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REFERENCES

VILLENEUVE, J. 1926. — Description de Myodaires supérieurs nouveaux. *Bull. Ann. Soc. R. Ent. Belg., 66 :* 269-275.

ZUMPT, F. 1956. — Calliphoridae (Diptera Cyclorrhapha) Part I : Calliphorini and Chrysomyiini. *Explor. Parc natn. Albert Miss. G. F. de Witte, 87,* 200 pp.

A NEW GENUS AND TWO NEW SPECIES OF GLYCYPHAGINAE FROM AUSTRALIA

(Acarina : Glycyphagidae)*

by A. FAIN** and Jacoba W.J. LOWRY***

We describe here a new genus and two new species of *Glycyphaginae,* collected by the junior author in two caves of Western Australia.

The types of these new species have been deposited in the CSIRO Canberra collection. Paratypes in the collection of the authors.

Famille **GLYCYPHAGIDAE**

Subfamily **Glycyphaginae**

Austroglycyphagus gen. n.

Definition : With the main characters of the subfamily *Glycyphaginae* : cuticle colorless, soft and covered by very numerous and very small spiniform cutilar surelevations as in the genus *Glycyphagus* ; tarsi I-IV long and narrow ; sejugal furrow absent ; setae of the dorsal surface long and thickly barbed ; genus I with two solenidia.

The tarsi I-IV are ensheahed by a finely barbed scale almost as long as the tarsi and there is no *crista metopica.* Tarsi III-IV very long and extremely narrow. Tarsal suckers without a distinct claw. All the tibiae are very short. Genital orifices situated in the middle of the venter, between coxae III and IV. Epigynium and genital suckers absent in female. Male organ situated on a broad oval punctate plate. Gnathosoma small. Epimera I very poorly

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sclerotized apically. Propodosoma with two narrow longitudinal paramedian bare areas. Solenidia of genu I long and subequal. The *ω1* (of tarsus I) situated in the middle of the segment ; the *ω2* basal and relatively long.

Chaetotaxy : Tibiae I-II with only one seta. Most of the tarsal setae are located in the apical region of the segment. The *v e* are located on anterior margin of idiosoma and widely spaced. The *v i* are more posterior and close to each other. The *sc i* are close together and situated in front of *sc e,* the latter being a little more spaced from each other. All the dorsal setae are barbed except the d_1 which is smooth. Female with 3 pairs of anal setae. Male without comb-like seta on tibiae I-II.

Type species : Austroglycyphagus weelawadjiensis sp. n.

Systematic position of the genus :

This new genus presents some characters of the genus *Glycyphagus,* subgenus *Lepidoglyphus* ZACHVATKIN (e.g. tarsi ensheathed by a long barbed scale, absence of *crista metopica*) but it is however clearly distinct of that subgenus by many other characters such as the anterior position of the *v e*, the more anterior and paramedian situation of the *sc i*, the more posterior situation of the genital orifices, the presence of a punctate genital plate in the male, the different position or length of *ω 1* and *ω 2* of tarsi I, the subequal length of *sigma 1* and *2*, etc..

The genus *Austroglycyphagus* presents some characters of the *genus Blomia* OUDEMANS, such has the anterior situation of the *v e*, presence of a punctate genital plate in the male, absence of epigynium in female, however it is well distinguished from the latter by several important features such as the presence of only one solenidion on genu I, the different situation of the *v i* more posterior and of the *v e* more lateral, the more anterior situation of the genital opening, the absence of the genital suckers in the female, the great length of *d 2* setae, the smooth aspect of *d l,* the more apical situation of ω_1, the much smaller development of the gnathosoma.

A. weelawadjiensis is related to *Glycyphagus geniculatus* VITZTHUM, 1919. This species has been redescribed by HUGHES (1961). It presents the main characters of our new species and it

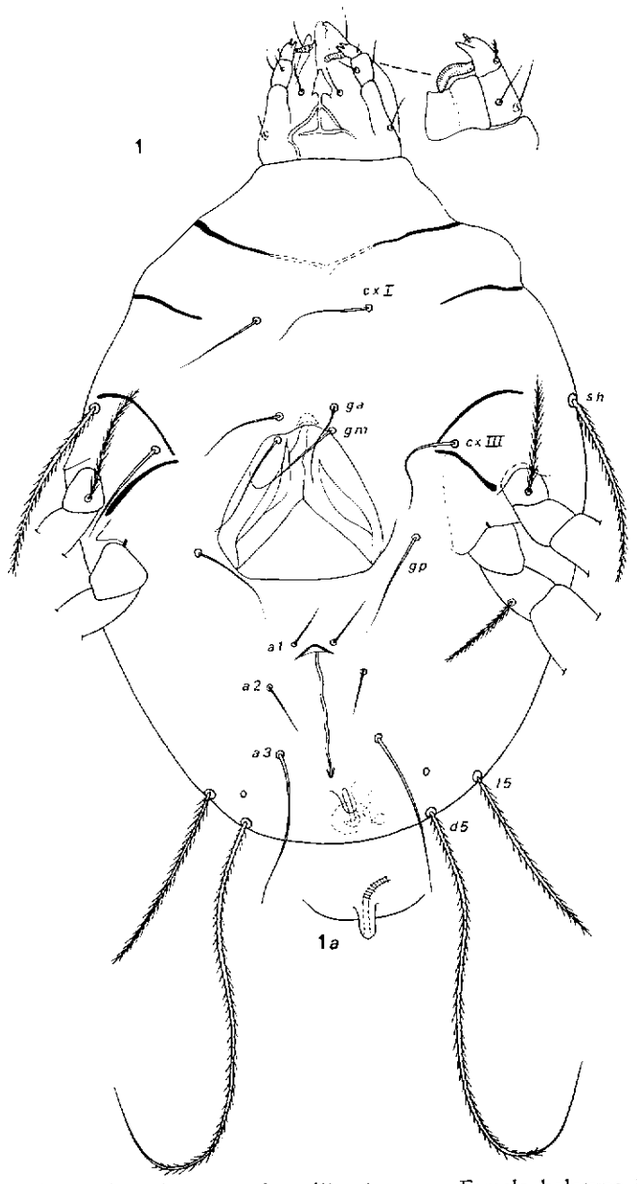

FIG. 1 : *Austroglycyphagus weelawadjiensis* sp. n. Female holotype in ventral view (fig. 1) Genital papilla in a paratype (fig 1a).

should also placed in this new genus. *A. weelawadjiensis* as-well as *A. troglodytus* are distinguished from *A. geniculatus* (VITZTHUM) n. comb., by the folowing characters :

1. More anterior situation of the *sc i* setae which are very close to each other and situated between the *sc e* and the *v i* setae.
2. The greater lenght of the body setae, the *d 3* and *l 2* being as long as the body.
3. The absence of a smooth area on the propodosoma.
4. Smaller length of the solenidia *phi.*
5. Greater length of the *omega 2.*

Austroglycyphagus geniculatus (VITZTHUM) has been reported from various habitats and localities. The typical series was described from the nest of a bee *Xylocopa* (*Koptorthosoma*) *nigrita,* in Amani, East Africa. The species was recovered later from birds'nests in England, from a fly in Congo (Zaïre), from a bat and on a fungus in Java (see HUGHES, 1961). It seems to us probable that all these records did not deal with the same species and that there are actually several distinct species involved. We hope that the description of this new genus will draw attention to this question.

1. **Austroglycyphagus weelawadjiensis** sp. n.

FEMALE (fig. 1-5) : The holotype is 401 µ long (idiosoma) and 285 µ wide. In two paratypes (length × width) : 440 µ × 295 µ and 420 µ × 290 µ. Cuticle as described in the genus. Epimera I very poorly sclerotized inside. Epimera III and IV almost contiguous, the epimera IV more sclerotized than epimera III. Epimerites IV absent. Vulva in an inverted Y with a well developed posterior lip. Epigynium and genital suckers absent. Anus ventral, with an anterior triangular sclerite. Immediately behind the anus is a short and relatively wide cylindrical membranous copulatory tube. In the holotype this tube is collapsed on the body. Tarsi III and IV very long and thin (length 195 µ and 230 µ respectively, minimum width 2,7to 2,9 µ). Claws absent on the tarsi. Gnathosoma relatively small, palps short. Inside and lying ventral to the palpi there is an elongate membranous and transversely striate structure.

FIG. 2 : *Austroglycyphagus weelawadjiensis* sp. n. Female holotype in dorsal view.

Chaetotaxy : Some dorsal setae are very long, the longest are as long (400 µ) as the length of the idiosoma. All the setae of the dorsal surface are barbed except the d_1 setae wich are very thin and smooth, measuring 150 µ long. Situation of the propodosomal setae as mentioned in the generic definition. The genital and the three pairs of anal setae are thin and bare. Seta *s cx* strongly barbed but non divided in two branches. On the legs I there are 8 very thin, short and bare setae, one basal long and barbed seta and one long barbed scale. Tarsus III bears a barbed scale inserted basally and 6 very thin, short and not barbed setae, all confined to the apex. Tibiae I-IV with l-l-l-l barbed, not inflated setae, those of tibiae I-II are 40 µ long, those of tibiae III-IV measure 105 µ and 120 µ respectively. Genu III with a thin barbed seta.

Solenidiotaxy : Tarsus I with *ω2* long (40 µ) and basal ; *ω 1* is median and a little longer (50 µ) than *ω 2 ; ω 3* is short and subapical. Tibia I with a long sinuous solenidion. The *sigma 1* and 2 of genu I are subequal and 48-50 µ long.

MALE (fig. 6) : The allotype is 320 µ long (idiosoma) and 225 µ wide. In two paratypes : 390 µ × 270 µ and 420 µ × 235 µ. Dorsum as in the female. Ventral surface : epimera as in the female. The genital organ consists of a plate slightly punctate 110 µ long, baring in its anterior part a chitinous ring. The penis is relatively long and narrow apically (40-45 µ on total). The genital suckers have not been observed.

Chaetotaxy of the dorsum and *s cx* setae as in the female. Legs, leg chaetotaxy and solenidiotaxy as in the female. The *sigma 1* and 2 of genua I are subequal and 45-50 µ long.

TRITONYMPH : Two specimens measure (idiosoma) 300 × 246 µ and 275 × 180 µ respectively. Chaetotaxy of dorsum and legs as in the female. There are 2 pairs of very small genital suckers. Solenidia *sigma 1* and *2* of genua I subequal and approximately 30 µ long. Trochanters I to III with one barbed hair.

PROTONYMPH : Idiosoma 230 µ long and 180 µ wide. There is only one pair of genital suckers and all the trochanters are devoid of hairs.

Habitat :

Weelawadji Cave near Eneabba, E 24, West Australia, on 8.X.1972. Twelve different samples from this cave contained these mites. All the specimens are types or paratypes. N° of samples : 51/30 (2 ♀♀, 1 ♂, 6 nymphs) ; 51/31 (1 ♀) ; 51/34 (holotype and 4paratypes females) ; 51/35 (2 ♀♀, 1 nymph) ; 52/38 (3 ♀♀, 1 ♂) ; 52/39 (2 ♀♀, 1 nymph) ; 52/5 3(from floor ligh-

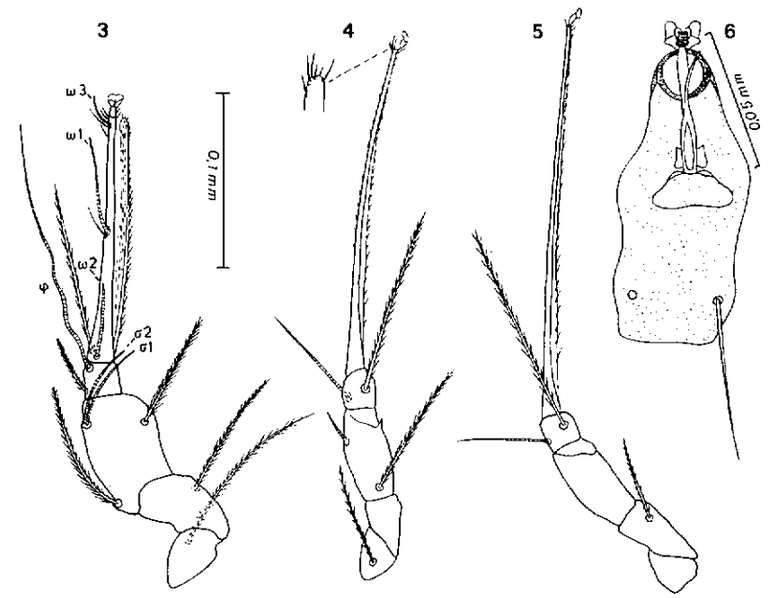

FIG. 3-6 : *Austroglycyphagus weelawadjiensis* sp. n. Female legs I, III, IV (fig. 3, 4, 5). Male : genital organ (fig. 6).

tly sprinkled with bat guano : 2 nymphs) ; 52/56 (from guano : 1 ♀, 4 nymphs) ; 52/59 (from drifts of guano, on cave floor : allotype and 3 paratypes ♂♂, 1 nymph) ; 52/64 (from thick drifts of guano, near the entrance : 1 ♂) ; 52/66 (from guano : 2 ♀♀) ; 91/24 (1 ♀).

N.B. : A description of the Weelawadji Cave has been given in our previous paper (FAIN and LOWRY, 1974).

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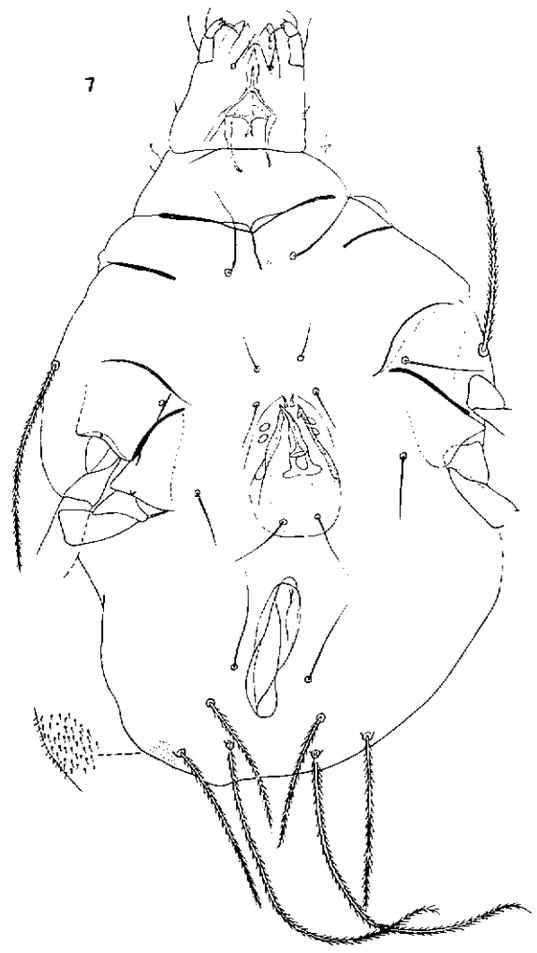

FIG. 7 : *Austroglycyphagus troglodytus* sp. n. Male in ventral view.

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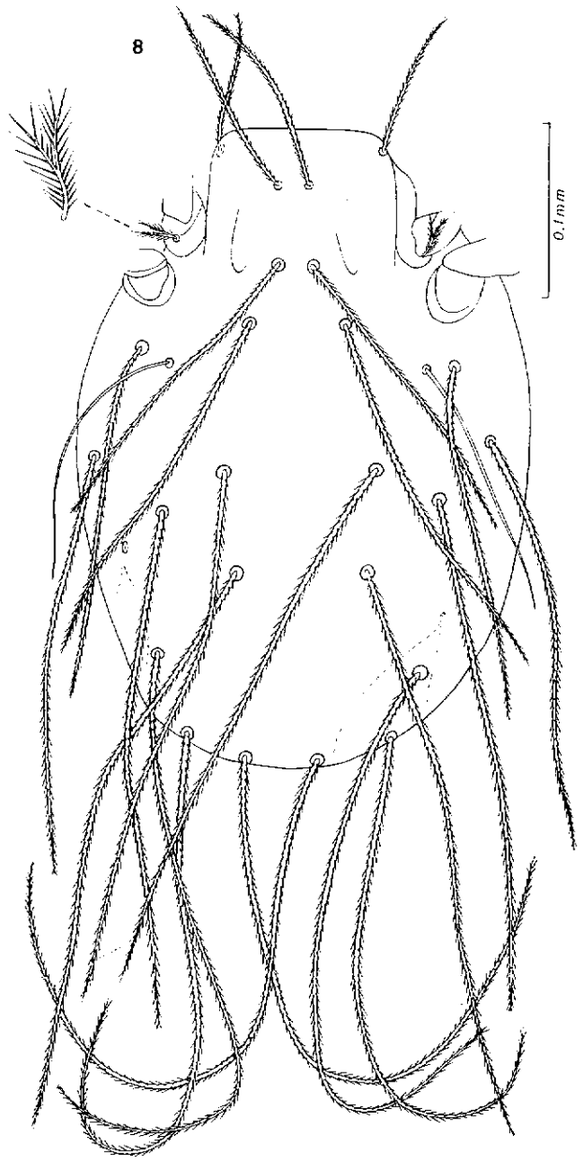

FIG. 8 : *Austroglycyphagus troglodytus* sp. n. Male in dorsal view.

2. **Austroglycyphagus troglodytus** sp. n.

This species is distinguished from *A. weelawadjiensis,* in both sexes by the bifid shape of the supracoxal setae, the much greater length of the solenidia *sigma 1* and 2 of genua I ; in the male by the different shape and smaller length of the genital plate, the shape of the penis which is shorter and thicker and the presence of genital suckers.

MALE (fig. 7-8) : The holotype is 395 µ long (idiosoma) and 285 µ maximum wide. All our specimens have lost one or several hairs and we have therefore made a composite drawing of the male. Dorsum as in *A. weelawadjiensis*. Venter : Epimera I fused forming a poorly distinct sternum. Genital plate 75 µ long and 50-53 µ maximum wide. The penis is 30-32 µ long, its narrow apical part slightly curved is only 12 µ long. The anterior border of genital region bears two paramedian chitinous sclerites longer than wide and slightly curved outside. Legs and gnathosoma as in *A. weelawadjiensis*.

Chaetotaxy as in *A. weelawadjiensis*. The solenidia *sigma 1* and 2 of genu I are subequal in length and 68 to 72 µ long.

FEMALE : The only known female is in bad condition. It is 455 µ long (idiosoma) and 290 µ wide. Resembles closely to the female of *A. weelawadjiensis* but the solenidia *sigma 1* and 2 of genu I are longer (approximately 80 µ). The *s cx* setae are forked, and there is no external copulatory tube.

Habitat :

? from a bat, in Murra-el-elevyn Cave, Nullarbor region, Western Australia, 24.X.1968 (sample 97/91 : ♀ paratype, holotype and 5 paratypes male, 2 nymphs ; sample n° 97/93, 1 ♂ paratype).

BIBLIOGRAPHY

FAIN, A. and LOWRY, JACOBY, W.J. — 1974. A new Pyroglyphid mite from Australia (Acarina : Sarcoptiformes, Pyroglyphidae). Acarologia (in press).

ZACHVATKIN, A. — 1941. Faune de l'U.R.S.S. Arachnoidea, Vol. VI, n°1. Tyroglyphoidea (Acari). Inst. Zool. Acad. Sci. U.R.S.S. (in russian).

CORRECTIONS MINEURES A LA NOMENCLATURE DE QUELQUES HYMENOPTERES PROCTOTRUPOIDEA*

par Paul DESSART**

Lorsque l'abbé Jean-Jacques KIEFFER reçut pour détermination des *Ceraphronoidea,* des *Bethyloidea* et des *Proctotrupoidea* récoltés en Norvège et en Allemagne par le Dr Embrik STRAND, il y reconnut 40 espèces, dont plus du quart lui parurent nouvelles pour la science. Il exposa le résultat de ses études dans deux notes séparées. Dans la première, il mentionne d'abord 11 espèces nouvelles (KIEFFER, 1912 : 15-17) et 7 espèces non déterminées : mais pour trois de ces dernières, il est renvoyé (1) plus loin à des pages de la seconde note, où ces espèces sont décrites comme nouvelles ; après cette liste, la première note se poursuit par la description de 11 espèces ; de celles-ci, 9 correspondent aux noms énumérés dans la liste introductive, une correspond à une espèce dont le nom spécifique, préoccupé, a été changé (traduit du latin en grec), une autre est la redescription d'une ancienne espèce de C.G. THOMSON, mais dont le sexe mâle était encore inconnu. Ces 11 descriptions ne correspondent donc pas exactement aux 11 espèces nouvelles annoncées ; en effet, « *Megaspilus innotatus* KIEFFER (n. sp.) ♀ » semble plutôt une nouvelle combinaison (d'ailleurs erronée) qu'une nouvelle espèce, ou simplement un lapsus pour *Conostigmus innotatus* KIEFFER, 1907.

L'abbé Jean-Jacques KIEFFER avait certainement l'espoir que ses deux notes parussent avant la fin de l'année 1910 : en tout cas, il intercala les nouvelles espèces de *Belytidae* dans le catalogue

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(1) Renvois dus, vraisemblablement, à l'éditeur.