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Background & objectives

The spotted wing drosophila, *Drosophila suzukii* (Matsumura) (Diptera: Drosophilidae) is an invasive pest that has spread around the world over the last years. This fruit fly has become a major pest for wild and cultivated berry crops in Europe and America. In the area of southern of Spain, the largest producer of European berries, as well as in southeastern and middle Europe, this invasive pest has become a problem. This fast growth of the pest needs an exhaustive fruit fly monitoring in order to adapt the best pest control strategy.

The capture of females (reproductive agent) is a good indicator for monitoring the pest and contributes significantly to the interruption of the reproductive cycle of the pest thus reducing fruit damage.

The objective was to compare the bait efficiency for monitoring of Suzukii Trap[®] versus other attractants.

Material & Methods

Two field trials with Suzukii Trap[®] bait in berry crops were performed:

Trial 1. Coop. Moguer is a commercial raspberry field within a large and high-tech farm in Huelva (south of Spain).

· Captures of *D. suzukii* evaluated with:

- Vinegar
- Suzukii Trap[®]
- European std attractant



· Crop: raspberry

· Weekly counts of catches (total, males and females) were performed during November 2018

Trial 2. Region of Troyan, Bulgaria.



· Captures of *D. suzukii* evaluated. Two types of food traps:

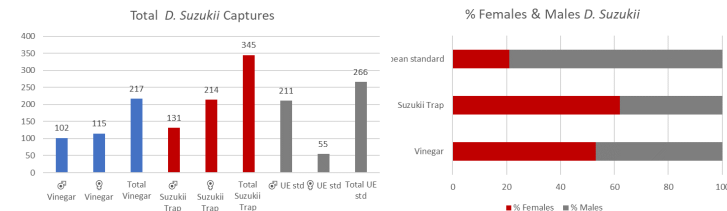
- red wine and natural apple vinegar (RWAV)
- Suzukii Trap[®]

· Crops: cherry, plum, raspberry, blackberry and blackcurrant

· 5-7 daily inspections were done up to the end of harvest. Total caught adults were counted during summer period 2018 (May-August)

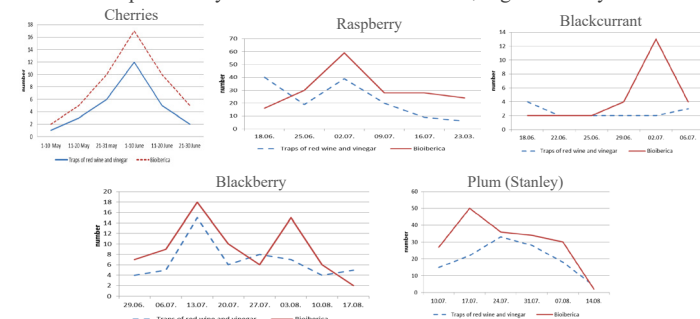
Results

Trial 1. Males, females and total captures of *D. suzukii*.



Suzukii Trap[®] gets more catches of *D. suzukii* and higher percentage of females compared to vinegar and other commercial UE standard attractant.

Trial 2. Population dynamics of adult of *D. suzukii*, region of Troyan.



Suzukii Trap[®] obtains higher number of *D. suzukii* compared to RWAV. Out of total of 869 flies, 507 were caught with Suzukii Trap[®] and 362 with RWAV.

Conclusion

Field trials performed suggest that Suzukii Trap[®], pesticide-free attractant formulation of natural origin, in comparison with other reference bait traps reached more catches of *Drosophila suzukii* and with a higher percentage of females (early-detected, damaging & reproductive agent) being efficient for monitoring the pest.