

Identification of ticks collected in two areas of Sardinia

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In the present note the results of preliminary studies on tick distribution in two areas of Sardinia (Cagliari and Ogliastra) are reported. Sampling of ticks from wild mammals (wild boar, pigeon, muflon, deer, hedgehog), domestic mammals (sheep, goat, horse, cattle, dog, cat, etc.), soil and vegetation, was performed from December 2004 to December 2005. In a total of 22 sites in Cagliari area and 10 sites in Ogliastra area about 2895 ticks were investigated, including Ixodidae and Argasidae families, in different life stages (1374 adults, 14 nymphs and 1507 larvae). Ticks collected were placed into 70% ethanol and identified by standard taxonomic keys (Manilla G, 1998, Acari Ixodidae, Fauna d'Italia, Calderini, Bologna). Tick species identified include: *Argas reflexus* (0.03%), *Boophilus annulatus* (0.45%), *Dermacentor marginatus* (0.45%), *Haemaphysalis sulcata* (0.70%), *Hyalomma marginatum marginatum* (0.55%), *Ixodes ricinus* (0.03%), *Rhipicephalus bursa* (2.00%), *Rhipicephalus pusillus* (0.03%), *Rhipicephalus sanguineus* (90.95%) and *Rhipicephalus turanicus* (4.80%). The most common species, by a strong adaptability, seems to be *R. sanguineus* (collected in both areas) which is a dog-associated species (92.19%), on sheep and goat (7.10%), cattle (0.09%), hedgehog, *Erinaceus europaeus* (0.09%) and in soil and vegetation (0.53%). An other significant species is *R. bursa* found on horse (51.71%), muflon, *Ovis musimon* (22.40%), goat (10.34%), cattle (12.10%), deer, *Cervus elaphus corsicanus* (3.45%).

D. marginatus was found only on wild boar, *Sus scrofa meridionalis*, so as *H. sulcata* was withdrawn in sheep and goats. The favourable climatic factors, the vegetation and the abundance of hosts support the finding of ticks also during the winter.

Our results show that the most common species in Sardinia is *R. sanguineus* and the presence of *Argas reflexus* on pigeon is confirmed. *I. ricinus* is not an endemic species in the island, so it is probably to suppose that the found models are due to a casual event.