

ABSTRACT

AN ANATOMICAL AND HISTOLOGICAL INVESTIGATION ON GRAFT FORMATION OF SOME APRICOT VARIETIES GRAFTED ON SOME CLONAL ROOTSTOCKS AND DETERMINATION OF NURCERY TREES PERFORMANCES

A.Deniz COŞKUN

Ph.D. Thesis, Department of Horticulture
Supervisor: Prof.Dr. F.Ekmele TEKİNTAŞ
2012,183 pages

This study has been carried out at Horticulture Department of Adnan Menderes University and Odemis district of İzmir, between 2006-2009. In this study which had been aimed to determine the graft ability and anatomical development of graft compatibility of some apricot varieties grafted on some clonal *Prunus* rootstocks and the determination of their nursery trees performances. In this study, had been used *Cadaman*, *GN 15*, *Myrobolan 29C*, *GF 677*, *Pixy*, *Apricot seedling* (for control) and *Tokaloğlu*, *Precoce de Tyrinthe*, *Ninfa* apricot varieties.

The progress of graft compatibility at the sections of graft unions were observed to take on the 14, 21, 28, 60 and 180 days after the budding and also were observed the morphological development of all varieties and rootstock combinations during three years. The cambial differentiation occurs after a callus bridge is formed between the stock and scion. The graft union and the development is found satisfactory. But, the varieties were grafted on *Pixy* rootstock, had determined that the slower graft development than the other combinations. According to morphological development of the graft combinations, *Tokaloğlu* variety has been shown the better development when was grafted on *Myrobolan 29C* and *GF 677* rootstocks. *GN 15* and *Myrobolan 29C* rootstocks were the better rootstock for morphological development of *Precoce de Tyrinthe* variety. *GN 15* and *Myrobolan 29C* rootstocks also given the better results of morphological development for *Ninfa* variety.

Key Words: Apricot, *Prunus*, budding, compatibility, clonal rootstock