

Project Title : Determination of Damage and Economic Threshold Level of *Zyginidia pullula* (Boherman, 1845) (Homoptera: Cicadellidae) on Second Crop Maize in Aegean Region

Start Date : 2011

Supporting Body : GDAR

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Summary : Cereals, which are of much importance in human nutrition, are taking special place in Turkish agriculture. Among these grains maize (*Zea mays* L.) in recent years along its nutrition value has found a wide proportion of usage in oil, dying, and fodder industries. In recent years as a result of the increase in the areas of usage and spread of maize production as a secondary crop there has been seen a wide expansion in maize fields in Aegean region. Accordingly increase in entomological problems has been seen related to the day to day increase in maize production areas of Aegean region. Along with European cornborer (*Ostrinia nubilalis* Hbn.) and Mediterranean corn borer (*Sesamia nonagriades* Lef.) being major pests, many other damaging insect species has been observed in maize production fields of the region. Among those spesies of Cicadellidae (Homoptera) family is also a main pest group of the maize production areas of the region.

In recent years different studies were conducted both in Turkey and abroad on species bound to Cicadellidae family with aim to determine their taxonomy and population densities. These studies showed that there are many insect species in maize fields related to Cicadellidae family and that some of them have reached a considerably high population levels.As a result of the studies it was found that *Zygindi pullula* (Boheman1845) and *Asymmetrasca decedens* (Paoli, 1932) (Homoptera: Cicadellidae) species besides being a potential pest for maize agriculture in many countries, were observed to be dense also in maize fields of the Aegean region.

Z. pullula' reaches high density especially in early period of the secondary crop maize in Aegean Region, but so far there is not any information about how much damage this pests causes. The aim of the project which will carrying out between 2011-2013 is to assess the damage that Cicadellidae species causes to second maize plants, and determining it's economic threshold levels.