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A new species of trombiculid mites the genus *Schoutedenichia* from Nagasaki prefecture, Japan (Prostigmata : Trombiculidae)

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Abstract: In the forest of Unzen area of Nagasaki Pref., trombiculid fauna was surveyed in performing the monthly collections of field rodents and soil samples for the period of one year, 1979−1980. Of the collected trombiculid mites, those belonging to genus *Schoutedenichia* have been identified as a new species. Therefore, it has been named *Schoutedenichia* (*S.*) *nagasakiensis* n. sp. and the report concerning it follows.

Diagnosis of larva: This species shows characteristics of Tribe Schoengastiini in having all 7-segmented legs (Fig. 1, G) and globosal sensillae (Fig. 1, D). It carries palpotibial claw with 3, palpotarsal pilous formula 4 branched setae, which means, it belongs to subgenus *Schoutedenichia* of genus *Schoutedenichia* and also belongs to "*fullery* group" in accordance with classification of Vercammen-Grandjean (1968).

Average body length and width of 7 paratypes, 148μm × 140μm by unengorged larval specimens. Palpal formula B/N/BBB+4B, eyes 1+1 but one specimen not clear, galeal seta nude. Scutum roughly trapezoidal, sensillae globose. Scutal measurements as in Table 1. Dorsal seta total 38, arranged 4-12-8-8-4-2; sternal setae 2-2, coxal setae 1-1-1. Specialized setae on legs as in Fig. 1, G.

Description of Holotype Larva: Pale yellowish color as in alive. 140 μm long and 130 μm wide. Eyes 1+1.

Gnathosome: Palpotarsal pilous formula: 4B. Palpal formula: Undeveloped short palpofemoral dorsal seta and palpogenual dorsal seta, B/N/BBB. 3 pronged palpotibial claws. Nude galeal seta. Chelicerae with tricuspid cap.

Scutum: Shape roughly trapezoidal with anterior margin deeply concave, flared posterolateral margins. Scutal setae showing quite similar characteristics both in al and am with long branches. Thick pl, thin and short branches resembling to dorsal setae. Sensilla globose with smooth basal root and sharp seta on surface of global part. Stand-

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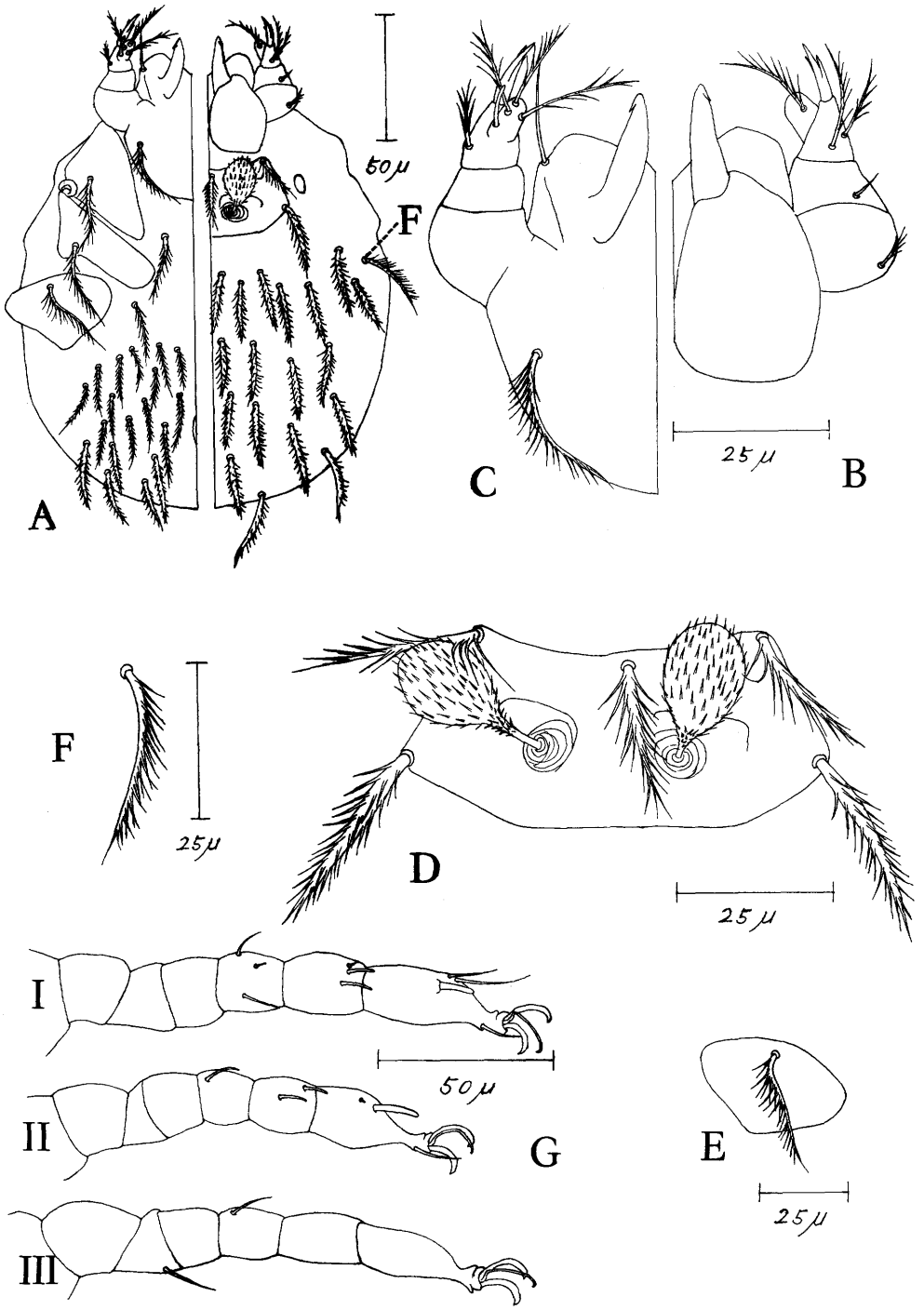

Fig. 1. *Schoutedenichia* (*Schoutedenichia*) *nagasakiensis* n. sp.
A. unengorged larva, left ventral, right dorsal; B. gnathosome, dorsal; C. gnathosome, ventral; D. scutum; E. coxa III; F. humeral seta; G. leg with specialized setae.

Table 1. Standard measurements of *Schoutedenichia* (*Schoutedenichia*) *nagasakiensis* n. sp. (in micra)

	AW	PW	SB	AP	ASB	PSB	SD	am	al	pl	s	AS	PS	pp-ss	pp	hm
Holotype (N-060-A)	45	64	21	23	20	12	32	21	32	37	26	21	21	+5	8	33
Mean of 7 paratypes	47	65	21	22	19	13	31	22	30	38	26	22	22	+7	8	34
Range	45-50	63-68	20-23	19-23	17-20	11-14	29-34	21-24	27-32	36-40	25-28	20-23	20-23	+5~+7	5-9	31-36

ard mesurement are shown in Table 1.

Body setae: Thick dorsal setae with thin and short branches (one of characteristics of this new species). 3 in total number, arranged 4-12-8-8-4-2. Sternal seta 2-2. Ventral setae: 30 in anterior margin of the anus and 12 in posterior margin, 10 of the 12 resembling to dorsal seta (thick).

Legs: Leg Ⅰ, Ⅱ and Ⅲ; 7-segmented. Coxal setae 1-1-1, seta of coxa Ⅲ situated in near part of antherior margin of coxa.

Leg Ⅰ: 170 *μ*m long, length of tarsus 38 *μ*m; 2 genualae, 1 microgenuala, 1 tibiala, 1 tibial spur, 1 microtibiala, 1 tarsal spur, 1 subterminala, 1 pretarsala.

Leg Ⅱ: 150 *μ*m long, length of tarsus 33 *μ*m; 1 genuala, 1 tibiala, 1 tibial spur, 1 tarsal spur, 1 microspur, 1 pretarsala.

Leg Ⅲ: 160 *μ*m long, length of tarsus 38 *μ*m; 1 femorala-like seta, 1 genuala.

Comparison to closer species

Neoschoengastia atollensis Wharton & Hardcastle, 1946 initially collected from wild birds at Okinawa had been transpositioned into subgenus *Ornithochia* of genus *Schoutedenichia* by Vercammen-Grandjean (1960). This new species, on the other hand, belongs to subgenus *Schoutedenichia* of the genus. Therefore, this is the first report in Japan as to subgenus *Schoutedenichia*. By the characteristics in its scutum and dorsal setae, this species is easily separable from other species of genus *Schoutedenichia* found in South-East Asia reported by Audy, 1956; Mo *et al.*, 1956; Schluger *et al.*, 1960; Domrow, 1962: Mitchell & Nadchatram, 1966; Upham & Nadchatram, 1968; Wharton & Hardcastle, 1946; Womersley, 1952. It also is obviously separable from other species of the same genus in Africa reported by Vercammen-Grandjean, 1960, 1963, 1964; Vercammen-Grandjean & Yang, 1963, 1964; Vercammen-Grandjean & Watkins, 1965.

Type Material:

Holotype Larva: N-060-A, ex soil of ground holes, Unzen, Nagasaki City Japan 12 November 1980.

Paratype Larva: 22 April 1979 (2), 26 May 1979 (2), 9 June 1979 (2), 16 October 1980, same place as holotype.

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

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長崎県雲仙で採集された *Schoutedenichia* 属恙虫の一新種

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長崎県雲仙の山林地帯（標高700m）に於て，1977年～1980年の一年間，毎月一回，野鼠と土壌採集により恙虫を採集し，この地域の恙虫相を調査した．
採集された恙虫のうち *Schoutedenichia* 属の一種は新種と認め *Schoutedenichia*(*S.*) *nagasakiensis* n. sp. と命名し記載した．
Schoutedenichia 亜属は，我が国から初記録である．

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