

- Project Title** : Obtaining True to Type and Healty Propagation Materials on the Stone Fruits and Basic Studies on Production of Certified Seedlings
- Start /End Date** : 2006-2012
- Supporting Body** : GDAR
- Leader** : Assoc. Prof. Dr. Mustafa GÜMÜŞ
- Co-researchers** : Prof. Dr. Serra HEPAKSOY, Prof. Dr. Ali ÜNAL, Prof. Dr. Adalet MISIRLI, Assoc. Prof. Dr. Murat SİPAHİOĞLU, Dr. Deniz EROĞLU, Dr. Ertuğrul ARDA, Selçuk BİLGİ, Dr. Aydan KAYA, Dr. Erol KÜÇÜK, Prof. Dr. Semih ERKAN, Assis. Prof. Dr. Hüseyin TÜRKÜSAY, Doç. Dr. Galip KAŞKAVALCI
- Summary** : Turkey has suitable ecological conditions for most of the fruit trees. Almost all of Prunus species have been grown in Anatolia and considered to be an important germplasm source for a lot of fruits. Because of no chemical treatments to protect the plants, viruses and virus-like diseases are one of the most important factors that restrict the quality and production of fruit growing. This situation is same also for growing of stone fruits. Viruses and virus-like diseases are prevalent in the fruit production areas in Turkey and the most important reason for it is that new orchards have established with virus-infected production materials. Using non-indexed propagation stock materials causes economic losses of fruit production and also viruses have been spread without any control in Turkey. In this study, the propagation of basic material for stone fruits were aimed in order to confirm the criteria of certified plants. The plant materials of the work in question were collected from research institutes located in different areas of Turkey. The detection of virus appearance in plant propagation materials was done by serological and molecular methods. Based on our findings, it was found out that 43 of 393 samples were infected with at least one virus and there was no viroid infection in all specimens. The samples from peach varieties and rootstocks had the highest infection ratio, following by sweet cherry and apricot. The mentioned study will continue with the production of propagation materials coming from varieties and rootstocks determined as healthy. In recent years, invitro methods are used for rootstock propagation in fruit growing. For this purpose, invitro propagation possibilities of Myrobolan B and Myrobolan 29C rootstocks were investigated. In addition, studies were done Prune Dwarf Ilarvirus (PDV) eradication in mahlep genotype (Prunus mahalep L.) by using chemotherapy.invitro thermotherapy and chemotherapy.