

A NEW ERIOPHYID MITE FROM *HYDRANGEA* SP. IN BRAZIL,  
*PARACAPHYLLA SETIFEMORATA*, N.SP.

Carlos H.W. Flechtmann<sup>1</sup>

ABSTRACT. *Paracaphylla setifemorata*, sp.n., the second species for the genus, an Eriophyidae - Phyllocoptinae acarina from *Hydrangea* sp. (Saxifragaceae) in Brazil, is described and figured.

KEY WORDS. Acari, Eriophyidae, *Paracaphylla setifemorata*, taxonomy, *Hydrangea*

MOHANASUNDARAM (1983) erected the genus *Paracaphylla* to accommodate a Phyllocoptine Eriophyid mite with divided featherclaws (empodia) and a broad median ridge and two troughs on either side on the histerosoma.

So far, according to AMRINE & STASNY (1994) and AMRINE (personal communication) the genus remains monospecific, that is, restricted to the type species, *P. streblae* Mohanasundaram, 1983, a leaf vagrant on *Streblus asper* Lour. (Moraceae) in India.

A second species is herein described.

*Paracaphylla setifemorata*, sp.n.

Fig. 1

Diagnosis. *Paracaphylla setifemorata*, sp.n. differs from *P. streblae* in presenting femoral setae : each branch of the divided empodia with 3 rays (6 or more rays in *P. streblae*); prodorsal shield with admedian lines forming large cells (shield smooth in *P. streblae*) and female genital shield with anterior transverse and posterior longitudinal ridges (only anterior scorings in *P. streblae*).

Female: holotype and range; n=10. All measurements are reported in micrometers.

Elongate dorsoventrally flattened idiosoma 195.4 (191.9-230.6) long, 64.2 (60.0-72.2) wide. **Gnathosoma** 22.5 (19.4-23.8) long; basal setae 1.6 (2.6-4.4) long; antapical setae prominent, 3.5 (3.5-4.4) long. Chelicerae 17.6 (16.7-18.5) long; oral stylets 11.0 (10.6-12.3) long. **Prodorsal shield** 38.7 (37.0-41.2) long, 57.9 (51.9-66.9) wide. Admedian lines starting near anterior margin, complete to rear shield margin, forming a row of 1-1-2-2 large cells. Prodorsal shield tubercles away from rear shield margin, 24.6 (23.8-25.5) apart, dorsal setae pointing up and inwards, slightly to the rear, 4.4 (4.4-4.8) long. **Legs** with all normal setae

1) Departamento de Zoologia, Universidade de São Paulo, ESALQ, Caixa Postal 9, 13418-900 Piracicaba, São Paulo, Brasil. CNPq Fellow.

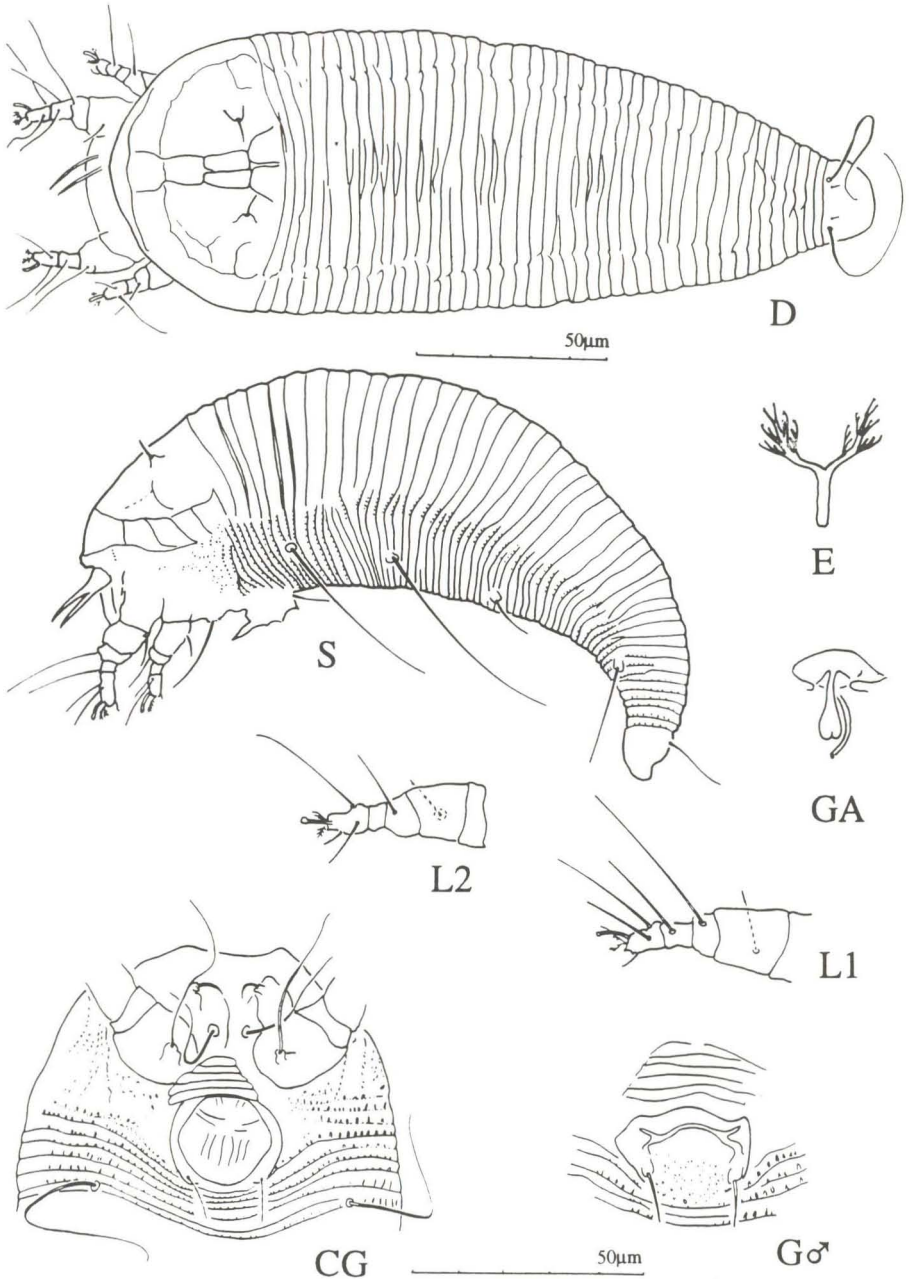


Fig. 1. *Paracaphylla setifemorata*, n.sp.. (D) Dorsal aspect; (S) lateral aspect; (CG) coxigenital area; (E) empodium (enlarged); (L1) leg I; (L2) leg II, of female; (G♂) genital area of male; (GA) genital apodeme of male.

present. **Legs I**, from trochanter base to tip of tarsus, excluding empodium and solenidium, 24.6 (24.6-30.0) long; femora I 9.7(7.9-11.4) long, femoral setae 8.8 (6.2-8.8) long; genua I 4.4 (3.5-4.4) long, genu I setae 22.0 (22.0-26.4) long; tibiae I 4.4 (3.5-5.3) long, tibia I setae 17.6 (15.8-19.4) long; tarsi I 4.4 (4.4-7.0) long, solenidia 5.3 (5.3-7.0) long, empodia 4.4 (4.4-5.3) long, fully divided, each branch with three pairs of rays; tarsi I dorsal setae 17.6 (16.7-20.2) long, lateral setae 14.1 (11.4-14.1) long and mesal setae 4.0 (3.5-4.4) long. **Legs II** 23.8 (22.9-25.5) long; femora II 7.0 (7.0-11.4) long, femoral setae 7.9 (6.2-7.9) long; genua II 3.5 (2.2-3.5) long, genu II setae 11.4 (10.6-14.1) long; tibiae II 3.5 (2.6-3.5) long; tarsi II 4.4 (4.0-6.2) long, solenidia 5.3 (5.3-7.0) long, empodia 4.4 (4.4-5.3) long, fully divided, each branch 3-rayed; tarsi II dorsal setae 17.6 (15.8-21.1) long, tarsi II lateral setae 6.2 (5.3-7.0) long, and mesal setae 4.4 (3.5-4.4) long. **Venter**: Sternal line 7.9 (7.9-8.8) long. Coxal setae I 10.6 (9.7-12.3) apart, 6.2 (4.4-6.2) long; coxal setae II 7.0 (5.3-7.0) apart, 16.7 (15.8-19.4) long; coxal setae III 23.8 (22.9-23.8) apart, 37.0 (37.0-42.2) long. **Coxigenital region** with 5 (5-6) annuli, smooth, devoid of microtubercles. Epigynium 19.4 (17.6-22.0) wide, 13.2 (13.2-15.0) long; anterior half of coverflap with two transversal, medially interrupted, lines or ridges; posterior half with 6 longitudinal lines or ridges. Genital setae 9.7 (8.8-10.6) long. **Opisthosoma**: dorsum with a broad ridge, narrowing posteriorly, with a trough on either side. Lateral setae 38.7 (34.3-49.3) long, on 7th (6th-8th) annulus. Ventral setae 1, 33.4 (30.8-35.2) apart, 52.8 (52.8-66.9) long, on annulus 21 (20-23); ventral setae 2, 19.4 (16.7-19.4) apart, 10.6 (9.7-14.1) long, on annulus 37 (35-41); ventral setae 3, 24.6 (23.8-25.5) apart, 22.0 (22.0-33.4) long, on annulus 55 (52-59) or 7 (7-8) from rear. **Total dorsal annuli** 48 (46-52); **total ventral annuli** 62 (59-66). Caudal setae 40.5 (40.5-47.5) long; accessory setae minute, 1.8 (0.9-1.8) long.

Male: smaller than female. Measurements of one male paratype.

Body 171.6 long, 52.8 wide. Basal seta on pedipalp 4.4 long; antapical seta 2.6 long. Chelicerae 14.1 long. Prodorsal shield as in female, 32.6 long, 49.3 wide. Tubercles 22.0 apart, setae 3.5 long. **Leg I** 23.8 long; femur I 7.9 long, femoral seta 7.0 long; genu I 3.5 long, genu I seta 20.2 long; tibia I 3.5 long, tibia I seta 12.3 long; tarsus I 5.3 long, solenidium 5.3 long, empodium 4.4 long, deeply divided, each branch 3-rayed; tarsus I dorsal seta 15.0 long, tarsus I lateral seta 11.4 long and mesal seta 3.5 long. **Leg II** 22.9 long; femur II 7.0 long, femur II seta 6.2 long; genu II 2.6 long, genu II seta 7.9 long; tibia II 2.6 long; tarsus II 5.3 long, solenidium 5.3 long, empodium 4.4 long, deeply divided, each branch 3-rayed; tarsus II dorsal seta 14.1 long, lateral seta 6.2 long and mesal seta 3.5 long. **Venter**: Sternal line 8.8 long. Coxal setae I 12.3 apart, 4.4 long; coxal seta II 5.3 apart, 15.0 long; coxal seta III 23.8 apart, 32.6 long. **Coxigenital region** with five smooth annuli. Genital shield 17.6 wide, 8.8 long, with dots. Genital setae 6.2 long. **Opisthosoma**: similar to female; lateral seta 30.8 long, on 7th annulus; ventral seta 1, 31.7 apart, 44.0 long, on annulus 15; ventral seta 2, 17.6 apart, 7.0 long, on annulus 31; ventral seta 3, 22.0 apart, 20.2 long, on annulus 47 or 7th from rear. **Total number of dorsal annuli** 39, **total ventral annuli** 54. Caudal setae 31.7 long, accessory setae 1.8 long.

Type material data: female holotype, 17 female paratypes, two male paratypes, on four microscopic preparations, from *Hydrangea* sp. (Saxifragaceae), Parque Nacional do Itatiaia, Rio de Janeiro, 24 Dec. 1993, CHWF, in the collection of Department of Zoology, University of São Paulo - ESALQ (Piracicaba, São Paulo).

Relation to host: Underside leaf vagrants.

**Etymology.** The genus name *Paracaphylla* is derived from the genus *Acaphylla* Keifer, 1943. KEIFER (1943) and MOHANASUNDARAM (1983) made no reference to etymology. The most likely guess on its derivation is that it was composed of *aca*, from *Acarus*, mite, Latin, masculine, plus either *phylon*, leaf, Greek, neuter and latinized as *phylla*, feminine, or *phyllas*, -ados, foliage, Greek, feminine, as Keifer collected the type species for his genus, *A. steinwedeni* Keifer, 1943 from leaves.

Since in compound words the final component, if a noun, determines the gender (BROWN 1956), *Acaphylla*, as well as *Paracaphylla* are then feminine.

The species designation *setifemorata* is composed of *seti*, from *setifer*, Latin, bearing bristles or setiferous, plus *femorata* from *femur*, *femoris*, Latin, femur, referring to the presence of a seta on femora I and II, one of the characters which distinguishes the new species from the type species.

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