

# **New and interesting mites from the Geneva Museum LXVI : two new *Scutacarus gros* : 1845 species from Sumatra (Indonesia) (Acari, Tarsonemina)**

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NEW AND INTERESTING MITES  
FROM THE GENEVA MUSEUM LXVI.  
TWO NEW SCUTACARUS GROS, 1845 SPECIES  
FROM SUMATRA (INDONESIA) (ACARI: TARSONEMINA)

BY

S. MAHUNKA \* and L. MAHUNKA-PAPP \*

With 18 figures

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ABSTRACT

**New and interesting mites from the Geneva Museum LXVI. Two new *Scutacarus Gros*, 1845 species from Sumatra (Indonesia) (Acari: Tarsonemina).** — Three species are identified from Sumatra, two of them are new for science: *Scutacarus batak* sp. n. and *S. sumatranus* sp. n.

INTRODUCTION

Soil samples taken during the 1985 expedition (see also MAHUNKA 1989) of the Geneva Natural History Museum to South-East Asia (Dr. B. Hauser and Dr. C. Lienhard), yielded some *Scutacaridae* species. Three species have been identified, two of them proved to be new to science.

LIST OF LOCALITIES

Sum-85/30: SUMATRA (Sumatera Utara: Simalungun): sur la route en provenance de Pematangsiantar, 18 km avant Prapat, lieu-dit «Ainuli», forêt dans la chaîne montagneuse Bukit Parasat, derrière la station «Holzweg Nr. 2 du Dr. Diehl», forêt primaire autour de l'école

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- forestière, 1000 m, prélèvement de sol dans les angles formés par les contreforts de grands arbres; 14.XI.1985, leg. B. H. (B)\*
- Sum-85/39: SUMATRA (Sumatera Utara: Deli Serdang): Sibolangit sur la route de Medan à Brastagi, Jardin botanique, prélèvement de sol dans les angles formés par les contreforts de grands arbres, 520 m; 18.XI.1985, leg. B. H. (B)
- Sum-85/47: SUMATRA (Sumatera Utara: Deli Serdang): forêt de *Pinus merkusii* près de la route de Brastagi à Sibolangit, 1400 m; prélèvement de sol sous *Pinus merkusii*; 19.XI.1985, leg. B. H. (B )

### LIST OF IDENTIFIED SPECIES

*Imparipes burckhardti* Mahunka et Mahunka-Papp, 1988

Locality: Sum-85/47: 2 specimens.

*Scutacarus batak* sp. n.

Locality: Sum-85/39.

*Scutacarus sumatranus* sp. n.

Locality: Sum-85-30.

### DESCRIPTION OF SPECIES

#### **Scutacarus batak** sp. n.

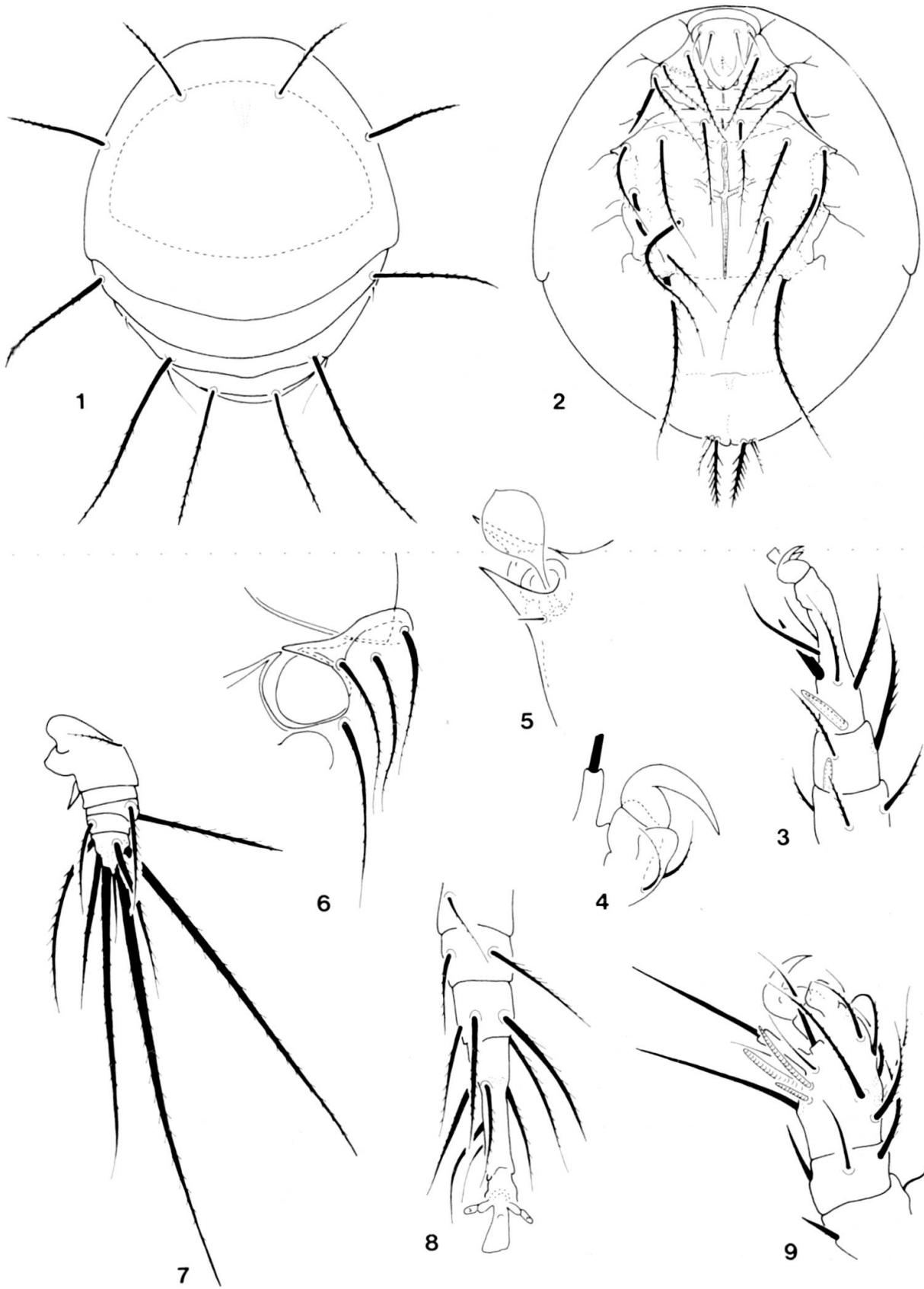
M e a s u r e m e n t s : Length: 169-180  $\mu\text{m}$ , width: 140-155  $\mu\text{m}$ .

D o r s a l s i d e (Fig. 1): Clypeus very large, margin of clypeus very broad anteriorly. Both pairs of setae arising on it, equal in length (42  $\mu\text{m}$ ). Among the other setae  $h_2$  short,  $e$  minute,  $f$  (100  $\mu\text{m}$ ) the longest,  $d$  (69  $\mu\text{m}$ ) and  $h_1$  (64  $\mu\text{m}$ ) nearly equal in length. In posteromarginal position three setae observable, but  $p_2$  much shorter and thinner than  $p_1$ ,  $p_3$  minute. Setae  $p_1$  resembling a Christmas tree.

V e n t r a l s i d e (Fig. 2): Apodemes of both sternal plates well observable. Posterior border of epimeral region strong, ap. 2 waved, slightly thinner than ap. sej. Anterior margin of posterior sternal plate strongly convex anteriorly but slightly concave medially. Anterolateral spine long and narrow (Fig. 6). Every setae of epimeral region long, and all, excepting  $2b$ , well ciliate. Cilia thin, conspicuously long on setae  $3a$  and  $3b$ . Setae  $4a$  arising very far anterior to setae  $4b$ , their distance scarcely shorter than distance between setae  $4b$ .

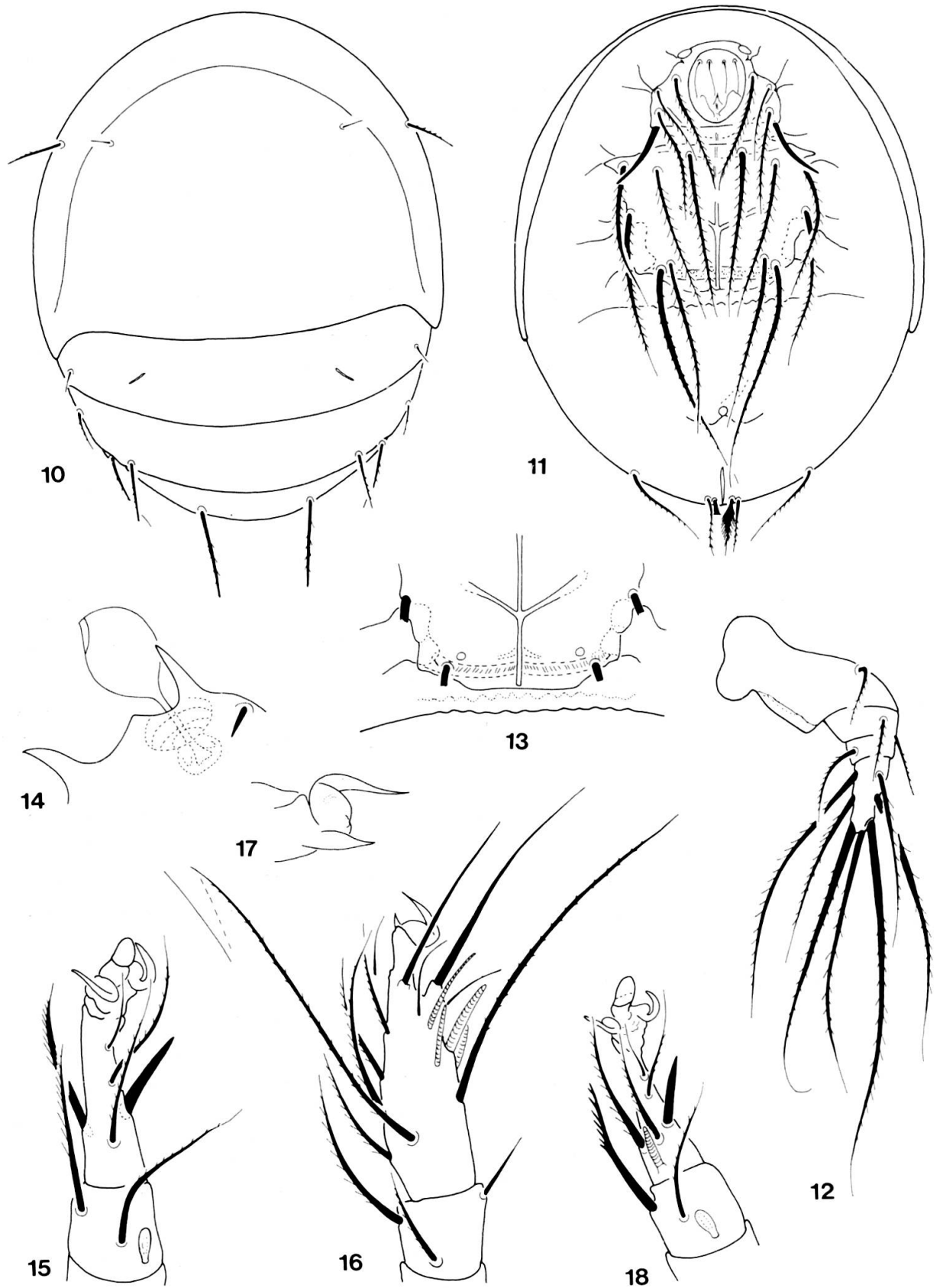
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\*(B): extraction par appareil BERLESE à Pematangsiantar (Sumatra).



FIGS 1-9.

*Scutacarus batak* sp. n. — 1: body in dorsal view, 2: body in ventral view, 3: leg II, 4: claw of leg I, 5: trichobothrium, 6: posterior sternal plate in lateral view, 7: leg IV, 8: leg III in ventral view, 9: leg I.



FIGS 10-18.

*Scutacarus sumatranus* sp. n. — 10: body in dorsal view, 11: body in ventral view, 12: leg IV, 13: posterior part of coxisternal region, 14: trichobothrium, 15: leg III, 16: leg I, 17: claw of leg I, 18: leg II.

**L e g s :** Claw of leg I (Fig. 9) sitting on a long peduncle, a separate basal scale well observable. Basal tubercle of seta *d* very long, seta *d* slightly shorter than *dT*. Solenidium  $\psi_1$  and  $\psi_2$  nearly equal in length. Tarsi of legs II (Fig. 3) and III (Fig. 8) elongate, more than three times longer than their basal diameter. Setae *ld''* on both joints thickened, spiniform, not ciliate. Trochanter of leg IV (Fig. 7) without dorsal spine, but a well developed spur on its ventral (inner) side present. Femur divided into two parts by a line, seta *dF* strong, erect. Setae *d* on tibiotarsus fine and short, setae *ld'\_1* the longest of all.

**M a t e r i a l e x a m i n e d :** Holotype: Sum-85/39; 1 paratype: from the same sample. Holotype: MHNG \*, paratype (1213-PT-86): HNHM \*\*.

**R e m a r k s :** The new species is well characterized by the insertion points of setae *4a-4b* and the shape of leg IV.

### **Scutacarus sumatranus** sp. n.

**M e a s u r e m e n t s :** Length: 316  $\mu\text{m}$ , width: 257  $\mu\text{m}$ .

**D o r s a l s i d e** (Fig. 10): Body strongly convex in lateral view. Clypeus large, but not much broader than the other segments. Clypeal margin also wide. Inner pairs of clypeal setae very short (13  $\mu\text{m}$ ) and fine, outer pairs much thicker. Ratio of some dorsal setae:  $c_1 = d < e$  (22  $\mu\text{m}$ )  $< f \cong c_2 < h_2$  (44  $\mu\text{m}$ )  $< h_1$  (49  $\mu\text{m}$ ). Setae *p*<sub>3</sub> the longest of all (52  $\mu\text{m}$ ), *ps*<sub>1</sub> well dilate and bilaterally ciliate, pennate; *ps*<sub>2</sub> longer than *ps*<sub>1</sub>, but simple.

**V e n t r a l s i d e** (Fig. 11): All apodemes well developed, a very strong transversal band (ap. 5) also existing between the trochanters of legs IV. Posterior margin of this region waved medially (Fig. 13). All epimeral setae — excepting *2b* — very long and with long cilia, but the density and the length of the cilia are quite different, e.g. setae *1a* more densely ciliate than *1b*, or the cilia of setae *4a* much longer than those of *4b*. Setae *4a* arising very near to *4b*.

**L e g s :** Claw of leg I (Fig. 16) sitting on a long peduncle, its apex long, thin. A well-developed, sharply pointed basal scale (Fig. 17) also observable. All setae of tibiotarsus of leg I very long, seta *dT* (83  $\mu\text{m}$ ) longer than seta *d* (62  $\mu\text{m}$ ), but setae *ldT* the longest of all (122  $\mu\text{m}$ ). Solenidia also long,  $\psi_1$  the thickest. Tarsi of legs II (Fig. 18) and III (Fig. 15) elongate, setae *d* on both tarsi ciliate. Femur of leg IV (Fig. 12) long, its basal margin convex. Tibiotarsus also elongate, nearly three times

\* MHNG = deposited in the Muséum d'histoire naturelle, Genève.

\*\* HNHM = deposited in the Hungarian Natural History Museum, Budapest, with identification number of the specimens in the Collection of Arachnida.

longer than its basal diameter. Setae *dT* much longer than the nearly equally long setae *d* and *ld'*<sub>2</sub>.

**M a t e r i a l e x a m i n e d :** Holotype: Sum-85/30: MHNG.

**R e m a r k s :** The new species belongs to the *Scutacarus sphaeroideus* Karafiat, 1959 group. It is well distinguished from all members of this group by the waved posterior margin of the coxisternal plate and the shape of the group of setae *ps*.

#### REFERENCES

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