

ARM Trial Management Software Products

Steven Gylling (Gylling Data Management), Bernd Stratmann (Agricultural Development Consulting).

The product presentation of ARM trial management software products provides an overview of features that assist in each step of managing agricultural trials, from planning through final reporting and archiving. Products are:

- ARM is the primary tool for each individual field and greenhouse research protocol and trial.
- AGM (ARM Germplasm Manager) is an optional tool to manage crop improvement research information and genealogies, especially designed for multi-year and multi-location projects.
- ARM ST (Summary across Trials) is an optional tool to summarize and report for a trial series, across locations and/or years.
- ATD (ARM Trial Database) is an optional relational Access database for storing and retrieving trials based on standard 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.
- Psion Workabout Pro with Enhanced Rating Shell is data collection hardware and software to enter trial assessments and descriptive information at the trial site, with one button click to pull information into the appropriate ARM trial on a PC.

Some of the topics that will be presented are:

- ARM: Entering protocols (trial plans) and creating randomized trials for a variety of experimental designs including: completely randomized, randomized complete block (RCB), Latin square, factorial RCB, split-plot, and strip-block designs.
- ARM: Printing typical trial management reports such as: spray/seeding plan, product amount totals, data collection, data verification, trial map, plot signs, tour reports.
- ARM: Entering assessment data and applying various data transformations.
- ARM: Creating trial summary reports with included ARM statistical analysis (using AOV) and option of applying various mean comparison tests. Reporting is quite flexible, with easy one button click shortcuts to print reports to paper, word processor, Excel, or PDF.
- ARM: Multi-language reporting, with included language choices of English, German, French, Japanese, Korean, Italian, Polish, Portuguese, and Spanish.
- ARM: Integrated data graphing tool.
- ARM: Query, archiving, and automatic data backup tools.
- AGM: Searching, selecting, and reporting germplasm information.
- ARM ST: Selecting and summarizing a trial series to calculate grand means across assessments and trials, demonstrating integrated multi-trial statistics and data graphs plus options to export raw trial data in a friendly format to perform additional data analyses using other statistics software.