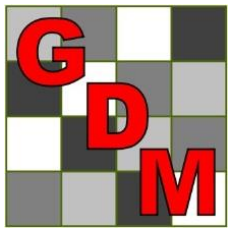
ARM Tablet Data Collector



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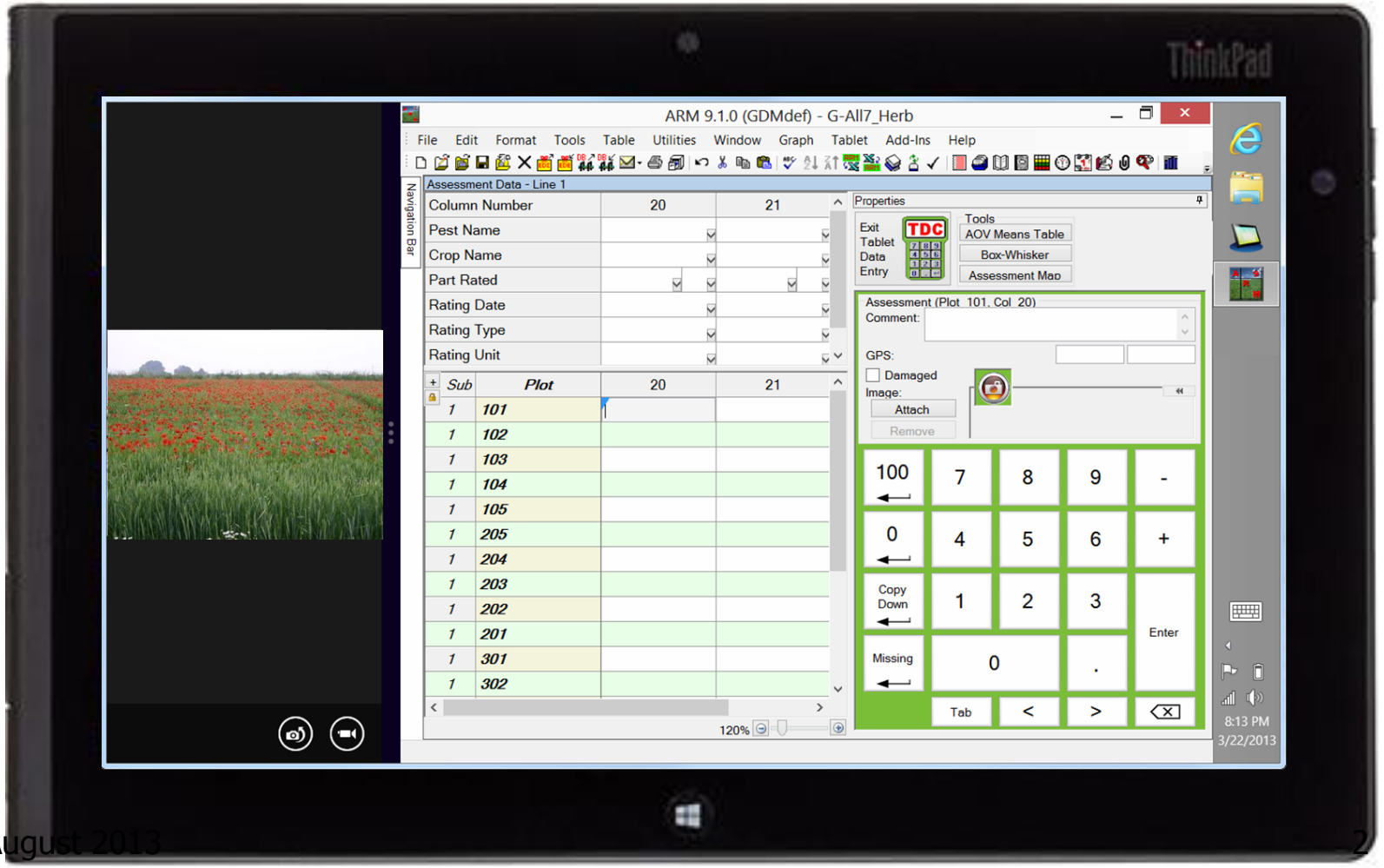
ARM Tablet Data Collector

Win 8 Pro tablet
+
ARM
+
special ARM tablet features



Actions that will Improve Assessment Quality

- Enter data only once to avoid transcription errors
- Employ appropriate range checking for assessed values
- Perform data quality checks before leaving trial site (analyze, graph)
- Include photographs that illustrate or support measurements & observations

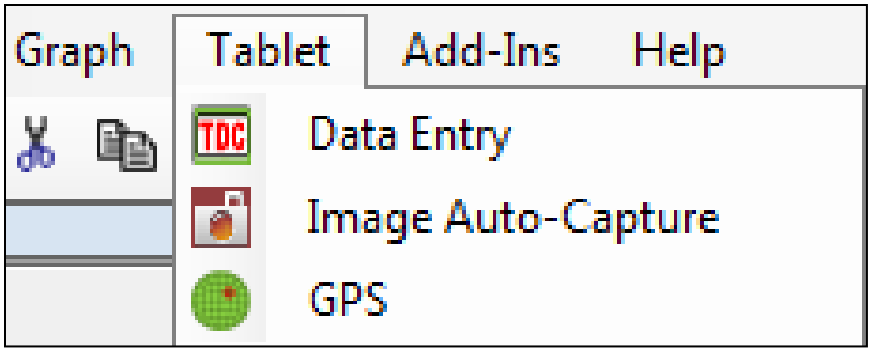
Benefits of Using ARM Tablet Data Collector (TDC)

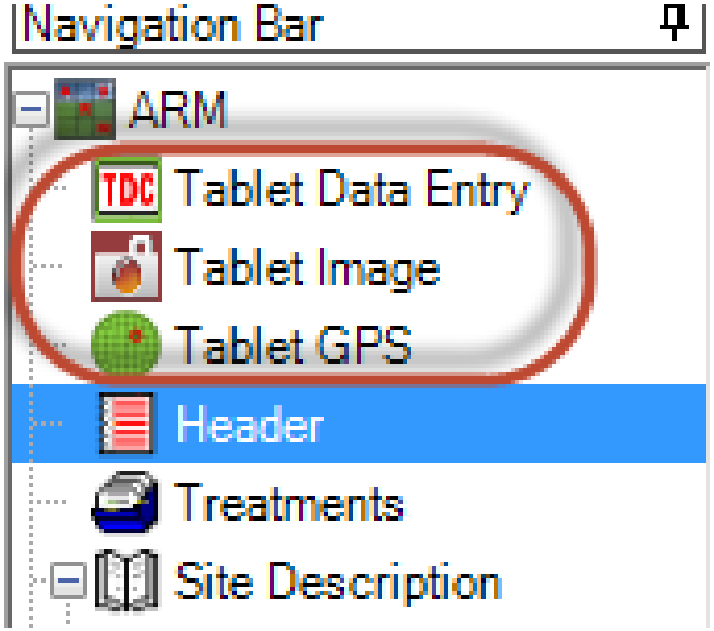
Use full ARM software at trial site on conveniently sized hardware that is readable in direct sunlight, plus:

- Optimized for collecting data
- Take photos directly into ARM trial file
- Record GPS coordinates into trial
- Perform data quality checks on-site
- Eliminates data transcription errors

Special TDC Features

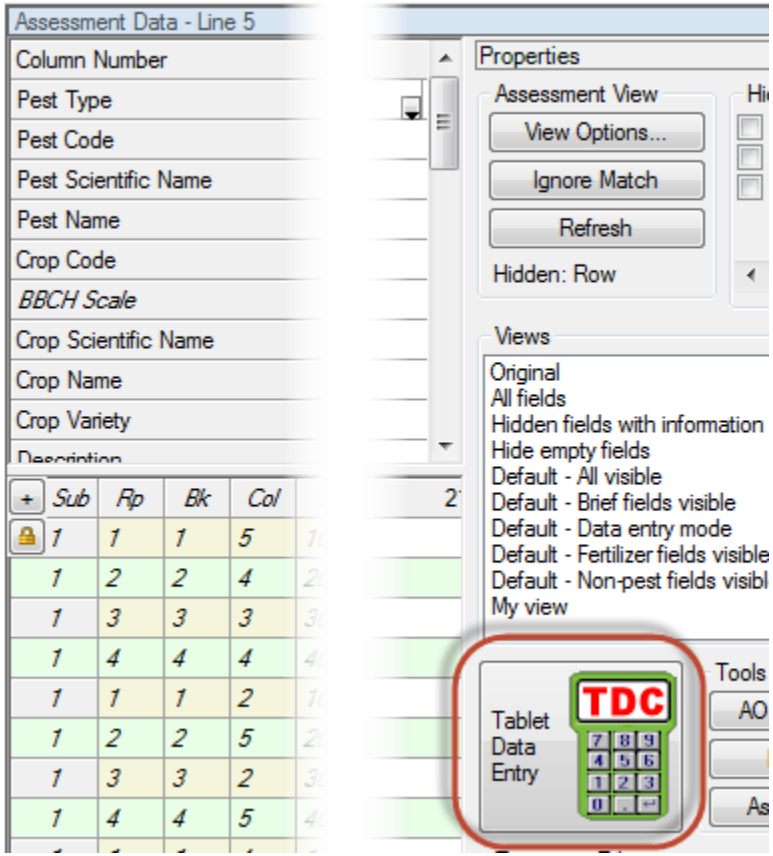
- Tablet Data Entry
- Tablet Image Capture
- Tablet GPS

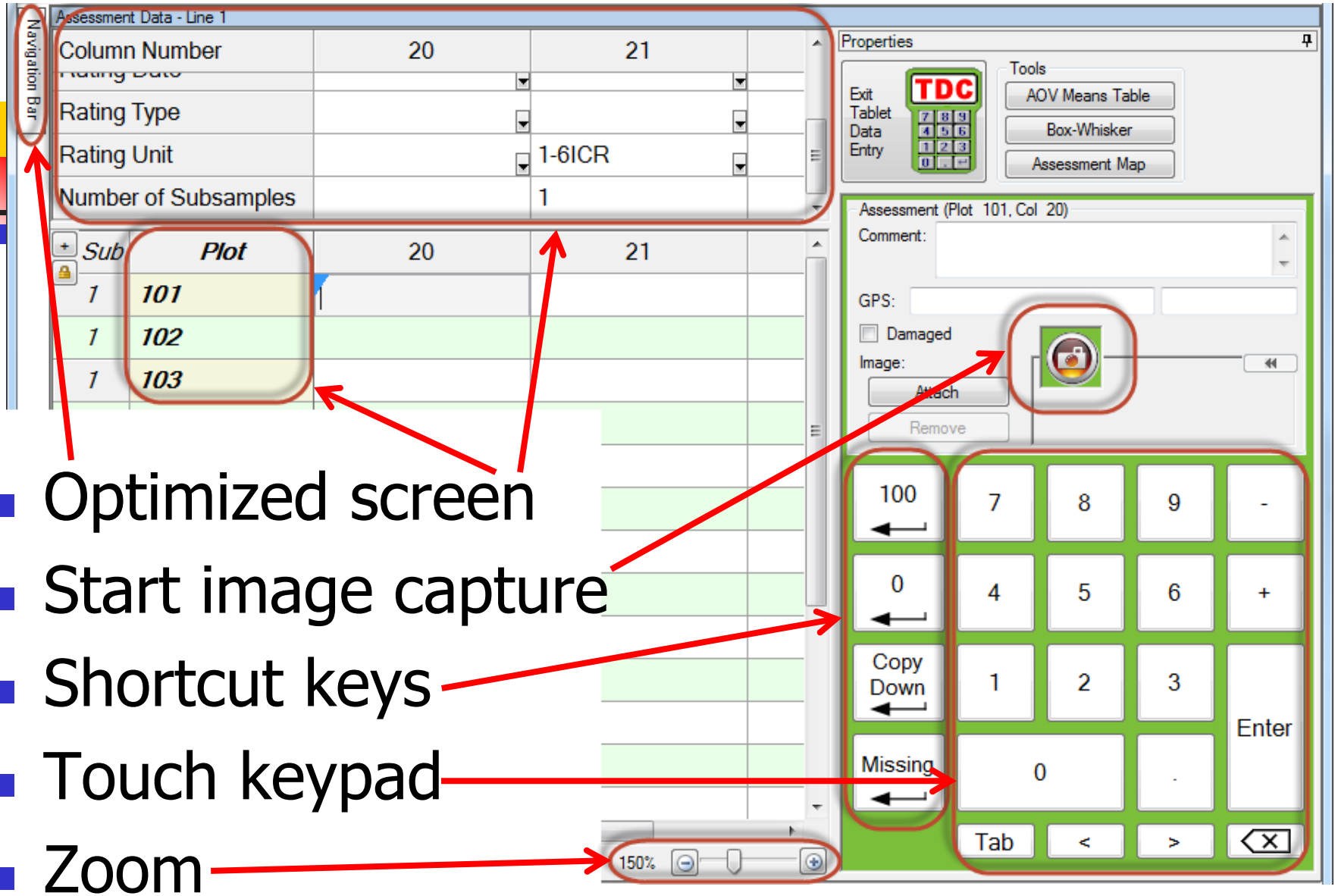




Tablet Data Entry

- Component of Assessment Data editor
- Optimizes editor use on a small touch tablet computer

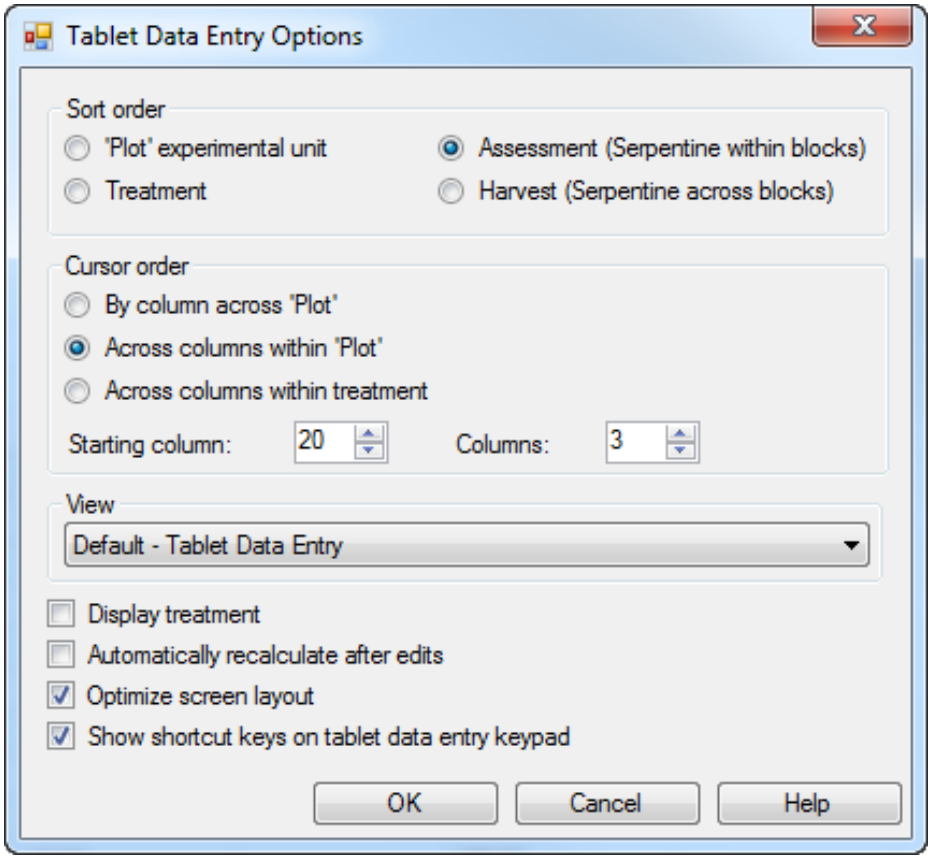




- Optimized screen
- Start image capture
- Shortcut keys
- Touch keypad
- Zoom

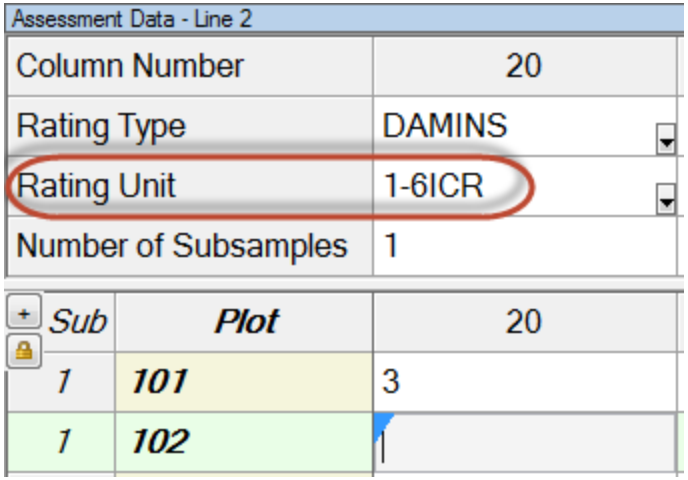
Tablet Data Entry Options

- Set plot order
- Enter 1 or more data columns
- Visible header rows
- "Blind" assessment
- Performance & screen optimized for tablet



Tablet Data Entry Features

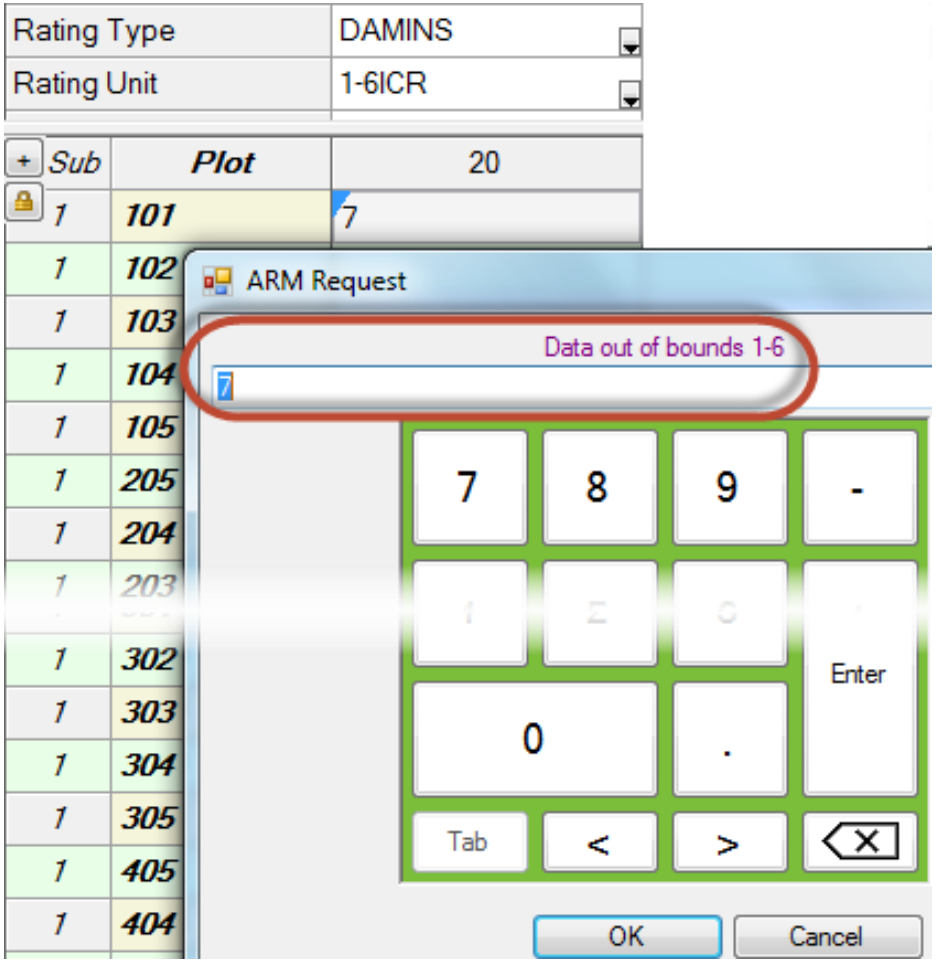
- Automatically reads valid data range from assessment unit field



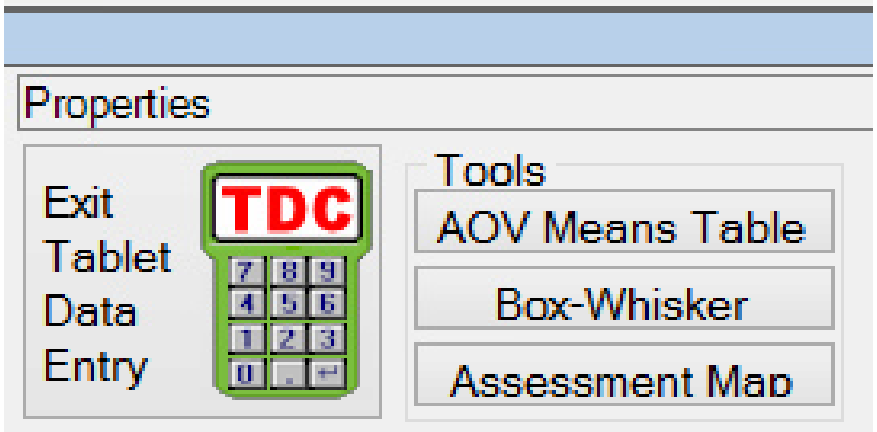
- For 1 digit scales from 0-9, cursor moves automatically to next assessment data cell (no pressing Enter)

Tablet Data Entry Features

- Automatic limit dialog displays for out-of-range data, for immediately correcting an entry mistake



Tablet Data Review Tools



- Data analysis (Analysis of Variance)
- Box-Whisker Graph
- Assessment Map

AOV Means Table

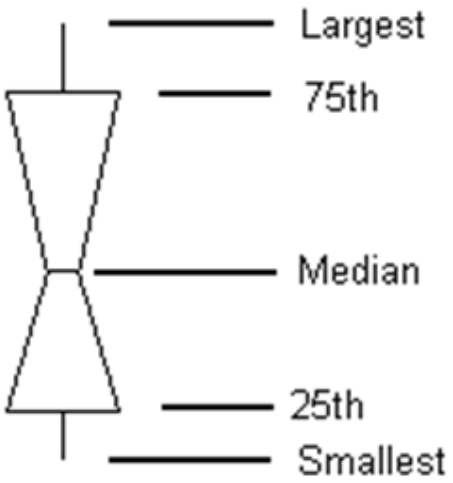
Rating Type ARM Action Codes		COUINS APC
Trt Treatment No. Name	Rate Rate Unit	1
1 Untreated Check		106.3 a (0.0%)
2 Sure Kill NIS	250 g ai/ha 0.5 % v/v	13.5 bc (87.3%)
3 Super Stomp NIS	250 g ai/ha 0.5 % v/v	17.0 bc (84.0%)
4 Sure Kill NIS	375 g ai/ha 0.5 % v/v	9.5 c (91.1%)
5 Super Stomp NIS	375 g ai/ha 0.5 % v/v	24.0 b (77.4%)
LSD (P=.05)		8.93
Standard Deviation		5.80
CV		17.03
Bartlett's X2		12.244
P(Bartlett's X2)		0.016*
Skewness		1.6078*
Kurtosis		1.0506
Replicate F		6.201
Replicate Prob(F)		0.0087
Treatment F		197.210
Treatment Prob(F)		0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL

- AOV=Analysis of Variance
- Treatment means
- Mean comparison test
- Descriptive statistics
- AOV assumption violations
- Evidence of significant treatment/rep. differences

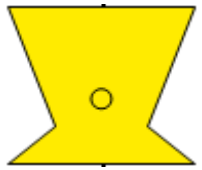
Box-Whisker Description

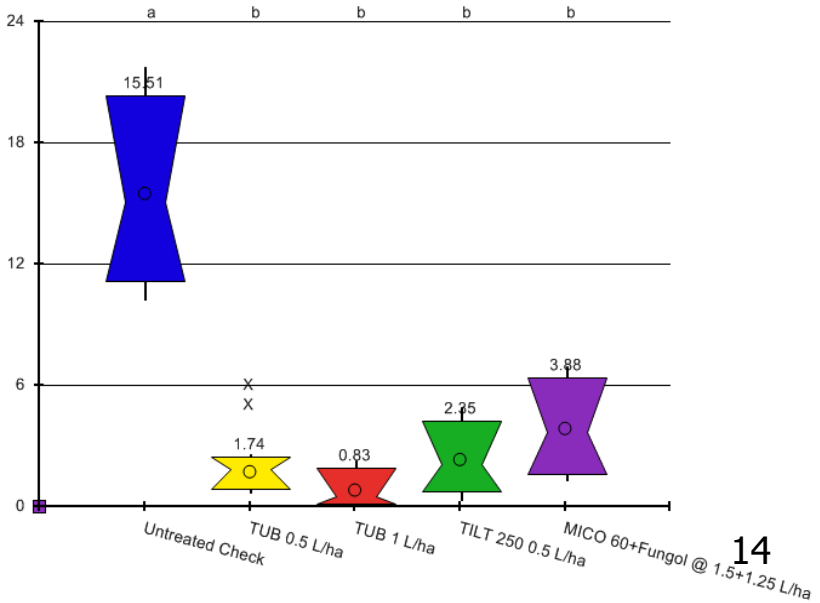
- Shows treatment "spread" around median
- **Box** is from 25th to 75th percentile, around median
- **Whiskers** extend to largest and smallest non-outlier values
- **Outliers** (X) are points outside of the box by more than 1.5 times box height



Box-Whisker Graph

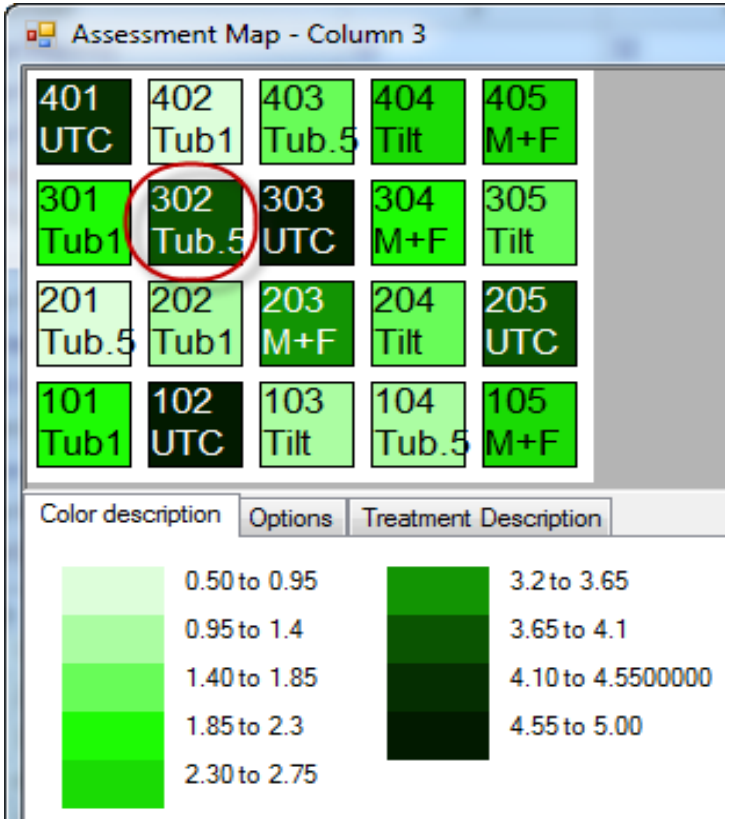
- Box height shows treatment stability across replicates
- Skewed waist position shows a replicate difference
- Simplest method to view treatment variance(s)





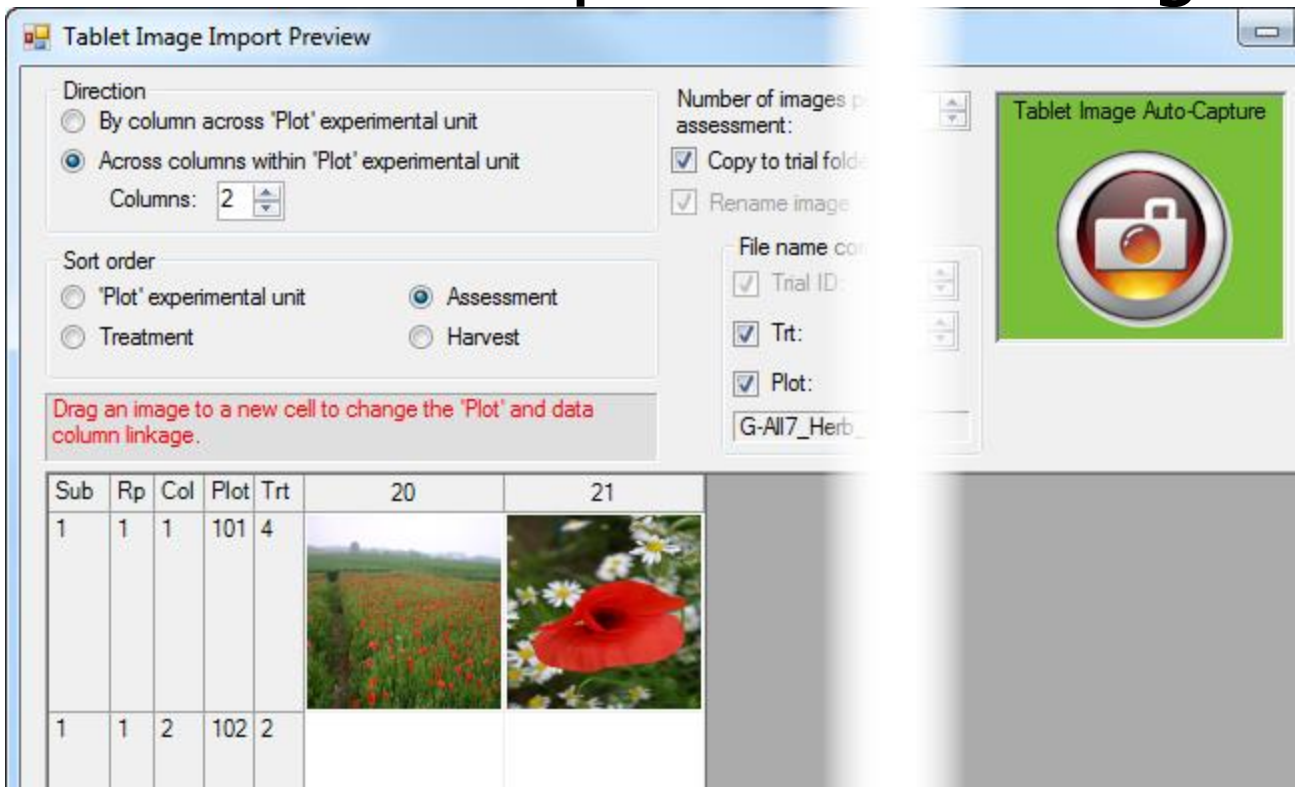
Assessment Map

- Displays assessment values on trial map
- Values are indicated by color intensity
- Lower values display in lighter colors
- Color description is key to value colors



Tablet Image Auto-Capture

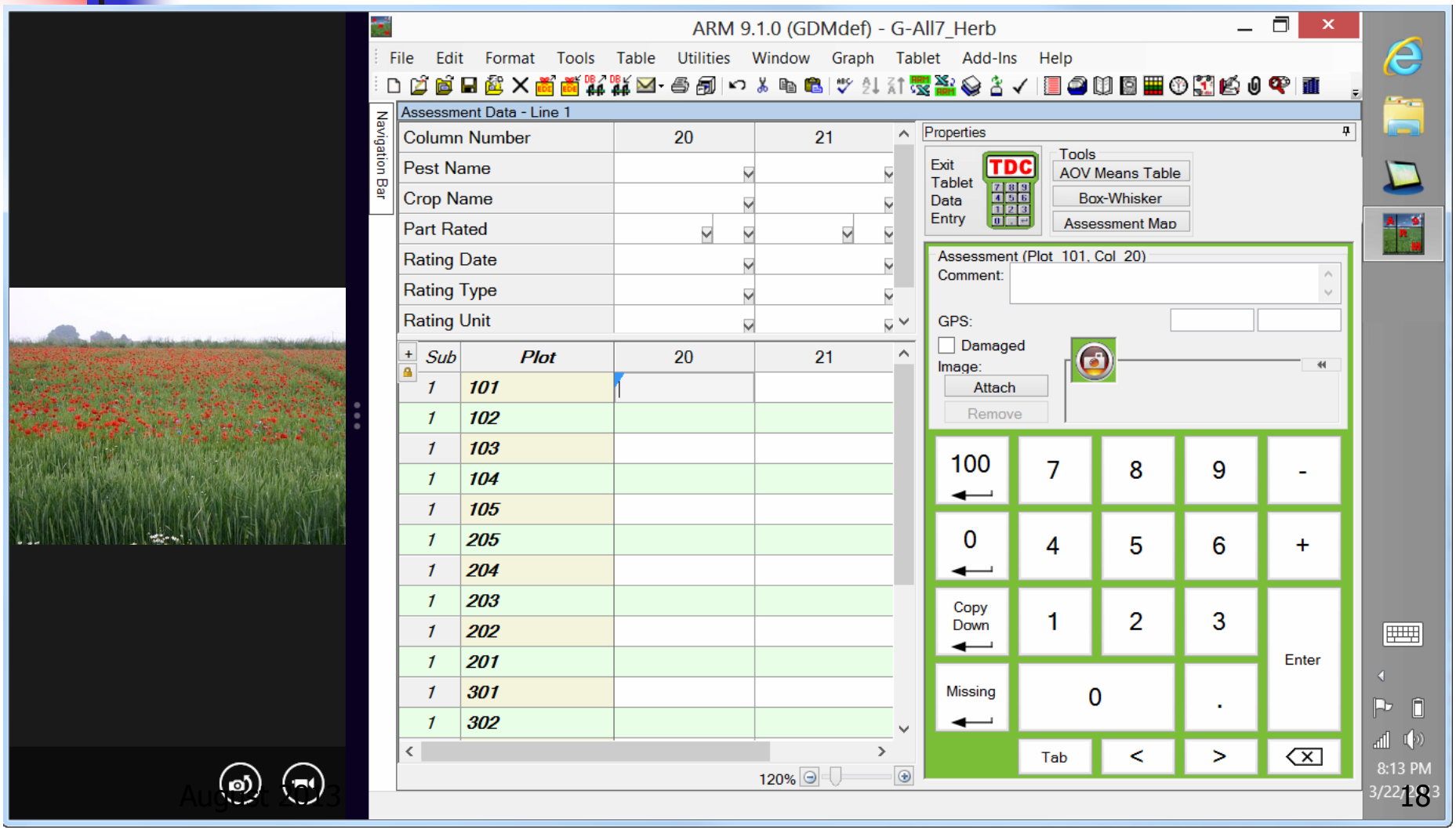
- Take a picture. ARM "captures" the image and links it to the current plot



Tablet Image Auto-Capture

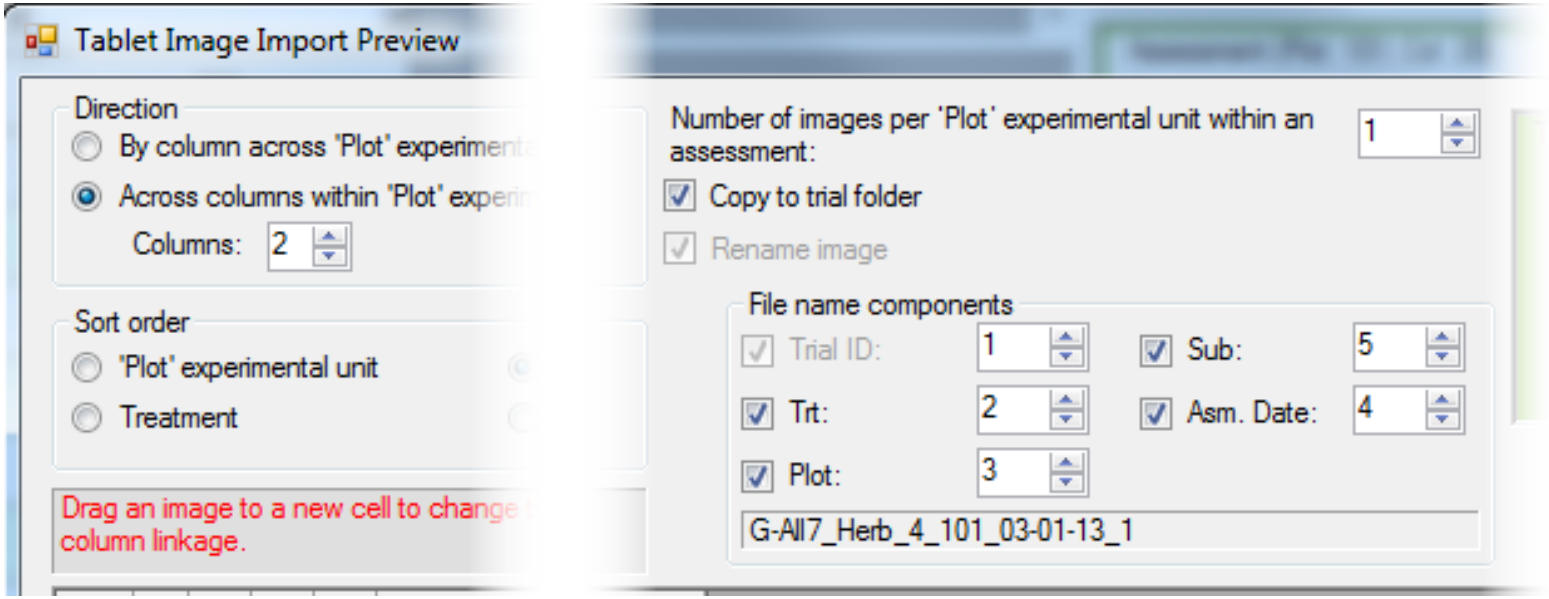
- Continue taking pictures, and images are added to the next open cell in Tablet Image Import Preview dialog
- Drag-and-drop to move images
- Set “Columns” to 1 for 1 image per plot
- Right-click (press and hold) and choose “Remove image” to delete
- Images are backed up into ARMbackup

Suggested "Camera" Position



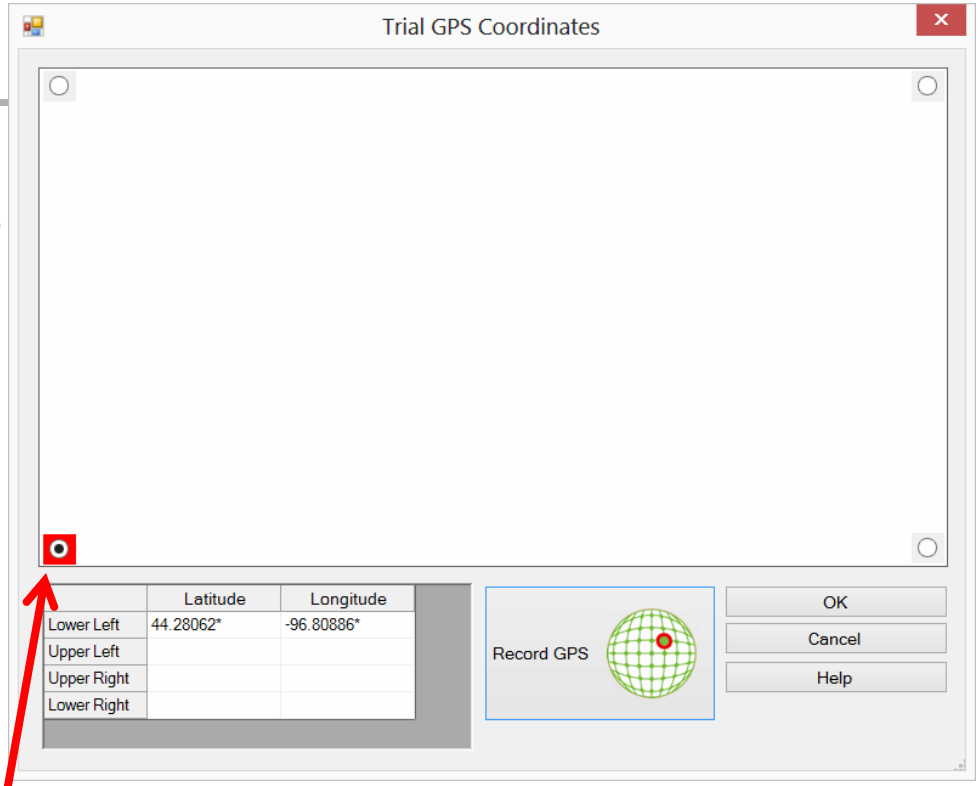
Tablet Image Auto-Capture

- Automatically rename attached image
- Copy image to folder where trial is saved



Tablet GPS

- Reads current GPS coordinates from tablet hardware into Latitude and Longitude site description fields
- Touch Tablet GPS button to read current position for indicated corner (e.g. LL)



Tablet Data Collector Inquiries

- Email your local GDM Representative, see http://gdmdata.com/distributors.htm or fran@gdmdata.com