

CURRENT STATUS ON SPREADING OF *CERATITIS CAPITATA* IN ROMANIA

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> The Mediterranean fruit fly *Ceratitis capitata* Wiedemann (Diptera: Tephritidae), a highly invasive species, is one of the main pest damaging the fruit and vegetable production in the world.

> As a result of climate changes as well as intensive human mobility and commerce, *C. capitata* has spread from one country to another, reaching Romania in 2007.

> Since 2013, an early detection program for this pest has been started within the framework of three TC regional projects RER5018/RER5020/RER5021 (2013-2017) under the IAEA Vienna coordination and one project 2016-F-236 under Euphresco (2018-2019).

TRAPPING METHODS

○ Tephri-Trap® Biolure® baited with three-component lure (ammonium acetate, trimethylamine and putrescine) in individual dispensers or Unipack™, Tephri-Trap® baited with Trimedlure, Jackson traps baited with Methyl Eugenol or Trimedlure. DDPV strips inside Tephri traps were used as killing agents. A total of 130 traps were used in seven years of monitoring.

○ The traps were placed in fruit tree orchards in fruit growing areas from different parts of Romania and in backyards of houses and institutions, botanical gardens and experimental fields, in spring, summer and autumn seasons according to period of fruit ripening.

○ There were surveyed: sweet and sour cherry, apricot, peach, plum, apple, walnut in orchards and mixed in private gardens; grapevine plots; exotic fruit species as Chinese date (in experimental fields and in gardens with mix fruit trees), kaki persimmon and figs (in gardens with mix fruit trees).



RESULTS

○ Adults of *C. capitata* fly were trapped in small numbers every year of survey in all type of emplacement (fruit orchards, houses backyard, botanical gardens and experimental fields) in West, South and South-Eastern Romania, from the end of August to the end of October (Fig. 1).

○ The presence of *C. capitata* with notable adult populations was recorded in the traps in an experimental plot of jujube in Bucharest (Fig 2). The adults population was variable from year to year. The total annual captures were between 2 (2015, 2018) and 202 (2014) flies. No captures were recorded in 2017.

○ No specimen of the fly was found in the traps on sweet and sour cherry trees, these having as ripen period of the fruits the June month.

CONCLUSION

✓ Based on small and fluctuating captures of *C. capitata* in the traps recorded from 2013 until 2019, we could conclude that this specie has a low and sporadic presence and does not represent an important phytosanitary risk at this time in Romania.

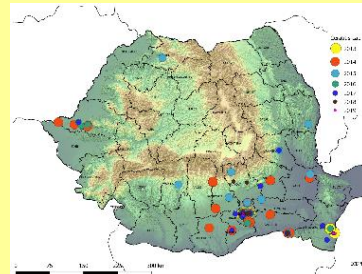


Fig. 1. Presence points for *Ceratitis capitata* in Romania

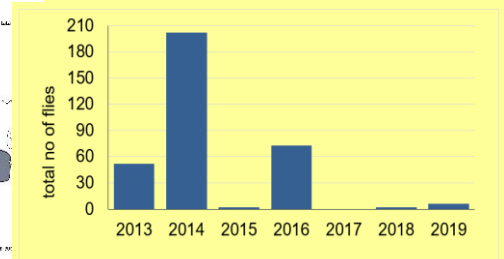


Fig. 2. *Ceratitis capitata* total annual captures on jujube