Research Note

Two cases of dermatitis caused by the northern fowl mite, *Ornithonyssus sylvarium*, in Asahikawa, Hokkaido, Japan

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Abstract: Two cases of dermatitis caused by the northern fowl mite, *Ornithonyssus sylvarium*, carried by pied wagtail, *Motacilla alba*, are presented.

Accidental dermatitis caused by several kinds of avian mites (*Dermanyssus gallinae* (De Geer), *D. hirundinis* (Hermann), *Ornithonyssus bacoti* (Hirst), *O. sylvarum* (Canestrini et Fanzago), have been reported in the literature (Uchikawa and Ito, 1969; Braun, 1979; Uchikawa, 1981; Maeda and Anekouji, 1984; Maeda, 1985; Tsukada *et al.*, 1985).

In end-July, 1996, two out of eight patients suffered pruritic eruptions in a ward of Hokkaido Ryoikuen (Institution for people with severe handicaps) which is located on the western side of the suburbs of Asahikawa City.

In case A (female, 35 year-old) erythematous papules appeared on the right side of the back (Fig. 1) and in case B (female, 46 year-old) one vesicle with erythema was detected on the abdomen (Fig. 2). The two patients were treated successfully with topical application of 0.1% dexamethasone propionate ointments for one week.

Investigation of the causative agent for dermatitis was carried out. Numerous mites were collected from the tatami mats in the living-room, especially, on the window side. The mites were mounted in balsam on slides and examined. The size

of these mites measured 680–750 μm long by 290–360 μm wide. We identified the mite as *Ornithonyssus sylvarium* based on the following characteristics: female chelicerae were normally produced, not whip-like, and corniculi were not membranous (Figs. 3, 4). The setae on the dorsal shield are shorter than those on the adjoining integument, and there are only two pairs of setae on the sternal plate, the third pair being on the integument.

Each ward of the Institution was equipped with a ventilator. The outside of the ventilator is covered with an open hood. In the early spring pied white wagtails (*Motacilla alba*) were nesting on the open hood. After the grown birds left the nest in July, the remaining mites were searching for bloodmeal. Then, they invaded the ward from the nest and accidentally attacked the patients, especially those who were staying at the window side.

Previously, Miyamoto (1993) also reported itchy eruption caused by a sparrow flea. The source of the flea was several infested tree sparrows which built their nests in a broken hood of the ventilator of an apartment house.

From these findings, separation of human living facilities from the home

Fig. 1. Case A with several papules on the right side back.
 Fig. 2. Case B with a vesicle on the abdomen.
 Fig. 3. Female of northern fowl mite, *Ornithonyssus sylvarium*.
 Fig. 4. Two pairs of setae on the sternal plate and the third pair on the integument.

range of feral animals, including birds is needed for avoiding infestation with the pests from wildlife.

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摘 要

換気扇フードに営巣したハクセキレイからの
トリサンダニによる刺咬症の2例について

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1996年7月旭川市内の医療施設で入居者2名に皮疹が生じた。精査の結果、部屋に設置された換気扇フードに営巣したハクセキレイからのトリサンダニ (*Ornithonyssus sylvarium*) の刺咬が原因であった。