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**A New Species of *Eulachnus* DEL GUERCIO (*Homoptera*, *Aphidodea*)  
from China**

[With 8 figures in the text]

The material from which this new species is described was collected by Dr. R. BIELAWSKI during his short stay in China. Holotype and the paratypes are preserved in the collection of the Institute of Zoology of the Polish Academy of Sciences in Warsaw, some paratypes in the collection of Dr. D. HILLE RIS LAMBERS in Bennekom, Netherlands.

Thanks are due to Dr. R. BIELAWSKI for collecting the material and to Dr. D. HILLE RIS LAMBERS for the gift of comparative material of *Eulachnus thunbergii* WILSON and *E. tuberculostemmata* (THEOB.).

***Eulachnus bielawskii* sp. n.**

**Apterous viviparous female**

Colour in life brownish yellow with red eyes. In mounted specimens body about 2.65–2.87 mm long, very elongated, about  $2\frac{1}{2}$  times as long as its maximum width. Head, pro- and mesonotum sclerotic, brown pigmented; metanotum and the tergum of abdomen membranous, with small dark sclerites around the bases of the dorsal hairs and with similarly coloured pleural and marginal intersegmental sclerites (muscle attachment plates), stigmal plates and subgenital plate. Dorsal hairs on abdomen numerous, mostly in two transverse rows, on tergite III about 20 in number, with slightly capitate or blunt apices, about 0.07–0.09 mm long and up to 3 times as long as basal diameter of antennal segment III; ventral hairs fine, acute, shorter than the dorsal ones, about 0.05–0.07 mm long. Head with distinct median suture, dorsally and ventrally with hairs like the dorsal ones. Front straight, the frontal hairs longer than the first antennal segment, about 0.11–0.12 mm long. Antennae  $\frac{2}{5}$ – $\frac{1}{2}$  of length of body, about  $3\frac{1}{3}$  as long as the width of the head between the eyes, without secondary rhinaria (only specimens no. 4 with one rhinarium on segment IV but this specimen is alatiform and have small wing pads), brownish yellow,

with segment I and II brown like the head, tip of III and IV, most of V and the whole VI brown; segment I and II and the basal half of III smooth, the rest distinctly imbricated; for interrelation of segments see measurements; antennal hairs stiff with blunt or slightly capitate apices, on segment III about 18–20 in number and mostly on the outer side, the longest ones about  $2\frac{3}{5}$ – $3\frac{1}{3}$  as long as the basal diameter of the segment. Rostrum short, reaching to the middle coxae; apical segment blunt, about,  $\frac{1}{2}$ – $\frac{2}{3}$  of the second joint of hind tarsi, with 2 hairs besides the 3 subapical pairs. Siphunculi small, only 0.03 mm in diameter, hardly elevated, placed on a very small brown hairless sclerite of about 0.04–0.05 mm in diameter. Abdominal tergite VIII with an interrupted broad sclerotic spinopleural bar, bearing about 12 hairs, which are up to 0.11 mm long. Cauda semilunar, blunt, thick, over twice as wide as long, with some 13–15 hairs of various length. Legs slender, the femora dark brown with pale bases, tibiae brownish yellow, densely brown spotted; hind tibiae 1.7–1.9 times as long as the middle tibiae; hairs on the hind tibiae stiff with blunt or capitate apices, on the outer side long, about  $2$ – $2\frac{4}{5}$  of the local diameter of the tibiae, on the inner side much shorter, only about  $1\frac{1}{5}$ – $1\frac{4}{4}$  times as long as the mentioned diameter; first tarsal joints elongate, about  $\frac{3}{5}$  of the second tarsal joint, those of hind legs ventrally  $1\frac{1}{2}$  times longer than dorsally, with 2 long dorsal hairs and 9–10 ventral hairs and one short spine placed ventro-apically.

#### Measurements in mm.

No.	Length of body	Ant.	Ant. III	Ant. IV	segments V	VI	Diam. siph.	Cauda	A. s. of ros.	2nd j. of h. t.
1.	2.67	1.32	0.40	0.23	0.27	0.22	0.04	0.10	0.12	0.18
2.	2.67	1.33	0.40	0.23	0.29	0.22	0.04	0.10	0.12	0.17
3.	2.70	1.40	0.47	0.25	0.27	0.22	0.04	0.10	0.10	0.18
4.	2.65	1.36	0.42	0.23	0.29	0.23	0.05	0.10	0.10	0.17
5.	2.68	1.32	0.41	0.22	0.28	0.22	0.04	0.10	0.11	0.18
6.	2.87	1.28	0.43	0.21	0.24	0.21	0.05	0.10	0.11	0.18

(1-6. from *Pinus* sp., Nankin, China, 15 XI 1965).

#### Alate viviparous female

Described from two specimens. Colour in life as in apterae. In mounted specimens head and thorax dark brown, the abdomen membranous with only the stigmal plates and sclerites around the bases of spinal hairs dark brown, the intersegmental sclerites brownish yellow. Hairs on the head, antennae and tibiae as in apterae, dorsal hairs on abdomen thinner and not so numerous as in apterae with acute apices. Antennae dark brown like the head, with only the very base of segment III pale, with secondary rhinarium on the distal part of segment III and IV. Legs dark brown with only the very bases of hind femora pale. Fore wings with indistinct once branched media, hind wings with 5 hamuli. Other characters as in apterous female.

## Measurements in mm.

No.	Length of body	Ant. III	Ant. IV	segments V VI		Diam. siph.	Cauda	A. s. of r.	2nd j. of h. t.
1.	2.75	1.40	0.44	0.25	0.30	0.22	0.04	0.10	0.19
2.	2.90	1.46	0.47	0.27	0.30	0.22	0.03	0.11	0.18

(1-2. from *Pinus* sp., Nankin, China, 15 XI 1965).

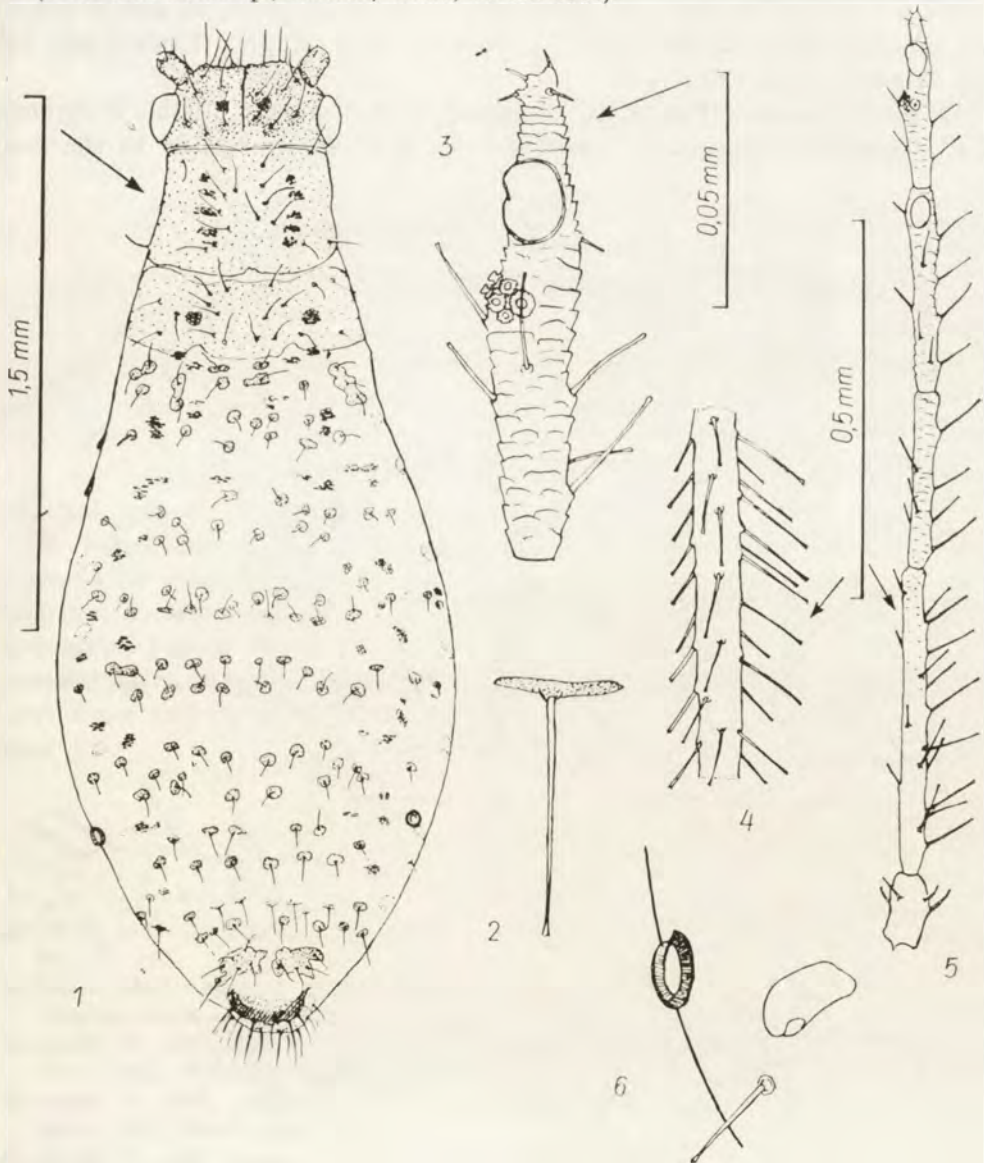


Fig. 1-6. *Eulachnus bielawskii* sp. n., apterous viviparous female: 1 - Habitus, 2 - dorsal hair from the posterior abdominal tergite, 3 - antennal segment VI, 4 - middle part of hind tibia, 5 - antenna, 6 - lateral margin of abdomen with siphunculus.

Discussion. The genus *Eulachnus* DEL GUERCIO, 1909 is readily recognizable but the species are difficult to separate. It contains 15 species of which only the European ones are a little better investigated. The group is in need of revision because the hitherto used taxonomic characters, viz. the length and shape of hairs, are very unsatisfactory.

As to my knowledge only five species of *Eulachnus* DEL GUERCIO are described from the Far East, viz. *E. thunbergii* WILSON, 1919, *E. piniformosanus* TAKAHASHI, 1921, *E. taiwanus* TAKAHASHI, 1932, *E. pini* TAKAHASHI, 1933 and *E. pumilae* INOUE, 1939.

*E. piniformosanus* TAKAH. is, according to TAKAHASHI (1932), a synonym of *E. thunbergii* WILSON. *E. pumilae* INOUE is closely related to the Euro-

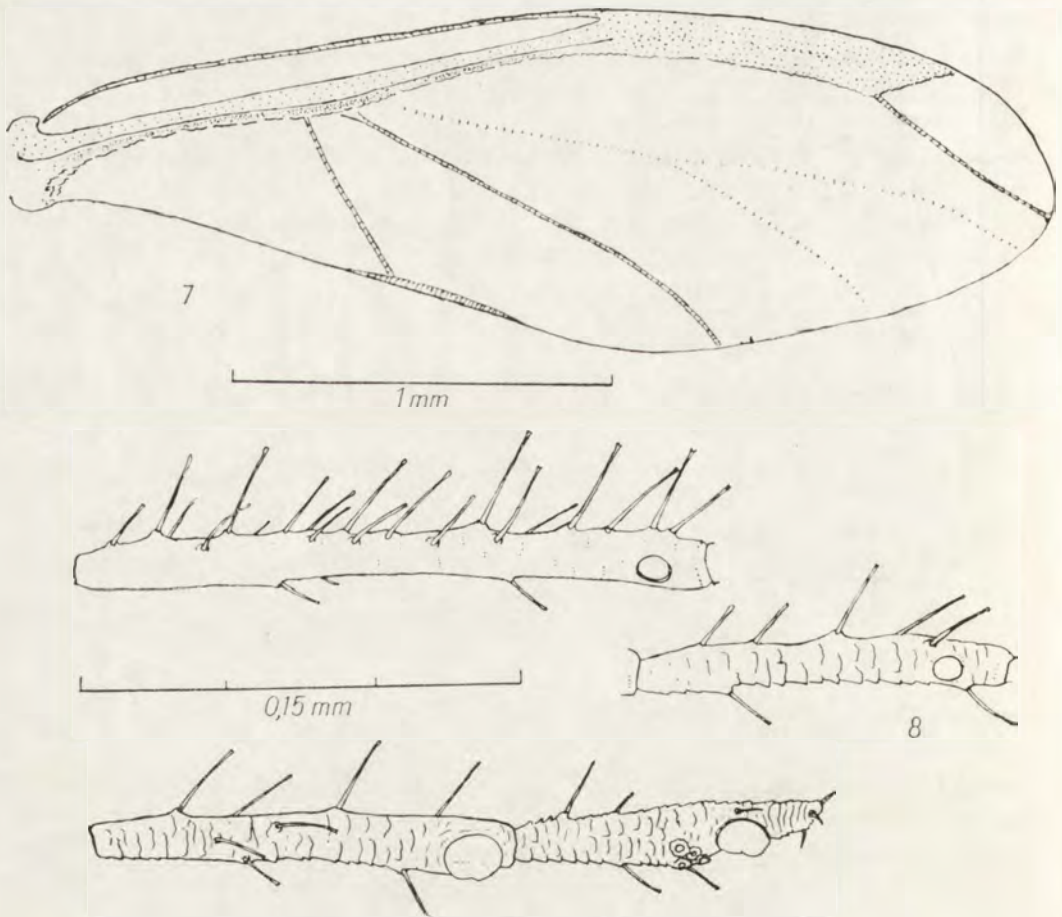


Fig. 7-8. *Eulachnus bielawskii* sp. n., alate viviparous female: 7 — fore wing, 8 — antennal segments III — VI.

pean *E. cembrae* BÖRN. and differs from other Asiatic species, including the described one, by the very short antennal and dorsal hairs and the lack of sclerites around the bases of dorsal hairs. *E. taiwanus* TAKAH. may be a good species closely allied to *E. thunbergii* WILSON and *E. rileyi* (WILLIAMS) and differing in the larger body, shorter hairs and the lack of secondary rhinaria in apterae [*E. thunbergii* WILSON and *E. rileyi* (WILLIAMS) have always one rhinarium on antennal segment IV]. *E. pini* TAKAH., known from Taiwan and Cambodia, may be only a green and large subspecies of *E. thunbergii* WILSON.

*E. bielawskii* sp. n. seems to be closely allied to *E. taiwanus* TAKAH. and differs from this species in longer hairs (the frontal hairs are 0.07 mm long in *E. taiwanus* and 0.11–0.12 mm in *E. bielawskii* sp. n.; dorsal hairs are 0.047 mm in *E. taiwanus* and 0.07–0.09 mm in the new species).

In addition to the above mentioned species the following European species were recorded from China: *E. agilis* (KALT.) from Hong Kong by VAN DER GOOT, *E. rileyi* (WILLIAMS) from Peiping by LOU and from Taiwan by TAKAHASHI and *E. tuberculostemmata* (THEOB.) from South China by TAKAHASHI. All these records seems to be very doubtful. *E. agilis* (KALT.) is an Euro-Siberian species that occurs easternmost to the Lake Baikal and Central Mongolia. The specimens of „*E. rileyi*” from Taiwan were later described by TAKAHASHI as new under the name *E. taiwanus*. It seems to be very likely that the species recorded from China as *E. tuberculostemmata* (THEOB.) are identical with *E. bielawskii* sp. n.

*E. tuberculostemmata* (THEOB.) is an East-Mediterranean species known to me so far from Yugoslavia, Greece, Egypt, Israel, Jordan and Iran. It differs from *E. bielawskii* sp. n. by less numerous and much shorter dorsal hairs (abdominal tergite III with only 8 hairs which are only 0.03 mm long), short antennal hairs, longer rostrum, the apical segment of rostrum without „secondary” hairs and by the presence of one secondary rhinarium on antennal segment IV.

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## STRESZCZENIE

[Tytuł: Nowy gatunek rodzaju *Eulachnus* DEL GUERCIO (*Homoptera*, *Aphidodea*) z Chin]

Autor opisuje nowy gatunek mszycy, zebrany przez dra R. BIELAWSKIEGO w Chinach na sośnie.

Gatunek ten był w Chinach mylony dotąd ze śródziemnomorskim gatunkiem *Eulachnus tuberculostemmata* (THEOB.), od którego różni się wyraźnie szeregiem cech. *E. bielawskii* sp. n. wydaje się być najbliższej spokrewniony z *E. taiwanus* ТАКАН.

## РЕЗЮМЕ

[Заглавие: Новый вид рода *Eulachnus* DEL GUERCIO (*Homoptera*, *Aphidodea*) из Китая]

Автор описывает новый вид тли, собранный доктором Р. Белявским в Китае на сосне.

Этот вид в Китае до сих пор принимали за средиземноморский вид *Eulachnus tuberculostemmata* (ТНЕОВ.), от которого существенно отличается целым рядом черт. *E. bielawskii* sp. n. наиболее близок с *E. taiwanus* ТАКАН.



Redaktor pracy — prof. dr J. Nast

Państwowe Wydawnictwo Naukowe — Warszawa 1970  
Nakład 1275+90 egz. Ark. wyd. 0,5; druk. 3/8. Papier druk. sat. kl. III, 80 g. B1 Cena zł 6,—  
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