

Integrated Nordic-Baltic Genebank Information Management System

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The Nordic and Baltic genebanks are responsible for conservation of plant genetic resources for food and agriculture. The e-infrastructure used by genebanks is termed Genebank Information Management System (GIMS). Implementation and development of a new Nordic Baltic integrated GIMS with functionalities that allows for incorporation of more data (phenotype/genotype) will be of great benefit for breeders and researchers using plant genetic resources. Efficient use of genetic resources is dependent on an informative database which allows for simple to complex queries, from Boolean searches to more complex queries using combined Boolean searches together with filtering for phenotypic (for example, morphology, disease resistance, yield, quality parameters) and geographic information. In the future there will also be a need to integrate genotypic (genomics) data on the collections. The aims are to fully integrate all information on clonal material from primary collections to clonal archives, develop batch tools for registration of material (including pictures, passport and phenotype-data), deploy tools to support seed/clone health information (phytosanitary documentation), set up direct links to FAO and ITPGRFA for reporting on PGR, direct export to European (EURISCO) and Global (Genesys PGR and GBIF) databases, provide advanced viewing and filtering methods for phenotypic data, develop capabilities to integrate geographic information, increased ability for Boolean searches across more database tables, prepare for future genotypic (genomic) data on collections, and a “one-stop-shop” for researcher to find and order material from all Nordic-Baltic genebanks.

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