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DIPTERA PSYCHODIDAE PHLEBOTOMINAE
AND SYPHONAPTERA OF MONTECRISTO ISLAND
(TUSCAN ARCHIPELAGO)

SUMMARY

The Psychodidae Phlebotomine sandflies *Phlebotomus mascittii* and *Sergentomya minuta* have been collected in Montecristo Island. *P. mascittii* is a rare species in Italy. In addition, are here recorded from Montecristo also the Syphonaptera *Nosopsyllus fasciatus* and *Leptopsylla segnis*.

Key words: Phlebotomine sandflies, fleas, Black rat.

RIASSUNTO

Due specie di Ditteri Phlebotomini (*Phlebotomus mascittii* e *Sergentomya minuta*) e due di Sifonatteri (*Nosopsyllus fasciatus* e *Leptopsylla segnis*) vengono segnalati nell'isola di Montecristo. *Phlebotomus mascittii* è un possibile vettore di malattie parassitarie (*Leishmania infantum*).

Parole chiave: Phlebotomini, pulci, ratto nero

To the best of our knowledge no data are available on the presence of Phlebotomine sandflies on the Island of Montecristo. Some species of the genus *Phlebotomus* are important vectors of parasitic diseases affecting both human and animals (GRAMICCIA & GRADONI, 2005). *P. mascittii* was identified in the material collected in 2012 following morphological keys by THEODOR (1958) and LÉGER *et al.*, (1983). A total of 5 specimens (n=3 males, n=2 females) were captured. Also 11 specimens (n=8 males, n=3 females) of *Sergentomya minuta* were collected and identified. The scarce number of col-

lected individuals for both species does not allow to make any inference on seasonal patterns of presence and abundance. *P. mascittii* is a rare species in Italy, usually reported at low frequency. A wide-range study by MAROLI *et al.* (1994) on Phlebotomine sandflies distribution, reported *P. mascittii* to be more common in the regions of Central Italy (Tuscany, Latium, Abruzzo and Molise). In Tuscany, *P. mascittii* was identified in the municipality of Monte Argentario; from the harbor of Monte Argentario leaves the majority of the boats directed to Montecristo.

Black rats *Rattus rattus* is an invasive species that was present at high densities on the island of Montecristo until it was eradicated in 2012 (CAPIZZI *et al.*, 2016). Within the eradication project “LIFE NAT/IT/000353 Montecristo 2010: eradication of invasive plant and animal aliens and conservation of species/habitats in the Tuscan Archipelago, Italy”, rats were captured and their ectoparasites examined. Two species of fleas (Siphonaptera) were recovered from the examined rats: *Nosopsyllus fasciatus* (Bose, 1800) (Fig. 1) and *Lep-
topsylla segnis* (Schoenherr, 1911).

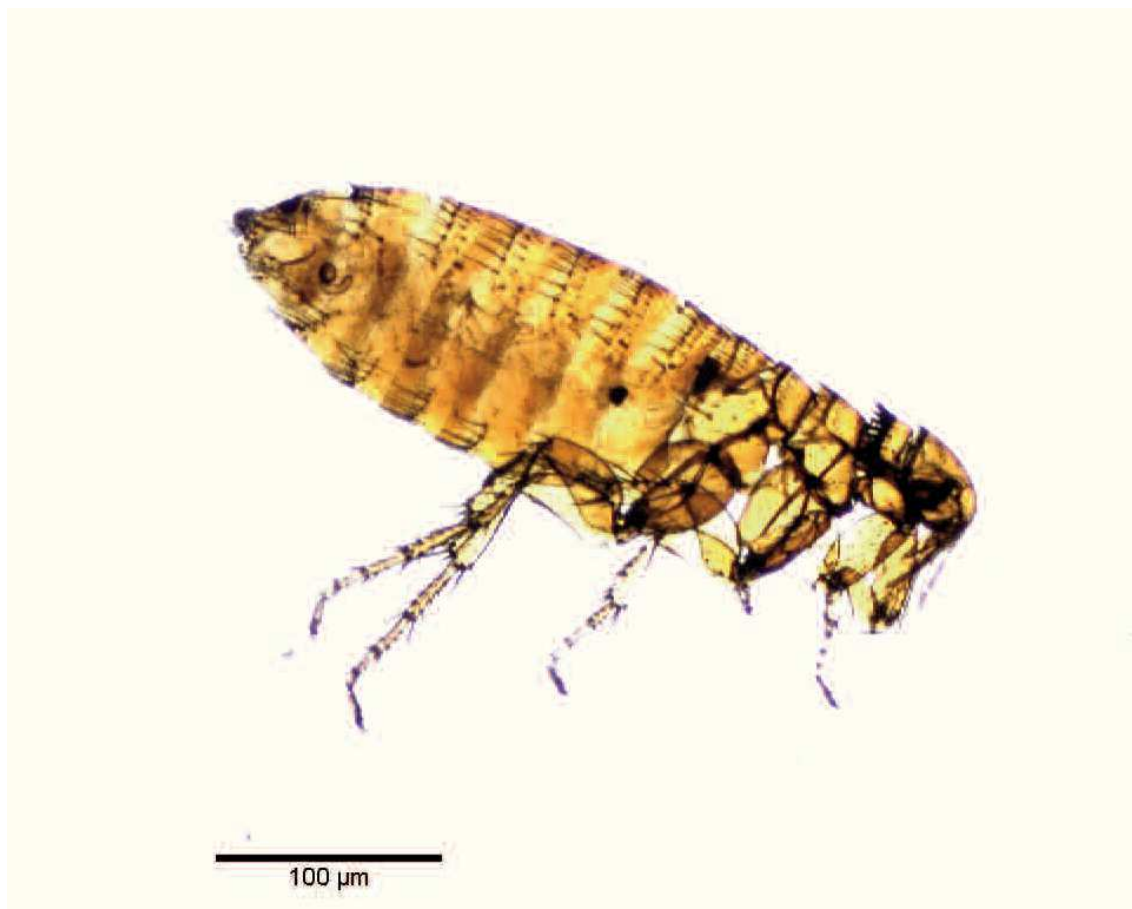


Fig. 1 — *Nosopsyllus fasciatus* female clarified in Sodium Hydroxide 10%.

REFERENCES

- GRAMICCIA M. & GRADONI L., 2005. The current status of zoonotic leishmaniasis and approaches to disease control. *Int. J. Parasitol.*, 35(11-12): 1169-1180.
- LEGER N., PESSON B., MADULO-LEBLON G., ABONNEN E., 1983. Sur la différenciation des femelles du sous-genre *Larroussius* Nitzulescu, 1931 (Diptera Phlebotomidae) de la région méditerranéenne. *Ann. Parasitol. Hum. et Comparée*, 58: 611-623.
- MAROLI M., BIGLIOCCHI F. & KHOURY C., 1994. Sandflies in Italy: observations on their distribution and methods for control. *Parassitologia*, 36(3): 251-264.
- CAPIZZI D., BACCETTI N. & SPOSIMO P., 2016 Fifteen years of rat eradication on Italian Islands. In: Angelici F. (ed.), *Problematic Wildlife*. Springer, Cham.
- THEODOR O., 1958. Psychodidae - Phlebotomine. In: *Die Fliegen der Palaearktischen Region*, 9c (ed. E. Lindner). *E. Schweiz. Verlagsb.*, Stuttgart, pp. 1-55.

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