
Ornithodoros (Pavlovskyella) alactagalis Issaakjan, 1936 (Fig. 18)

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Life Cycle and Host Preferences

Under laboratory conditions (temperature of 26 °C and humidity of 90–95%), the development of *O. alactagalis* from egg to adult lasts from 5 to 10 months. All life stages feed; bloodsucking usually lasts between several minutes to 1 hour. Attachment of larvae on mice takes 1–4 h and moult to first stage nymphs occurs after 9–20 days. Female development includes 3–4 nymphal stages. For males, 2–3 nymphal stages exist. After 52–120 days of feeding, females oviposit; incubation lasts 19–32 days. Survival of wild specimens in the laboratory was reported to be longer than 6 years (Filippova 1966). *Ornithodoros alactagalis* ticks are found in burrows of animals, such as rodents (including *Psammomys obesus*, *Cricetus cricetus*, *Phodopus* spp., *Meriones* spp., *Mus musculus*, *Arvicola* spp., *Allactaga* spp.), badgers (*Meles* spp.), foxes (*Vulpes* spp.) and hedgehogs (*Hemiechinus auritus*); it was associated also with lizard and green toad burrows (*Bufo viridis*) (Filippova 1966; Soneshine et al. 1966). *Ornithodoros alactagalis* ticks may show aggressive behaviour towards humans, and researchers reported attacks when approaching animal burrows (Filippova 1966).

Ecology

The habitat of *O. alactagalis* is essentially moist burrows, which are not excessively damp. It inhabits beaches, deserts and mountainous areas covered with desert or steppe

vegetation (Soneshine et al. 1966). In Azerbaijan and Armenia, larvae were observed by the end of June and beginning of July, and nymphs and adults were observed during June. Oviposition occurs from April to December (Filippova 1966).

Distribution

Ornithodoros alactagalis was reported only in the Palearctic region, in Armenia, Azerbaijan, Georgia, Iran, Northern Caucasus, Azerbaijan and Turkey (Manzano-Román et al. 2012).

Vectorial Capacity and Pathogen Burden

A *Borrelia* sp. was reported to be transmitted by this tick to humans (Filippova 1966; Gugushvili 2013); however, no description is available on the species of *Borrelia* this tick can transmit.

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Fig. 18 **A** Distribution of *O. alactagalis* in Europe and Northern Africa (10×10 km grid presence with black dots). **B** Countries where the species has been reported are marked in dark grey

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