**Fruit Fly Surveillance Trap Deployment Support Tool**

The Fruit Fly Surveillance Trap Deployment Support Tool (*FF-STD*) is a user interphase developed by ARO and UTH to support potential users in the selection of appropriate deployment locations in sensitive landscapes for fruit fly traps (conventional and/or smart). *FF-STD* was conceived and developed within the framework of the Horizon project *FF-IPM*. During the last decades, and as a result of increasing trade, people movement and climatic change, exotic fruit fly species of economic importance are invading and expanding into new regions, threatening agricultural fruit production costs and the environment. The *FF-IPM* project approached the problem of exotic fruit fly invasion by increasing and deepening our knowledge on the biology and ecology of these flies, and by developing methods and strategies to improve detection and mitigate their damage and geographic expansion. The *FF-STD* tool was conceived and developed as an instrument to support users and stakeholder’s organization to optimize surveillance trap-networks in large landscapes by directing the placement of traps into locations with higher probability of intercepting and detecting fruit flies. The developed tool is based on several years of research. *FF-STD* algorithm ponders “risk level” of potential fruit fly presence in the pre-characterized landscape by incorporating biological and ecological knowledge on the fruit flies, and by weighing different elements in the landscape and their geographic extent by a panel of experts. The *FF-STD* algorithm then determines specific geographic locations in the landscape of interest to deploy a pre-determined number of traps. The level of trap aggregation in the landscape, and the extent of land covered by the surveillance network is interactively determined by the user through the determination of number of traps and by “step” increments in the distance between adjacent traps. Initially, *FF-STD* users upload either a classified tif (raster) in UTM or a kml of the study area in WGS84 coordinates. After processing, *FF-STD* user downloads shapefiles containing the risk grid and points corresponding to the selected cells, along with land cover raster. These rasters include the original ESRI land cover data and a version that has been reclassified.

Link to FFSTD tool: <https://ffstd.agri.gov.il/>

