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DUST FOR WINDOWS (DUSTNT) REPORT ON DEVELOPMENTS

Document prepared by experts from the United Kingdom

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## DUST for WINDOWS (DUSTNT)

#### REPORT ON DEVELOPMENTS

#### The DUST system

The DUST system has been developed to meet the needs of DUS (Distinctness, Uniformity and Stability) testing stations for software to organise, analyse and report data from DUS field trials. It is in routine use at several UK DUS centres for the management of data from trials of grasses, legumes, vegetables and fodder crops, and incorporates many of the UPOV-recommended statistical procedures for these crops.

The DUST system handles data through the stages of collection, storage, single-year summary, and multi-year summary. It may also be used to identify most similar varieties and produce variety descriptions. Each stage comprises one or more modules that will read and process data files and either produce new data files for processing by other modules or produce analyses.

DUST is available in an MSDOS or a Windows version.

### **Developments**

During the past year DUST for Windows has been developed as follows:-

- The output from the main module for COYD analysis (TVRP) has been expanded. In addition to providing a summary of the overall distinctness of the candidates from the other varieties, it now also provides the sign and significance of the differences in the character means between the candidates and every other variety.
- The module DUS9, which is interactive in MSDOS, has been rewritten as a module which is interactive in Windows, called INTR. It is used to compare two specific varieties for distinctness either within a year or over years. It will work with data from "cyclic controls" type trials as well as with data from "complete controls" type trials.
- For the purposes of analysis, some very large trials are regarded as if they were made up of a number of trials defined by maturity groups, e.g. Early, Intermediate or Late. In such cases, specifying which varieties are to be analysed from a list of all the varieties in a trial can be tedious. As a result, the TVRP and FIND modules, which are used for COYD analyses and for finding most similar varieties, have been adapted in order to give the user the option of filtering the list of varieties to just those belonging to certain maturity groups. This is done using a Filter File. A Filter File defines which maturity group each variety in a trial belongs to and must be set up by the user according to the format in the user-manual (it may also be converted from an equivalent Excel file). In opting to apply a Filter File, the user must select the Filter File and specify which maturity groups he is interested in. The list of varieties to choose from for analysis will then be reduced to just those belonging to the specified maturity groups.
- The latest version of DUSTNT is available from http://www.afsni.ac.uk/services

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## Work in progress

- A downloadable, web based presentation that will function as an introductory tutorial and a "How To Get Started" user-manual is still under development. As DUSTNT is based on the MSDOS version of DUST, namely DUST9, the user will be referred to the DUST9 user-manual for instructions on the more advanced aspects of the system.
- A French translation version of DUSTNT is currently being produced.

For further information please contact:

Dr Sally Watson, Biometrics Division, Department of Agriculture and Rural Development, Newforge Lane, Belfast BT9 5PX, UK Phone: (44) 2890 255292 Fax: (44) 2890 681216 Email: sally.watson@dardni.gov.uk

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