



# TEAM 2016



Tephritid Workers  
of Europe, Africa and the Middle East

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ABSTRACTS

**5\_114. INVENTORY OF PARASITIDS OF *CERATITIS COSYRA*  
AND *BACTROCERA DORSALIS* (DIPTERA: TEPHRITIDAE), PESTS OF  
SEVERAL FRUIT SPECIES IN THE DEPARTMENT OF BORGOU, BÉNIN**

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Fruit flies (Diptera: Tephritidae) are widespread frugivorous pests of economic importance infesting some fruit species in Benin, such as *Mangifera indica*, *Psidium guajava*, *Vitellaria paradoxa*, *Annona senegalensis* and *Sarcocephalus latifolius*. The objective of this study was to obtain information on the parasitoids of *Ceratitis cosyra* and *Bactrocera dorsalis*. The study was conducted in four townships (Tchaourou, Parakou, N'Dali and Bembéréké) in the Department of Borgou, Benin, from April to October 2009. A total of 7270 fruits were collected from the five fruit species and the four districts, taken to the laboratory and placed on sand in gauze-covered containers to collect pupae and parasitoids. Pupae were collected every 5 days by sifting the sand. We obtained 54,171 pupae from which six fruit fly species emerged, the two dominant species being *C. cosyra* (69.7%) and *B. dorsalis* (11.8%). Seven species of parasitoids were collected; *Fopius caudatus*, *Tetrastichus giffardianus*, *Pachycrepoideus vindemmiae*, *Fopius silvestri*, *Diachasmimorpha fullawayi*, *Psytalia cosyrae* and *Psytalia concolor*. *Fopius caudatus* was the main parasitoid species collected in the study. Moreover, among the cultivated fruit species, *M. indica* (mango) had the highest fruit fly infestation rate (average of 32.2 pupae/kg fruit), while fruit flies from *P. guajava* (guava) were the most parasitized. Generally, the wild fruit species had more fruit fly infestation which was more parasitized than the cultivated species.

*Keywords: fruit flies, Ceratitis cosyra, Bactrocera dorsalis, parasitoids, infestation rate, parasitism rate*