

SCIENTIFIC NOTES

A New Genus and Species of Thripidae (Thysanoptera) from Taiwan

LAIN-SHENG CHEN

Bureau of Commodity Inspection and Quarantine
Ministry of Economic Affairs
Taipei, Taiwan, Republic of China

Received for Publication, Oct. 2, 1975

The new genus described in the present paper belongs to Family Thripidae which is the largest fauna of the Order Thysanoptera. This new species *Tsengothrips plumosa* probably feeds on mites and small insects, so it may take an important role on the natural control of pest mites and insects of economic significance.

Tsengothrips n. gen.

Diagnosis: Head much broader than long, broadest across cheek, trapezoidal, prolonged between base of antennae. Ocelli large, the median ocellus far behind anterior margin of eyes. Antennae seven-segmented, with long, prominent, outstanding setae. Sense cones on segments III and IV forked. Maxillary palps three-segmented. Prothorax about as long as head, its notum distinctly cross-striated, two pairs of long setae at the posterior angles. Wings long and slender. Abdominal segment IX about twice the length of X, terminal segment blunt.

Type species: *Tsengothrips plumosa* Chen.

This new genus is most closely related to genus *Plesiothrips*^(1,2), but it can be separated by the head trapezoidal, median ocellus far behind anterior margin of eyes, also resembles genus *Plesiothrips*⁽²⁾ and can be differed by the head trapezoidal, antennae segment III short, ocelli large. This new genus is named in honor of Mr. Y.H. Tseng for his kind assistance.

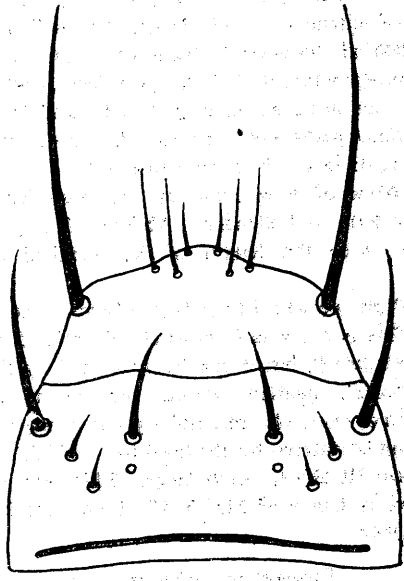
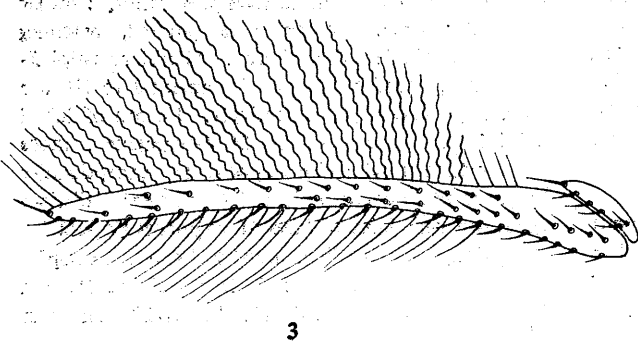
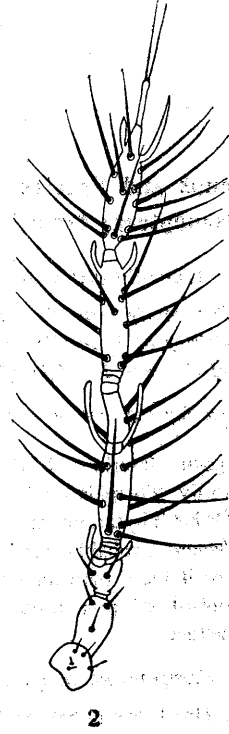
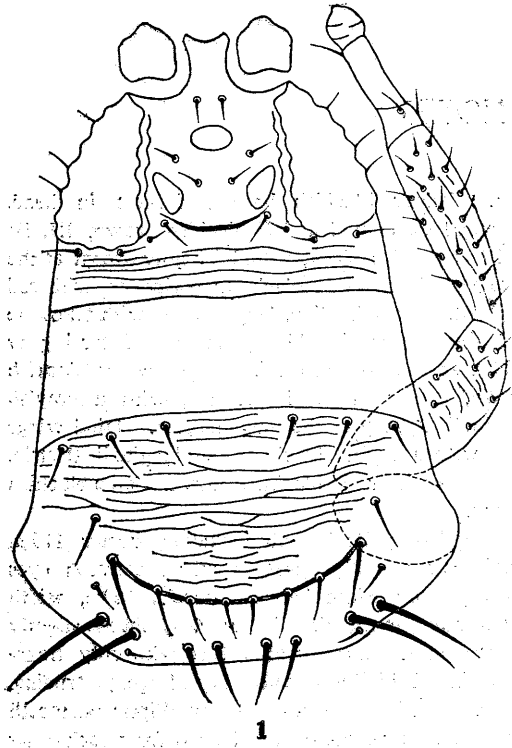
Tsengothrips plumosa n. sp.

Male (macropterous): Length (distended) 1.15

mm. Colour blackish brown, darkest in head. Antennal segment I and II blackish brown, III, IV and VII grayish black, V and VI gray except at the base and sides. Eyes black, at periphery with red pigment. Ocelli hyaline, large. Legs with all coxae and femora grayish black, tibiae and tarsi gray except at sides of fore tibiae. Fore wings blackish brown, lighter in basal one-fifth, with a grayish longitudinal strip at the median part. Hind wings gray with a slightly black median longitudinal strip. Abdomen uniformly blackish brown. Setae blackish brown.

Head (Fig. 1): Length including process 110 μ , without process 90 μ , greatest width between eyes 140 μ , greatest width between cheeks 160 μ , width across anterior margin of eyes 90 μ , Cheeks slightly converging at base, dorsal surface with only transverse lines behind postocelli. Eyes large, protruding, pilose. Ocelli large, median ocellus elliptic, postocelli subtriangular; postocelli equal apart from each other to from the median ocellus; length/width of median ocellus 20 μ /12 μ , of postocelli 21-22 μ /10-13 μ . A subcarina just behind postocelli. Head setae all small, 1 pair of antecellar setae, 2 pairs of interocellar setae, 1 seta behind each postocellus, 2 major postocular setae. Mouth cone pointed, reaching about the middle of prothorax. Maxillary palpi 3-segmented, slender, length of segment I to III are 18 μ , 10 μ , and 17 μ , respectively. Length of labial palpi 18 μ . Antennae (Fig. 2) 7-segmented, more slender than usual, with segment IV exceptionally long, the sense cones on it and III forked; a distinct accessory ring joint at base of segments IV and V; setae long, outstanding, mostly brown. Length/width of segments in μ : I, 27/31; II, 33/25; III, 31/22; IV, 106/18; V, 89/15; VI, 81/20; and VII, 16/5.

Prothorax (Fig. 1): Length 110 μ , width including coxae 200 μ , transverse lines entirely. A subcarina near posterior margin. Two pairs of major setae on posterior angle, outer one 50 μ , inner one 60 μ . Mesonotum entirely cross-striated, midlateral setae 30 μ . Metanotum sculptured, median pairs of setae



Figs 1. to 4 *Tsengothrips plumosa*: 1. Head and pronotum. 2. Dorsal surface of left antenna. 3. Right fore-wing. 4. Tergites of IX and X.

40 μ , near anterior margin. Legs long and slender, tarsi 2-segmented. Fore wings (Fig. 3) ensiform, length 680 μ , width 35 μ at about middle. Costa with 25 setae. Upper vein with 14 setae in 2 groups and 2 apical setae. Lower vein with 12 setae in about equal space. Anal lobe with 5 setae at anterior margin and 1 seta near base at middle.

Abdominal tergites without sculpture: I-IX with a prominent transverse line near anterior margin; I-VIII with median pair of small setae, ahead of median discal pore; IX (Fig. 4) with 4 pairs of setae, i, 26 μ , ii; 15 μ , iii; 13 μ ; iv. 47 μ ; X with 1 pair of major setae, 85 μ . Abdominal sternites weekly sculptured, without accessory setae.

Female: Unknown.

Holotype: male, from *Pinus massoniana* L., Taoyuan, Kaohsiung Hsien, Taiwan; VII 6, 1975, L.S. Chen. The type-specimen deposited in the collection of Plant Quarantine Division, Bureau of Commodity Inspection and Quarantine, Ministry of Economic Affairs, Taipei, Taiwan, Republic of China.

Acknowledgements: The author wishes to express his hearty thanks to Dr. Lewis J. Stannard of Illinois Natural History Survey for his valuable information and a specimen of *Plesiothrips perplexus* (Beach); Mr. S. T. Lee, Head, Animal and Plant Quarantine Division, Bureau of Commodity Inspection & Quarantine; Mr. Y. H. Tseng, Specialist, Tainan Branch Office, B. C. I. Q.; for their kind guidance, encouragement and suggestion. Thanks are also due to Dr. Y. I. Chu, Professor of Department of Entomology, National Taiwan University for his valuable criticism and reading the manuscript. The kind assistance of Miss S. L. Yu is also appreciated.

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臺灣薊馬科之一新屬及新種

陳 連 勝

毛角曾氏薊馬 (*Tsengothrips plumosa*), 在高雄縣桃源之馬尾松上採得, 爲屬於薊馬科之一新屬新種。

本屬 (*Tsengothrips*) 與 *Plesiothrips* 和 *Plesioptothrips* 極相似, 然以頭部呈梯形, 觸角第三節短, 中單眼位於二複眼之間, 三個單眼大及二個後單眼略呈三角形, 可和後兩屬區別。

Blood and Cerebrospinal Fluid Findings in Eosinophilic Meningitis and Antibody to *Angiostrongylus cantonensis*

SHIU-NAN CHEN*

Department of Zoology, College of Science, National Taiwan University, Taipei, Taiwan, Republic of China.

Received for Publication, 1975

An outbreak of an unusual form of meningitis, characterized by a pleocytosis (in particular, eosinophilic leucocytes), was recognized in Taiwan. The disease have been referred to as eosinophilic meningitis or meningoencephalitis. Recently, it has been reported that this disease can also be caused from the infection by the 3rd stage larvae of *Angiostrongylus cantonensis*. In man who serves as an accidental host of this parasite, the larvae may migrate through the central nervous system. The clinical manifestations as well as immune response of the body may occur during the larval migration. In the present investigation, the levels of immunoglobulin, antibody to *A. cantonensis* antigen and the number of leucocytes in serum and cerebrospinal fluid (CSF) from the patients of eosinophilic meningitis are investigated in order to seek the evidence for the presence of a specific immune response to the pathogenic stimulation.

MATERIALS AND METHODS

Five patients of eosinophilic meningitis all had past experience of eating raw *Achatina fulica* within a month prior to the onset of the disease. From each patient 3 ml of serum and cerebrospinal fluid (CSF) were obtained and stored in a deep freezer

* Present Address: Department of Parasitology, Liverpool School of Tropical Medicine, University of Liverpool, Pembroke Place, Liverpool L3 5QA, ENGLAND, UK.