

Product presentation: PIAF and PIAFStat

Held by: Volker Michel (Landesforschungsanstalt für Landwirtschaft und Fischerei Mecklenburg-Vorpommern), Gregor Zink (ProPlant), Jörg Schmidtke (BioMath), Albert Anderl (Mainz)

Tuesday, 9 October 2007, 18:00 – 19:00

The PIAF- and PIAFStat- product presentation will give an overview about two typical workflows which are representative for the field trial process in Germany. One workflow belongs to variety-trials and the other one to efficacy trials of plant protection products. Thereby we can demonstrate on the one hand the power and complexity of the PIAF-system which supports the field-trial process beginning with the planning phase up to the statistical evaluation and on the other hand the involvement of all actors like the officials of the Federal States of Germany, independent agricultural research organisations, plant protection companies, breeders, the *Bundessortenamt* (BSA) and the *Biologische Bundesanstalt* (BBA) with the associated data flow.

Workflow 1: Post-registration State Variety Trials (Landessortenversuche)

The demonstration is associated to the pull-down menu of **PIAF** (Fig. 1):

1. Planning a regionalized series at several locations for the actually year;
2. Export of planed trials to the trial stations;
3. Input of the original data in trial stations and export to the central administrator;
4. Interchange to **PIAFStat**: statistical analysis of single trials (Fig. 2):
 - a. Likelihood procedures, optimal adjustment of means and statistical testing;
 - b. Automatically return of adjusted means and other parameters to **PIAF** database;
5. Documentation and recording of test results;
6. Data interchange between federal states, with *Bundessortenamt*, breeders ...;
7. Harmonizing of all trials in the region to an extensive long-term series (including many years, trials from other states in overlapping areas, trials from the previous trial-system of the *Bundessortenamt* as well as EU-trials);
8. Interchange to **PIAFStat**: statistical analysis of the whole series to obtain best predictions for differences between varieties in new environments (locations and year) as a basis of variety-recommendation.

Workflow 2: Efficacy trials of plant protection products:

A plant protection company generates multiple orders based on a specific project which belongs to a test compound. These orders are distributed to different trial stations.

1. The trial stations create trials based on one or more orders.
2. The trial results will be reported to the plant protection company.
3. The plant protection company create different summaries or other result lists using their own and the co-operator efficacy trials.
4. The results are integrated in a dossier which is created for the registration.

Regarding the described workflows we will furthermore show the possibilities of PIAF and PIAFStat in customizing the system to specific use cases without the need of programming. This can be done using the master data and guideline area of PIAF (specific information which is e.g. needed for an ornamental trial in comparison to a variety or herbicide trial in winter wheat can be defined in the guideline area as well as the statistical design).

The presentation will be performed by different users which will report of their work with PIAF and PIAFStat.

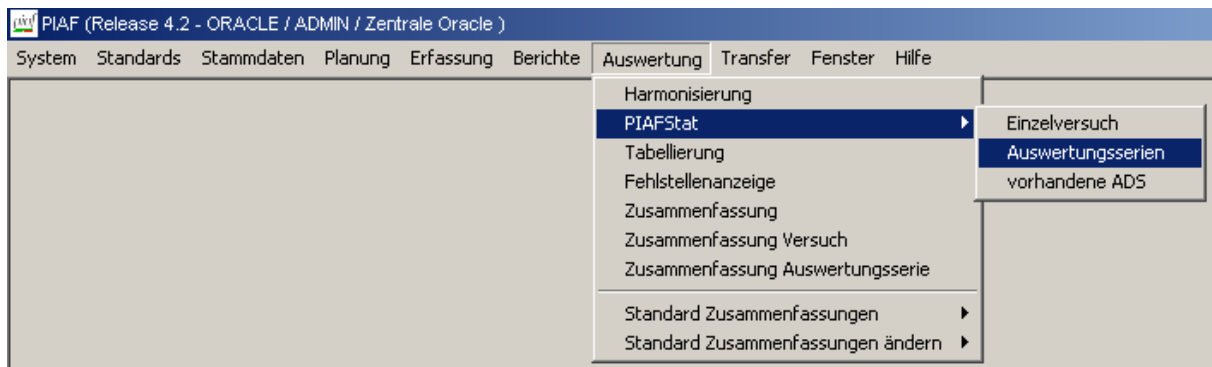


Fig. 1: Pull down menu of PIAF

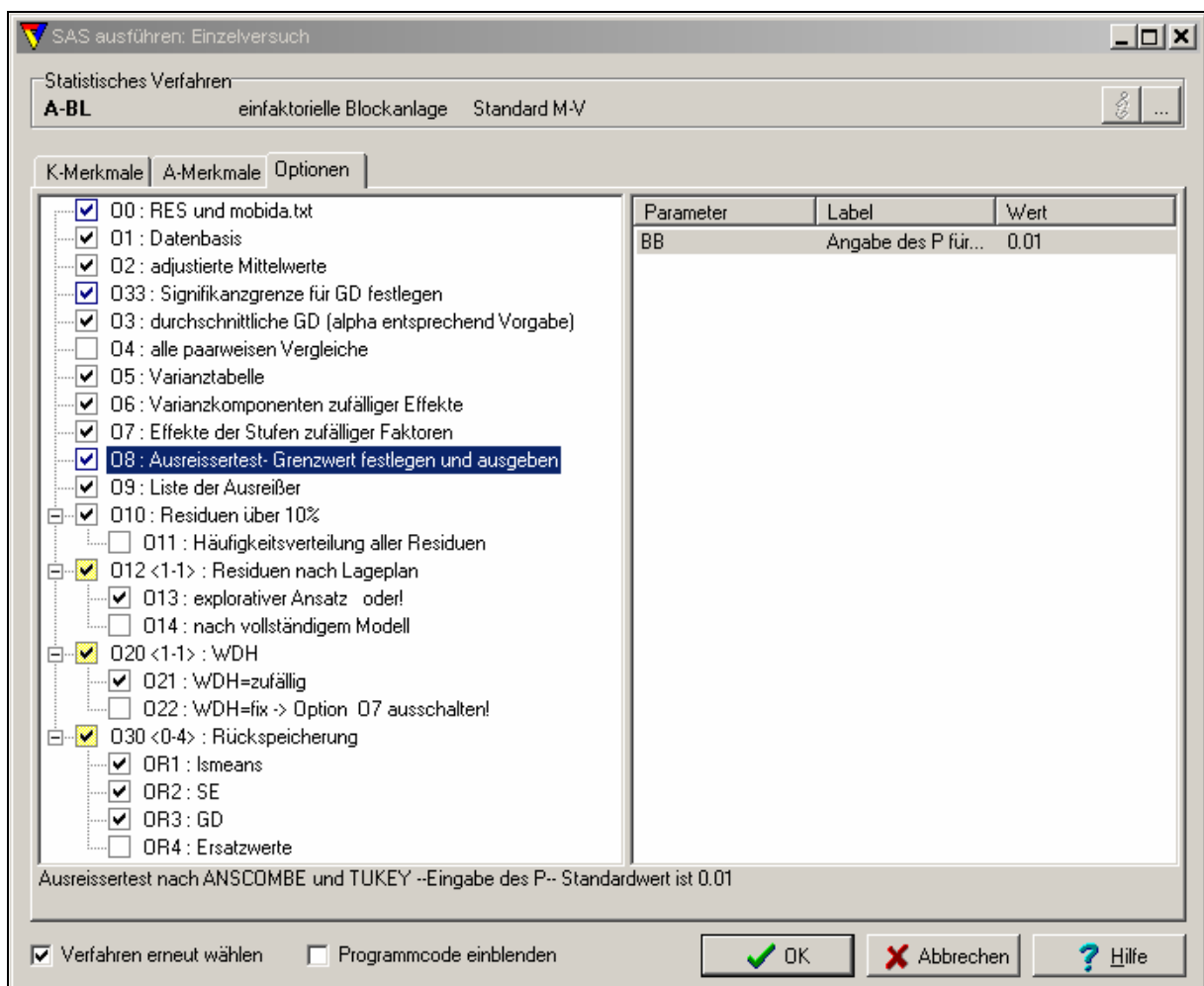


Fig. 2: Options of the PIAFStat – procedure “einfaktorielle Blockanlage”