

TIGER MOSQUITO SURVEILLANCE PROGRAM IN THE REGION OF MURCIA: POPULATION DYNAMICS IN MUNICIPALITIES

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Abstract Tiger mosquito (*Aedes albopictus*) was recorded in 2011 at first time in the Region the Murcia. After this year to 2017, only municipal or local studies were carried about, mainly by the Universidad de Murcia team. In 2018, the regional Public Health Service started a surveillance program which became standard in 2019, about the collection method, sampling frequency, etc. In 2021, the last free municipality in the region was positive and the occupation, at municipal level, of the region was completed. In this work, the annual population dynamics of the period 2019-2021 in the municipalities are studied and compared. Data was obtained from the standardized sampling with duplicates ovitraps in each point, collected every two weeks, in all municipalities of the region, with 266 points in 2019, 297 in 2020 and 301 in 2021. The phenology is similar in general, but the slope of the increasing and the max values differ among municipalities. The positivity as percentage of positives has been compared in the spacial (% positive points) and temporal (% positive weeks) aspects among municipalities as well as the mean of eggs collected in ovitraps. Both variables show different intensity of infestation among municipalities. Those results should be taken into account in order to adopt measures of control in every municipality.

Key words Tiger mosquito, surveillance program, population dynamics