Evaluation of Superior Hybrids Grape Genotype in Comparison with Iranian Seedless Cultivars

A. Ebadi*, O. Goodarzi and M. Fattahimoghadam¹

Grape is one of the most important fruit crops in which seedless cultivars have been more interested among consumers. Iranian seedless grape cultivars are limitted and have faced some undesirable traits. Therefore, breeding them to achieve superior seedless cultivars is necessary. In order to evaluate 13 hybrids obtained from crosses among four seedless male parents and seven seeded female parents and comparing them with Iranian native seedless cultivars (Bidaneh Sefid, Bidaneh Ghermez, Askari, Yaghouti), this work was conducted in randomized complete block design with eight replications during years 2014 and 2015 in College of Agriculture and Natural Resources, University of Tehran. Hybrids were 4 to 5 years old and trained to figure of self-supported. Comparisons of data showed significant differences among hybrids for all measured traits. According to panel test hybrids were derived in to groups of seedless and semi seedless. Hybrids B98 and Q45, had the highest berry size while Yaghouti had the lowest. Hybrids B98 and Q45, had the gratest berry weight. Bidane Ghermez had the highest ratio of sugar to acid. Hybrids L125, B98 had the highest and Bidane Ghermez had the lowest single seed fresh weight. Considering all qualitative and quantitative traits, hybrids I21, S51, B98 L127 Q45 J73 R80 S55 and L125 were selected as superior hybrids.

Key Words: Breeding, Female parents, Panel test, Single seed fresh weight.

Professor, Former M.Sc. student and Professor of Department of Horticultural Sciences, University College of Agriculture & Natural Resources, University of Tehran, Karaj, Iran.

^{*} Corresponding author, Email: (aebadi@ut.ac.ir).