



Maize local landraces used like prebreeding material for simultaneous improvement of main agronomic traits

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In the maize breeding programs the local maize landraces shows a particular interest, especially as useful sources for adapting capacities, physiological, agronomic and valuable quality traits. A morpho-physiological evaluation of main germplasm genepool represented by 200 local maize landraces was achieved through a CEEX Project (2006-2008). Characterization of maize local populations was done in an appropriate experimental system based on morpho-physiological descriptors edited by the International Institute of International Plant Genetic Resources (BIOVERSITY) located in Rome (www.bioversityinternational.org). Evaluation of maize genetic resources is found in the online database [http:// www.scdasuceava. ro/ biomaize](http://www.scdasuceava.ro/biomaize) which includes information concerning the value of biological material with useful genes for breeding programs. It was noticed some maize local landraces which can be used like initial genetic material for breeding of main traits (precocity, resistance to low temperatures, elements of productivity and resistance to root and stalk lodging, diseases) such as: Rodna16, Botiza12, Ivăneasa1, Solca3, Vama7, Gersa11, Tiha Bargaului 8 Moisei 5, Valea Mare 2, Bucerdea, Putna 3 Pojorâta, Brodina 1.

Of a particular interest are local populations valuable like rebreeding material for simultaneous improving of some important agronomic traits: Rodna 16 for cold resistance and disease resistance Botiza 12 for low temperatures resistance, resistance to root and stalk lodging, small percentage of sterile plants Moisei 5 and Valea Mare 2 for productivity, low temperature resistance, precocity, resistance to diseases and others locale landraces that may be selected from the mentioned database.