

## Global Database of Wheat Wild Relatives

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**Abstract:** Seed samples of wheat wild relatives are maintained in numerous collections worldwide. WIEWS system of Food and Agriculture Organization (FAO) list 50 collections having *Aegilops* germplasm; many more keep wild *Triticum* germplasm. There is no global "one-stop shop" for scientists wishing to find particular germplasm although many genebanks offer Internet access to information on their collections. Genetic Resources Unit (GRU) of ICARDA in collaboration International Plant Genetic Resources Institute (IPGRI) and major collections maintaining wild wheat germplasm has compiled a Global Database of Wheat Wild Relatives for samples of *Aegilops* and wild *Triticum*. The database covers nearly 19,000 accessions from 62 institutes/genebanks. The samples were collected on over 150 missions between 1948 and 2004. Whenever the collection site data were sufficiently detailed (more than 6,500 sites at present) the collection sites were geo-referenced to facilitate production of distribution maps and links with Geographic Information System (GIS). The latter enables access to environmental attributes of collections sites and using this possibility we have added more than 65 environmental variables to the system: long-term monthly and yearly averages of rainfall, minimum and maximum temperatures, potential evapotranspiration, aridity indices, agroclimatic zone, soil type and salinity. These detailed environmental data apply to approx. 80% of accessions. Comprehensive passport information combined with environmental data make the database a useful tool to select wild relatives for utilization in wheat breeding. The database is available on CD-ROM; an Internet version should be available soon.