

Project Title : Investigation on the effectiveness of cold-treatment against Mediterranean fruit fly (*Ceratitis capitata* Wied.) (Diptera: Tephritidae) after its inoculation to citrus fruits

Start Date : 2003

Supporting Body : GDAR (General Directorate of Agricultural Research and Policy)

Leader : Dr. F. Özlem ALTINDIŞLI

Co-researchers : Assoc. Prof. Fatih ŞEN, Tefvik TURANLI, M. Fatih TOLGA, İlkey ÇAKANDİKİCİ

Summary : Export of fresh fruits into Far East Countries is impossible since Turkey is infested with Mediterranean fruit fly, *Ceratitis capitata* Wied., which is a serious insect pest in the quarantine list of these countries. The Far East Countries demand scientific studies proving 100% mortality of the pest as a quarantine treatment before import. Bornova Plant Protection Research Station took the charge of conducting scientific studies to find an effective quarantine measurement (cold treatment) which kills Mediterranean fruit fly 100%. Quality analysis of grapefruits after cold treatment has been made by the scientist of Horticulture Department of Agriculture Faculty at Ege University. The report of the tests and pest risk analysis of citrus in Turkey have been presented into MAFF together with an official application to remove the obstacle of fresh grapefruit export from Turkey to Japan in 2006. After reviewing study report, MAFF demanded to discuss the results face to face in Japan together with CIFEC members and researchers who have conducted the scientific tests. The meeting was held in Japan between 3 and 5 July 2007 by the participation of researchers and representatives of all member institutions of CIFEC as well as the experts of MAFF. Test results have been discussed in detail. MAFF accepted the report as sufficient and reported that the studies of Turkey were conducted conformably with the Japanese quarantine regulation on the removal of obstacle to fresh fruit export from the countries infested with Mediterranean fruit fly in 2007. Quarantine expert from MAFF visited Turkey in the citrus vegetation period to audit the experiments conducted by Bornova PPRS, to see the agricultural precautions including control treatments in the citrus orchards made by growers against Mediterranean fruit fly and procedures followed by Quarantine Departments and infrastructure of Turkish Ministry of Food, Agriculture and Livestock in-situ between 9 and 27 November 2008. Confirmatory tests were repeated with the attendance of Japanese Quarantine expert under the frame of "Examination Plan". Report of On-Site Confirmatory Test was prepared by the project leader of Bornova PPRS and submitted to MAFF via the General

Directorate of Exportation of Turkish Ministry of Economics. Japanese Quarantine expert also reported his own observation in Turkey to MAFF. Both of the two reports have been reviewed and deemed compatible by MAFF. MAFF has considered the studies as sufficient to eliminate Mediterranean fruit fly in grapefruits. Office of the Commercial Counselor of Turkish Embassy in Tokyo declared that MAFF would change its quarantine regulation required for the removal of obstacle to fresh grapefruit exportation from Turkey in 24 September 2009. Procurement committees of Japanese importers visited grapefruit exporters and packing houses in Turkey in 17-21 October 2009 and 17-23 November 2009 to establish connection. MAFF declared that the terms of reference on quarantine regulation regarding fresh grapefruit export originated from Turkey put into force by the notification of MAFF numbered 1307 and dated 18 August 2010. Grapefruits produced by Turkey could be imported by Japan on condition that they are exposed into cold treatment at 0.5 C for sixteen days uninterruptedly since the end of 2010. Fresh grapefruits have been exported from Turkey to Japan since the end of 2010. Same procedure has been completed for lemon in 2014.