

Conference Abstract

New data on *Ceratitis capitata* (Wiedemann) (Diptera: Tephritidae) from Bulgaria

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Abstract

The Mediterranean fruit fly *Ceratitis capitata* (Wiedemann, 1824) (Diptera: Tephritidae) is considered to be one of the world's most destructive fruit pests because of its global distribution, wide host range and rapid dispersal. In the period 1956–2006, transient populations of the pest have been reported regularly in Bulgaria. The Bulgarian Food Safety Agency (BFSA) initiated monitoring of *C. capitata* in 15 regions of the country. The surveys were conducted during the period 2013–2018, using Jackson traps with attractant trimedlure and Tephri traps with Biolure.

The presence of adults of *C. capitata* was confirmed in peach, apple and mixed orchards, as well as in private yards at five locations in southern and south-eastern Bulgaria: Blagoevgrad, Kyustendil, Pazardzhik, Plovdiv and Sliven. The results from the five-year monitoring showed a variable abundance of *C. capitata* adults captured in different years and localities. The highest mean captures were recorded in 2014 (195) and 2018 (422), no specimen of the *C. capitata* was found in 2017. In 2018 the most abundant captures were from fruit gardens in Plovdiv (297 $\[Gamma]$; and Sliven (18 $\[Gamma]$; 22 $\[Gamma]$). Over the entire study period, the lowest rate of adult captures was in July and August (only a few individuals in traps in each region).

The population abundance began to increase at the beginning of mid-September and a peak was observed at the beginning of mid-October. The results on the seasonal

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population fluctuations obtained are similar to data from neighbouring countries: northern Greece, Montenegro, Croatia, Romania, and Turkey.

Keywords

Ceratitis capitata, monitoring, distribution, abundance, Bulgaria

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