3130 - Plant Genetic Resources

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EVALUATION OF GRAPEVINE GERMPLASM UNDER TROPICAL CONDITIONS IN BRAZIL

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ObjectivesIn the last years, a great expansion of grape production towards tropical regions has occurred in Brazil and the influence of the climate conditions on agronomical and berry quality traits and features of grape-derived products is well-known. The objective of the current work is to evaluate agronomical traits of accessions from the Grapevine Germplasm Bank under tropical conditions.MethodologyIn 2010, a vineyard with 200 accessions from BAG-Uva was installed at the Experimental Station of Tropical Viticulture, Embrapa Grape and Wine (latitude 20º 09' S, and longitude 50º 35' W), employing ?IAC 572' as rootstock and in a pergola configuration. The group consisted mainly of Vitis labrusca, V. bourquina, hybrids and other wild Vitis species accessions. The genetic material is currently being characterized by phenological observations, flower typing and berry and cluster features. During harvesting, productive components are evaluated and samples are collected for must evaluation. Besides investigation of the incidence of main grapevine diseases, the occurrence of grapevine rust and leaf blight, two important diseases that increased their importance from the 1990s, causing losses for tropical viticulture, will also be studied. The evaluations will be carried out during a five-year period in order to define the accessions displaying the best agronomical and quality traits to be incorporated into the breeding program for tropical grape cultivars.ResultsThe first evaluation was performed between October and November, 2011. Genetic variation among the accessions was observed for the considered traits, important in the development of novel grapevine cultivars for tropical regions, including berry color, flavor, sugar content, texture, adherence to cluster, berry and cluster size. From the investigated accessions, 8% exhibited high fertility and 76% displayed resistance to berry skin cracking.During that growth season, it was not possible to evaluate rust and leaf blight incidence due to unfavorable climate conditions to disease occurrence. ConclusionsAmong the investigated accessions, it will be possible to identify progenitors with interesting attributes for the development of novel table grape cultivars for tropical regions, such as high fertility and resistance to berry skin cracking.