

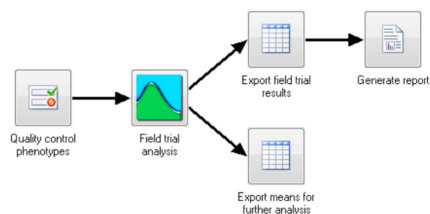
Breeding View for Statistical Analysis

Quick View

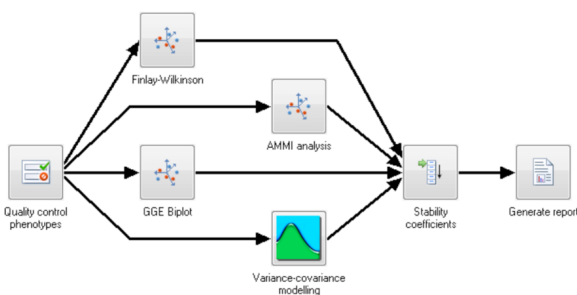
A Breeding Management System core functionality

In modern plant breeding today, breeders have an increasing amount of data to analyse and need to make rapid decisions. The statistical tool Breeding View helps you in this task by providing a set of simple, visual and easy-to-use analytical pipelines. It is a state-of-the-art solution, with batch mode functionality, designed to efficiently analyse multiple phenotypic datasets in one run of a pipeline, and quickly view results.

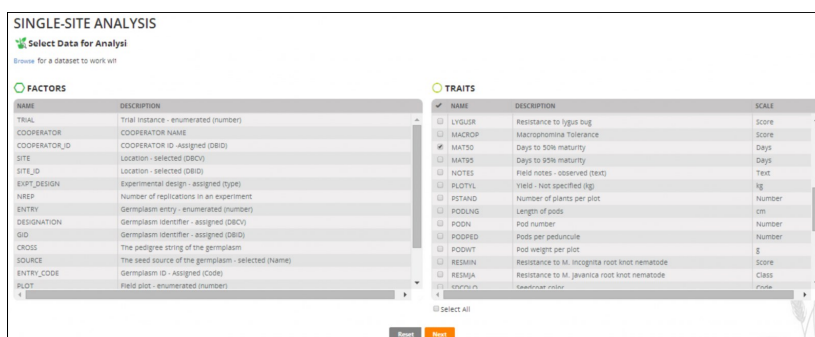
Single-site analysis pipeline:



Multi-site analysis pipeline:



QTL analysis pipeline



Key elements:

- **Batch processing for sequential, single-site analysis:** Send all environments from a study to be analysed at once.
- **Database integration:** Selected data automatically imports into Breeding View from the programme database. Save heritabilities to use in decision on traits to send to a multi-site analysis.
- Multi-site analysis now permits **mega-environment analysis**.
- **Launch as a stand-alone application:** identify QTL and analyse data imported from external sources.
- View **summary statistics** and **mixed-model results** for each trait.
- **View graphs:** PCA Biplot, Histogram of Residuals, Fitted-Value Plot, Normal Plot, Half Normal Plot.
- **Customise analysis and outputs:** generate comprehensive reports, save your statistics in the database and export results.

| Description | Development phase | What's new | Related support tools |
|---|-------------------|--|--|
| Analyse phenotypic data and identify quantitative trait loci (QTL). | Stable version | <ul style="list-style-type: none"> Identify and exclude outliers from analysis Output reports include summary statistics Includes R-AP and REML | www.integratedbreeding.net/429/breeding-management-system/tutorials/maize-single-site-analysis-4-location-batch ibp@cgiar.org |

“ Breeding View enables easy and comprehensive data analysis and presentation of data very soon after completion of the study. It facilitates the work of breeders who will focus on plant selection rather than data management and analysis of technical aspects. — Dr Ibnou Dieng, Head of the Data Integration and Biometrics Unit, Africa Rice Center ”