

## SAND FLY (*PHLEBOTOMUS*) SURVEILLANCE IN LEGANÉS, SPAIN

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**Abstract** The Phlebotominae include many genera of blood-feeding (hematophagous) flies, including the primary vectors of leishmaniasis. Species belonging to the genus *Phlebotomus* are responsible of the transmission of this important parasitic disease in Europe. Leishmaniasis is a zoonotic disease, widely spread all over the world, and an endemic disease in some Spanish regions. Within the Autonomous Region of Madrid, some south populations were affected by an unexpected outbreak from 2009. Since then, over a thousand cases have been reported in the region, the vast majority related to the outbreak. After the municipality of Fuenlabrada, Leganés has had the largest number of affected inhabitants. Since 2012 a systematic Sand fly surveillance program has been implemented in the area. Based on both castor oil traps and CDC light traps. In Leganés more than 2.500 tramping records have been registered by 2019, with both number of individuals and species. During the study the number of sampling points has varied in between 20 and 30. Almost 70.000 Sand flies were collected and identified. *Phlebotomus perniciosus* is the most common species (>60%), followed by *Sergentomyia minuta* (>30%), while the presence of *P. papatasi* and *P. sergenti* was residual. All the information gathered was of great relevance in the outbreak management and has increased the knowledge of both the vector and the disease. Data that delves into the local phenology of the sand fly and the different species involved will be presented.

**Key words** Hematophagus flies, leishmaniasis, castor oil traps, medical entomology