

Traumatic cutaneous myiasis by *Wohlfahrtia magnifica* in a stray dog in Italy

In May 2016, a stray male dog roaming in an area used for sheep grazing close to Manfredonia (Apulia, Italy) was captured by a charity and presented to a veterinary practice for lameness. There were many grass awns between the digits and a lesion between the second and third interdigital spaces of the right thoracic limb. This wound was a subcutaneous tunnel with two entry points both with defined margins and filled by maggots at different development stages (Fig. 1). It was washed with povidone-iodine (Betadine) solution and the maggots were removed using tweezers. Twenty of the largest maggots were identified as third-stage larvae of the spotted flesh fly *Wohlfahrtia magnifica* (Diptera: Sarcophagidae) (Fig. 2). The dog was treated with a cutaneous preparation of imidacloprid and moxidectin. The dog recovered well with no sign of myiasis one week later.

W. magnifica is an important myiasis-causing fly. It is an obligate parasite of warm-blooded vertebrates, including humans, and is found in tropical and subtropical areas. Larvae of *W. magnifica*

are usually laid in natural body orifices, such as the nose, eyes or genital regions, but wounds are also used. The larvae feed and mature in five to seven days and then leave the wound to pupate, often having caused extensive destruction of the infested tissues. Wohlfartiosis usually occurs in livestock, mainly sheep, and, if untreated, it can lead to severe production loss. Although rarely reported, traumatic myiasis in dogs should be not surprising, given the widespread nature of the parasite.

D. A. Raele¹*, D. Galante*,
N. Pugliese*^{ORCID} and M. A. Cafiero*

¹Unit of Medical Entomology, Department of Virology,
Istituto Zooprofilattico Sperimentale della Puglia e della
Basilicata, Via Manfredonia, 20-71121, Foggia, Italy

¹Corresponding author email: donatoantonio.raele@izspb.it



FIG 1. Infested wound of a free-ranging dog: transfixion lesion of the foot showing two entry holes and several maggots at different development stage

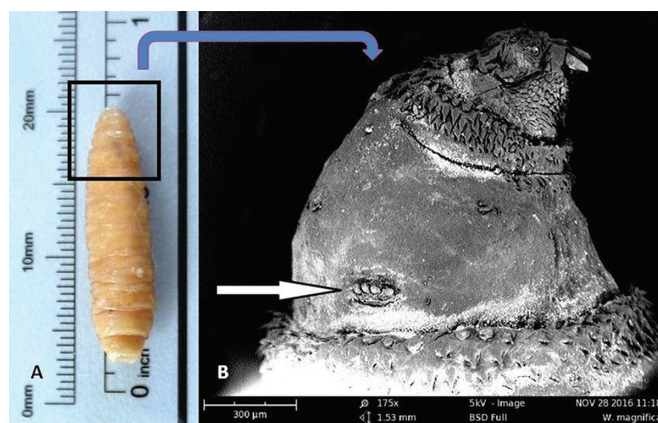


FIG 2. *Wohlfahrtia magnifica*, third-instar larvae: (A) dorsal view and (B) electronic micrograph of the cranial end detailing the five-lobed anterior spiracle (white arrow)