

System for Electronic Detection of Bite Infestation

Authors: [Panagiotis Papadopoulos](#) and [Ioannis Vavourakis](#)

Affiliation: *Creative Systems Engineering, 28is Oktovriou 119, Athina 112 51, Greece*
info@creativese.eu

The effective management of the annual *Dacus* infestation levels in the olive tree cultivation of our country constitutes a major challenging issue due to several involved uncertainties and causes each cultivation period unforeseen distortions in the vertically integrated economic exploitation chain of the annual olive oil production. The intensity of the *Dacus* infestation on the olive crops varies continuously throughout the year, from year to year, month to month and from region to region, due to the variance in the local microclimate conditions in the different geomorphologies and due to the density of the different olive variants thriving in each region. This necessity has led to the development of an electronic *Dacus* trap, which can provide *Dacus* fly population measurements to olive growers remotely on a continuous 24/360-time streaming basis, to continuously monitor the changing *Dacus* infestation rates in the olive fields, to set in action immediate spaying or other appropriate interventions. These counts of the number of *Dacus* flies detected from an extended number of installed electronic *Dacus* traps dispersed over a wide area in the olive orchards together with the locally measured meteorological data at each installation point, of temperature and humidity, are transmitted through field networking electronic systems and transmitters and posted in a web page in the world wide web.

Keywords: Olive tree; *Dacus* infestation; electronic pest monitoring.