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<th>長崎県男女群島で採集された恙虫の新種</th>
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A new species of Trombiculid mite collected in Danjo Islands, Nagasaki Prefecture, Japan (Prostigmata: Trombiculidae)*

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Abstract: Reported here is Walchia (Ripiaspichia) hayashii, a new species of trombiculid mite. The new species closely resembles Ripiaspichia sawaii Suzuki, 1975 but is obviously different from it in pyriformed sensillae of the scutum, nude seta of the palpotibial dorsal portion in the palpal formula and no specialized seta at the genuala of the second and third legs.

INTRODUCTION

A survey on sanitary vermins was undertaken from the 12th to the 17th of May 1978, on the islands of Meshima (1.4km²) and Oshima (2.7km²) of the Danjo Islands located at north latitude 31°51'–32°3' and east longitude 128°20'–128°25', about 95km south south west of Fukue of Goto Islands of Nagasaki Prefecture. Trombiculid mites were collected from the soil of nest tunnels of Streaked shearwaters, Colonectris leucomelas and two Black-rats, Rattus rattus (collected by Dr. Mogi, M.).

Of the mites collected, those belonging to subgenus Ripiaspichia have been identified as a new species. This subgenus originated in North America is also distributed in South East Asia, and mainly parasitized to the rodent.

R. sawaii in Amami-oshima is the only recorded species of the subgenus in Japan. Characteristics of the subgenus are having three palpotibial claws, five palpotarsal pilous formula and no eyes. It also has characteristic projecting roundness in the rear part of the scutum.

Walchia (Ripiaspichia) hayashii Suzuki, n. sp. [Fig. 2. A-G]

Diagnosis of larva: This species similar to R. sawaii Suzuki, 1975 [Fig. 3. A–G] but easily separable from it in pyriformed sensillae of the scutum, nude seta of the palpotibial dorsal portion in the palpal formula and no nude seta at the genuala of the second and third legs. Near R. americana (Ewing, 1942) and R. mima (Traub and Evans, 1957), but separable by having 2 setae on coxa III (n. sp. have one seta) and also separable in that the palpal formula is in mima b/N/bNN (n. sp. N/N/NNN).

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Gnathosome: Palpotalar pilous formula 5B. Palpal formula N/N/NNN. Palpotibial claw 3-pronged and middle prong the longest. Galeal seta nude. Chelicera bears a row of short teeth of which three, behind the tricuspid cup.

Scutum: With large broadly and deeply rounded posterior margin straight. Usual scutal setae rather slender, with tiny hairs. BS inserted at level slightly closer to PLs than ALs. Sensilla pyriform and swollen portion with many sharp hairs, stem bare. am seta absent. Scutal measurements as in Table 1.

Table 1. Standard measurements of *Walchia (Ripiaspichia) hayashii* n. sp. (in micra)

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<th>AW</th>
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<th>ASB</th>
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Fig. 2. *Walchia (Ripiaspichia) hayashii* Suzuki n. sp. A. unengorged larva, left ventral, right dorsal; B. gnathosome, dorsal; C. gnathosoma, ventral; D. scutum; E. coxa III; F. humeral seta; G. leg with specialized setae.
Fig. 3. Walchia (Ripiaspichia) sawaii Suzuki, 1975. A. unengorged larvae, left ventral, right dorsal; B. gnathosome, dorsal; C. gnathosome, ventral; D. scutum; E. coxa III; F. humeral seta; G. leg with specialized setae.

Legs: Leg I, 7–segmented; leg II and III, 6–segmented, coxal setae 1–1–1; Seta of coxa III situated in middle of coxa. Leg I: 170 μm long, length of tarsus 42 μm; 1 genual, 1 microspur, 1 tibiala, 2 tibial spurs, 1 tarsal spur, 1 subterminala, 1 microspur, 1 pretarsala. Leg II: 150 μm long, length of tarsus 34 μm; 1 tibiala, 1 tibial spur, 1 tarsal spur, 1 microspur. Leg III: 170 μm long, length of tarsus 40 μm; 1 femorala-like seta.


Holotype: Oshima, Danjo Gunto, Nagasaki Prefecture, Japan, 12 May 1978.

Paratype: 10 paratypes, Oshima and Meshima, Danjo Gunto, Nagasaki Prefecture, Japan, 12–13 May 1978.

Holotype and 5 paratypes will be deposited in the National Science Museum, Tokyo, Japan and 5 paratypes will be deposited in collections of author.

Comment: This new species is dedicated to Dr. Kaoru Hayashi, Director, Department of Virology, Institute for Tropical Medicine, Nagasaki University.

Besides the new species reported above, two members of *Leptotrombidium* (*L.*) *pallidum burnsei* (Sasa et al., 1950) and two members of *Euschoengastia* (*E.*) sp. from soil samples and twenty five members of *L. (L.) kawamurai* (Fukuzumi et Obata, 1953) from Black rats were collected, respectively. Also, forty three (43) members of *Ornithodoros* (*A.*) *sawaiii*, Kitaoka et Suzuki, 1973 of Family *Argasidae* were collected from nest tunnels of Streaked shearwaters.

As a result, trombiculid mites in Danjo Islands have been found to correspond to the trombiculid fauna collected in the Nansei Islands.

It is quite significant in comparison to the trombiculid fauna in the Goto Islands which is similar to that in Kyushu main island but is geographically closer to the Danjo Islands.

*O. sawaiii* collected in this survey were previously reported from nest holes of Streaked shearwaters in an inhabited island near Amami-o-oshima of the Nansei Islands. The finding of the same blood sucking type mites in the Danjo Islands may indicate interesting mutual characteristics between the two different group islands.

ACKNOWLEDGEMENTS

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REFERENCES


