Discriminant function analysis among winged bean (*Psophocarpus tetragonolobus* (L.) DC.) genotypes for enumerating available variability

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ABSTRACT: Twenty one genotypes of winged bean from different sources were evaluated, at the Department of Olericulture, College of Agriculture, Vellayani, Thiruvananthapuram (Kerala) during 2013-2014. Morphology, yield and quality attributes of these genotypes were substantially different. Genotypes PT 21 and PT 1 showed maximum duration in flowering and fruiting in a year, while most of the accessions showed flower initiation and peak flowering and fruiting under short day period's falls from September to February. Days to first flowering (75.05 to 178.83), pods per plant (44.98 to 154.49) and pod yield (696.60 g to 2703.33g per plant) also showed considerable variations. Based on selection index including both vegetative and qualitative characters PT 21 was ranked first with an index of 24799.37 followed by PT 6 (23324.76). Overall ranking based on all the selected characters showed the relative superiority of PT 21 and PT 1 over others.

Key Words: Winged bean, variability, selection index, genotypes, discriminant function.