

Preliminary study of pistillate flower abscission of walnut (*Juglans regia* L.) in Iran

H.Moradi(1),M.Sanei Shariat-panahi(2) and A. Vezvaei(3)

1- Agricultural Research Center of Chaharmahal Va Bakhtiari, shabrekord , Iran

2,3- Horticultural Department of Agricultural faculty of Tehran University, Karaj,Iran

Occurrence and extent of pistillate flower abscission(PFA)of the persian walnut were investigated during 1996-1997 at the walnut genotype collection station of the Seed and Plant Improvement Research Institute in Karaj. Also some observation were conducted in 1996 for PFA occurrence in walnut genotype collections of Mashhad, Shahrood and Oromieh.

PFA occurred in a very high level at all orchards with considerably different levels among genotypes. The rang of recorded PFA for genotypes was from 0 to 98%. The average PFA for genotypes significantly differed among sites in 1996. Mean of PFA for the same genotypes differed significantly between two years(1996 and 1997) in Karaj. No relationship was found between the extent of PFA and any other minerals. Thus, the nutritional conditions as indicated by standard midsummer sampling did not appear to be related to PFA . Low postive correlations were found between PFA and pistillate flower density ,flowering index, catkin density and vegetative points density.