

HORIZONTAL TRANSMISSION OF *SYRINGOPHILOPSIS KIRGIZORUM* (ACARI: CHEYLETOIDEA: SYRINGOPHILIDAE)

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ABSTRACT: Horizontal transmission of the syringophilid mites (Acari: Syringophilidae) is documented for the first time. *Syringophilopsis kirgizorum* which was, until now, restricted to a small group of finches (Passeriformes: Fringillidae), was recorded from the tawny owl *Strix aluco* L. (Strigiformes: Strigidae). This could only be due to the horizontal transmission of the mites from prey.

KEY WORDS: Acari, horizontal transmission, quill mites, ectoparasites, birds

Transmission of syringophilid mites (Acari: Syringophilidae) is believed to occur in two ways. In the breeding season, the feathers of young birds can be invaded by the vertical transmission of mites from the infested feathers of the parent birds — the nestling passage. Transmission can also take place in the moult when mites invade new feathers on the same host — the moulting passage. Horizontal transmission from one adult to another has not been documented (Skoracki 2011).

In early 2009 I examined a tawny owl *Strix aluco* Linnaeus (Strigiformes: Strigidae) for quill mites. The owl, a road casualty, was found in a built up area, in Worsbrough, near Barnsley. South Yorkshire, England, 53°31'N, 28°08'W. In the greater coverts of both wings, I found a relatively large population of specimens. These were largely *Bubophilus aluconis* Nattress et Skoracki, 2009 — specific parasite of this host (Nattress and Skoracki 2009), but amongst them, in one feather only, were two specimens of *Syringophilopsis kirgizorum* Bochkov et al., 2000. *S. kirgizorum* has previously been recorded on four hosts, the type host,

the greenfinch *Carduelis chloris* (Linnaeus) (Passeriformes: Fringillidae), the goldfinch *Carduelis carduelis* (Linnaeus), the linnet *Carduelis canabina* (Linnaeus) and the desert finch *Rhodopechys obsoleta* (Lichtenstein) (Fringillidae) (Skoracki 2011).

The diet of tawny owls varies with habitat. In woodland, it is mainly of small rodents, birds, amphibians, shrews, earthworms and beetles. In towns, the diet is largely of birds, also small rodents and other prey as available (Cramp 1985). It follows the owl I examined had fed upon one of the infected *Carduelis* finches, resulting in the horizontal transmission of the parasites.

REFERENCES

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