Tiger Mosquito Surveillance Program in the Region of Murcia: Population Dynamics in Municipalities

Introduction

Aedes albopictus was recorded in 2011 at first time in the Region the From 2011-2017, only Murcia. municipal or local studies were carried about. In 2018, the regional Public Health Service started a surveillance program which became standard in 2019.

In this work, the annual population dynamics of the period 2019-2021 in the municipalities are studied and compared

Materials & Methods

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the Data obtained from was 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

2019

References and cited literature

- (Skuse, 1894) in Spain 2015. Acta Tropica, 164, [6].
- Region of Murcia, Spain. International Journal of Environmental Research and Public Health, 17(11), 4173.

Eva María Muelas & Francisco Collantes

1 Servicio de Sanidad Ambiental, Consejería de Salud, Comunidad Autónoma de la Región de Murcia, Spain. 2 Departamento de Zoología y Antropología Física, Universidad de Murcia, Spain.

Results



Week number

The phenology is similar in general, but the slope of the increasing and the max values differ among municipalities



Spacial positivity (% positive points by municipality)

Both types of positivity have changed over time, in general as increase. Both types of positivity show different intensity of infestation among municipalities

• Collantes, F., & Delgado, J. A. (2011). Primera cita de Aedes (Stegomyia) albopictus (Skuse, 1894) en la Región de Murcia. Anales de Biología, 33, 99–101. • Collantes, F., Delacour, S., Delgado, J. A., Bengoa, M., Torrell-Sorio, A., Guinea, H., ... Lucientes, J. (2016). Appendix: Updating the known distribution of Aedes albopictus

• Collantes, F., Méndez, M. J., Soto-Castejón, C., & Muelas, E. M. (2020). Consolidation of Aedes albopictus Surveillance Program in the Autonomous Community of the



Week number

Temporal positivity (% positive bi-weeks)





Conclusions

- municipalities of the Although all Region of Murcia are already colonized by the tiger mosquito, each shows different degree of one occupation and intensity.
- Although the management of the pest on each municipality, the falls information on the whole must be taken into account given the natural and artificial dispersion of the insect.

60-81,3% 81,3-87,5%

Further Research

- Typification habitats local OŤ favourable for tiger mosquito breeding and development.
- Strategies for citizen cooperation in the control of breeding sites.

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