e.g. copying rates or growth stages to factor that defines tested products)



# Create Trial - Merge Factor to

- These protocol treatments:

Trt Line	Trt No.	Type	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Growth Stage	Appl Code
1			Start of Factor A (Herbicide)							
2	1	HERB	Tub	500	g/L	EC				
3	2	HERB	Tilt	600	g/L	EC				
4			Start of Factor B (Rate)							
5	1		Low rate				25	g Al/ha		
6	2		High rate				50	g Al/ha		
7			Start of Factor C (Stage)							
8	1		Early						EAPOCR	A
9	2		Late						LAPOCR	B



# Create Trial - Merge Factor to

- Result in these trial treatments

Trt Line	Trt No.	Type	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Growth Stage	Appl Code	Factor ID	Level No.
1	1	HERB	Tub	500	g/L	EC	25	g AI/ha	EAPOCR	A	A	1
2	1		Low rate				25	g AI/ha			B	1
3	1		Early						EAPOCR	A	C	1
4	2	HERB	Tub	500	g/L	EC	25	g AI/ha	LAPOCR	B	A	1
5	2		Low rate				25	g AI/ha			B	1
6	2		Late						LAPOCR	B	C	2
7	3	HERB	Tub	500	g/L	EC	50	g AI/ha	EAPOCR	A	A	1
8	3		Low rate				50	g AI/ha			B	1
9	3		Early						EAPOCR	A	C	1
10	3		Late						LAPOCR	B	C	2
11	4	HERB	Tilt	600	g/L	EC	50	g AI/ha	EAPOCR	A	A	2
12	4		High rate				50	g AI/ha			B	2
13	4		Early						EAPOCR	A	C	1
14	4		Late						LAPOCR	B	C	2
15	5	HERB	Tilt	600	g/L	EC	50	g AI/ha	LAPOCR	B	A	2
16	5		High rate				50	g AI/ha			B	2
17	5		Late						LAPOCR	B	C	2
18	6		Late						LAPOCR	B	C	2
19	7	HERB	Tilt	600	g/L	EC	50	g AI/ha	EAPOCR	A	A	2
20	7		High rate				50	g AI/ha			B	2
21	7		Early						EAPOCR	A	C	1
22	8	HERB	Tilt	600	g/L	EC	50	g AI/ha	LAPOCR	B	A	2
23	8		High rate				50	g AI/ha			B	2
24	8		Late						LAPOCR	B	C	2

# Study Rule Required and Recommended Field Colors

- Required=pink background:

Latitude of LL Comer °:

Longitude of LL Comer °:

- Recommended=blue background:

Overall Moisture Conditions:



# Study List

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- Use study list as the ARM desktop when current study is closed
- More study list entry fields, to give more flexible filters and sorts
- Easier filtering method to locate ARM studies that meet desired criteria

# Study List as ARM desktop

The screenshot displays the ARM (GDMdef) desktop application interface. The main window is titled "ARM (GDMdef)" and features a menu bar (File, Edit, Format, Tools, Table, Utilities, Window, Graph, Add-Ins, Help) and a toolbar. A navigation bar on the left lists various study components like "ARM", "Summary Across Trials", "Germplasm Manager", "Tasks", and "Master Calendar". A tree view on the right shows a hierarchical structure of study details, including "Header", "Treatments", "Site Description", "General Trial", "Objectives/Conclusions", "Personnel", "Crop Description", "Pest Description", "Site and Design", "Maintenance", "Soil", "Moisture", "Application", "Crop Stage at Appl.", "Pest Stage at Appl.", "Appl. Equipment", "Treatment Appl. Comments", "Notes", "Deviations", and "Settings".

The central area is a form for editing study details, organized into sections: "Header" (Title, Trial ID, Protocol ID, Location, Study Director, Project ID, Investigator), "Treatments" (Protocol/Site Description - General), "Trial Status" (Trial Status, Initiation Date, Planned Completion Date), "Trial Location" (City, State/Prov., Postal Code, Country, Latitude of LL Corner, Longitude of LL Corner), and "Settings" (Conducted Under GLP, Official Trial Code, Conducted Under GEP, Other Trial Code). An "Active Filter: Active Studies" is shown on the right side of the form.

At the bottom, a table lists the study list with columns for "Selected", "Study ID", "Study Type", "Title", "Project ID", "Study Director", and "Mas". The table contains 20 rows of study entries.

Selected	Study ID	Study Type	Title	Project ID	Study Director	Mas
<input type="checkbox"/>	AUDPC7	Trial	AUDPC Transformation/Graph Example Trial		Fran O. Gylling	
<input type="checkbox"/>	ST-EXAM1	Trial	ARM ST Tutorial Example Product Screening Number 1		Bill Jenkins	
<input type="checkbox"/>	St-Int1	Trial	ARM ST Tutorial Example Product Screening Number 1		Bill Jenkins	
<input type="checkbox"/>	BRO-05-01	Protocol	Screening - Broccoli - 2005 - Central area	BROC	Dongbu	
<input type="checkbox"/>	CORN_Yield_06_01	Protocol	Corn North - Yield trials for Product positioning	CORN_Yield_0	Dongbu	
<input type="checkbox"/>	G-AI17_Herb	Protocol	Determination of the efficacy and lowest effective dose rate of HERB 1 against m	G-AI17_Herb	R.E. Search	
<input type="checkbox"/>	G-AI17_Ins	Protocol	Efficacy of some new insecticide formulations against Californian Red Scale (Aon		Your Name	
<input type="checkbox"/>	G-Seed7_1	Protocol	Corn North West - Yield trials for Product positioning	G-Seed7_1	G. CONTZERG	
<input type="checkbox"/>	St-Exam	Protocol	ARM ST Tutorial Example Product Screening Number 1		R.E. Search	
<input type="checkbox"/>	St-Int	Protocol	ARM ST Tutorial Example Product Screening Number 1		R.E. Search	
<input type="checkbox"/>	BRO-05-01_01	Trial	Screening - Broccoli - 2005 - Central area		Dongbu	
<input type="checkbox"/>	CORN_Yield_05_01_01	Trial	Corn North - Yield trials for Product positioning		Dongbu	
<input type="checkbox"/>	G-AI17_Fung	Trial	An assessment of the efficacy of TUB and other fungicides for the control of Septoria D		R.E. Search	
<input type="checkbox"/>	G-AI17_Herb	Trial	Determination of the efficacy and lowest effective dose rate of HERB 1 against monoco		R.E. Search	
<input type="checkbox"/>	G-AI17_Ins1	Trial	Efficacy of some new insecticide formulations against Californian Red Scale (Aonidiela		Your Name	
<input type="checkbox"/>	G-Seed7_1	Trial	Corn North West- Yield trials for Product positioning		G. CONTZERG	
<input type="checkbox"/>	G-Seed7_1	Trial	Corn North West- Yield trials for Product positioning		G. CONTZERG	
<input type="checkbox"/>	G-Seed7_2	Trial	Screening - Broccoli - 2005 - Emilia-Romagna area		AZ ROMA MAGN	
<input type="checkbox"/>	St-Exam2	Trial	ARM ST Tutorial Example Product Screening Number 1		R.E. Search	
<input type="checkbox"/>	St-Exam3	Trial	ARM ST Tutorial Example Product Screening Number 1		R.E. Search	

At the bottom of the window, there are buttons for "Select All", "Clear All", "Remove Filter", "Browse...", "Refresh", "Clipboard", "OK", "Cancel", and "Help". A checkbox labeled "Include archived studies" is also present.

# Study List

- Enter 'filters' to find desired studies
- Tutorial mode shows only studies in Tutorial folder, for ARM and ST

The screenshot shows a form titled "Site Description - General(2)" with various input fields. A dropdown menu is open for the "Discipline" field, showing options: F, FIH, and FIS. The "Include" button is highlighted in blue. The "Include" button and the dropdown menu are circled in red.

Selected	Study ID	Study Type
<input type="checkbox"/>	2009Fung_AU	Trial
<input type="checkbox"/>	ATD_06HERB-05_02	Trial
<input type="checkbox"/>	ATD_06HERB-05_03	Trial
<input type="checkbox"/>	ATD_06HERB-05_04	Trial

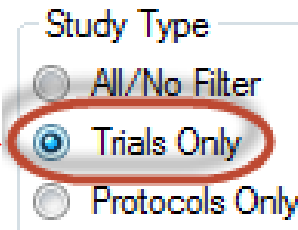
Buttons: Select All, Clear All, Remove Filter

Include archived studies  Tutorial

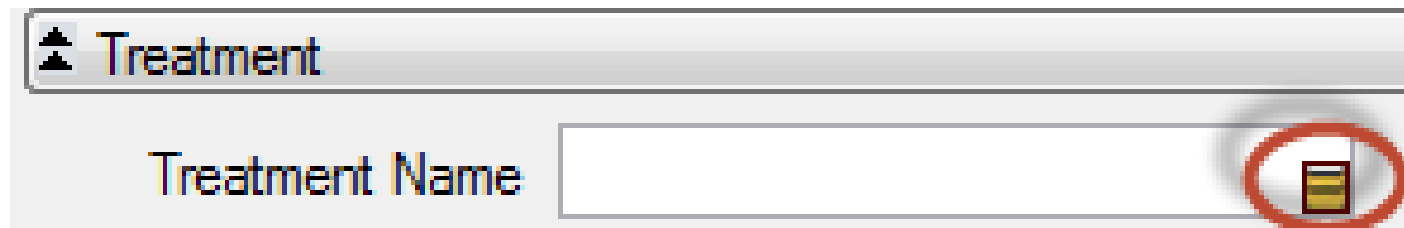
# Find Trials using Study List

- How to find trials with treatment(s), crop(s), and weed(s) of interest:

1. Display only trials

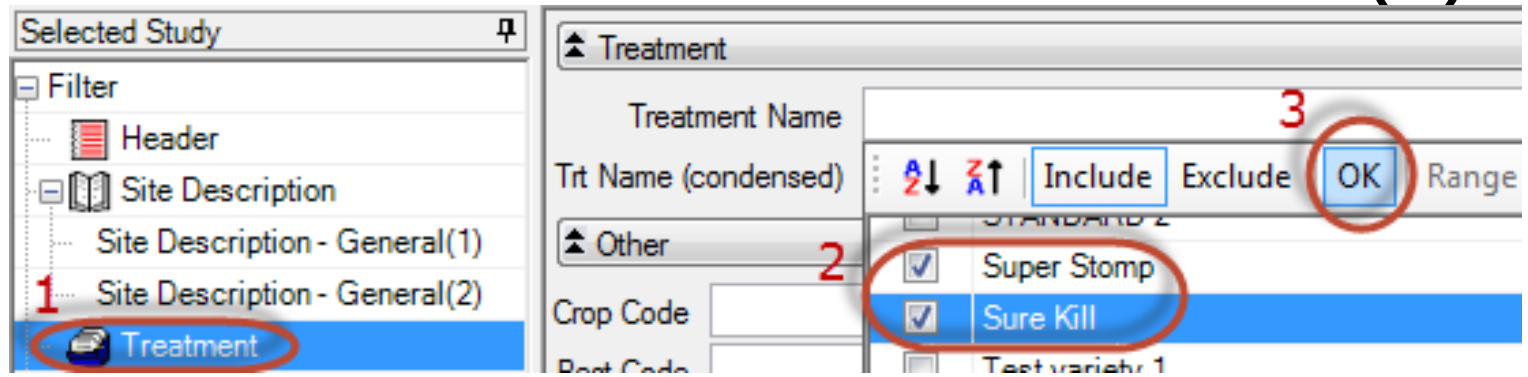


2. Display unique treatment names



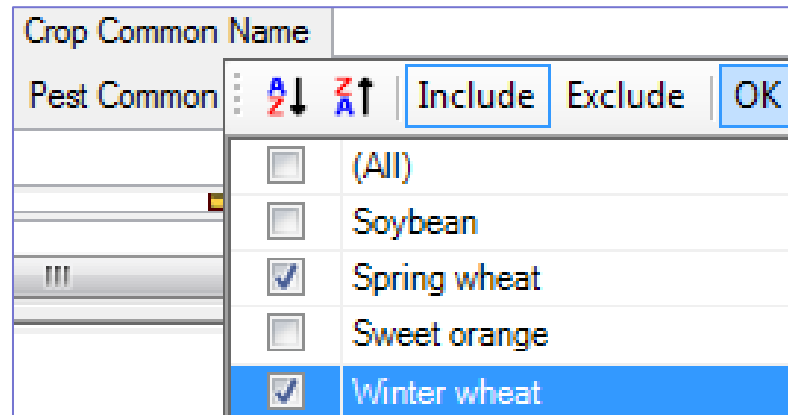
# Find Trials using Study List

## 3. Select trials with desired treatment(s)



The screenshot shows a software interface with a 'Selected Study' window. On the left, a 'Filter' pane lists 'Header', 'Site Description', and 'Treatment', with 'Treatment' selected and circled in red (1). On the right, the 'Treatment' pane shows a list of treatments: 'Super Stomp' and 'Sure Kill' are checked and circled in red (2). The 'OK' button is also circled in red (3).

## 4. Identify desired crop(s)



The screenshot shows a software interface with a list of crops. The 'Crop Common Name' pane shows a list of crops: '(All)', 'Soybean', 'Spring wheat', 'Sweet orange', and 'Winter wheat'. 'Spring wheat' and 'Winter wheat' are checked and highlighted in blue.

# Find Trials using Study List

3. Identify desired weed(s)

Pest Common Name

⌵ ⌴ | Include Exclude OK

<input checked="" type="checkbox"/>	Lambsquarters, common
<input type="checkbox"/>	Matricaria inodora
<input checked="" type="checkbox"/>	Nightshade, black

4. Open matching trials from grid

Selected	Study ID	Title
<input type="checkbox"/>	ATD_06HERB-05_01	Herbicidal efficacy of HERB_2203 with a range of broad-leaved weed herbicides
<input type="checkbox"/>	ATD_06HERB-05_02	Herbicidal efficacy of HERB_2203 with a range of broad-leaved weed herbicides
<input type="checkbox"/>	ATD_06HERB-05_06	Herbicidal efficacy of HERB_2203 with a range of broad-leaved weed herbicides



# Export Assessment Data

- File - Export - Data Export
- Create file to open in other programs
- Settings to analyze with SAS, R, etc.

The screenshot shows the 'Data Export Options' dialog box with the following settings:

- File type:** Delimited (\*.csv)
- Delimiter:** Tab
- Treatments:** Export selected (unchecked), Synonym number: 0
- Export selected data columns:** checked
- Format:** Header as first line (checked), Missing data As: (empty field)
- Include 'Plot' experimental unit:** checked
- Include trial ID:** checked
- Treatment information:** First line (selected), All, separate (unchecked), All, concatenated (unchecked), Separator character (unchecked), Enclose separator with spaces (unchecked)
- Assessments:** All data (selected), 'Plot' experimental unit means (unchecked), Treatment means (unchecked)
- Sort order:** Treatment (selected), Replicate (unchecked)
- Export batch into one file:** unchecked

# Export Assessment Data

- Settings to graph means of treatments

The screenshot shows the 'Data Export Options' dialog box with the following settings:

- File type:** Delimited (\*.csv)
- Delimiter:** Tab
- Treatments:** Export selected (unchecked), Synonym number: 0
- Export selected data columns:** (checked)
- Format:** Header as first line (checked), Missing data As: (empty), Include 'Plot' experimental unit (checked), Include trial ID (checked)
- Treatment information:** First line (selected), All, separate (unchecked), All, concatenated (unchecked), Separator character (empty), Enclose separator with spaces (unchecked)
- Assessments:** All data (selected), 'Plot' experimental unit means (unchecked), **Treatment means (selected and circled in red)**
- Sort order:** Treatment (selected), Replicate (unchecked)
- Export batch into one file:** (unchecked)