

Un nuevo *Teuchothrips* (Insecta Thysanoptera) procedente de México

A new *Teuchothrips* (Thysanoptera) from México

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(With plate 76)

The genus *Teuchothrips* was erected by the writer in 1919 (Proc. Biol. Soc. Washington, 32:86) for six Australian species of tubuliferous Thysanoptera, all of which had been taken by sweeping in forested areas and whose life-habits were therefore wholly unknown. Since then eight additional species have either been described in the genus or referred to it from *Mesothrips* Zimmermann; and all of these live in spirally curled or folded leaves on various plants, in Australia, Java, and Ceylon.

It was thus of more than usual interest to receive from Dr. Alfonso Dampf, Head of the Department of Entomology in the Escuela Nacional de Ciencias Biológicas, another species, also new and the first member of its genus to be reported from the New World, which, near Cuernavaca, Morelos, México, was found to produce a folding of the leaves of *Pithecolobium dulce*. This species is the subject of the present paper.

Teuchothrips pithecolobii, sp. nov.

(Fig. 1, *a* and *b*)

Female (macropterous).—Length about 2.5 mm. (fully distended, 2.8 mm.). Color opaque coal-black, with only the fore tarsi and tip of fore tibiae dark brown,

the antennæ concolorous with body in segments I, II, and VI-VIII, II yellowish at apex, all of III golden yellow, as is the basal half of IV and the pedicel of V, IV dark brown apically, V shading to nearly black in apical two-thirds; fore wings dark blackish brown in scale and in the region of the three subbasal setæ, and light brown in remainder, with a darker median streak which fades out near tip of wing, and with the margins of the wing somewhat darkened.

Head (Fig. 1 a) fully 1.3 times as long as greatest width, which is across cheeks, the width across eyes somewhat less; cheeks slightly concave opposite posterior margin of eyes, usually broadest in front of middle, and roundly converging to just in front of the basal collar, where the width is scarcely 0.9 as great, the breadth across the collar itself distinctly greater; vertex slightly produced or swollen, nearly vertical on anterior surface, and bearing the overhanging, forwardly-directed median ocellus; surface of head rather heavily subreticulate on vertex and heavily cross-striate basally, the cheeks more or less serrate, especially basally; postocular setæ brown with pale tips, scarcely pointed, their length 126-147 μ , interval about 154 μ , and distance from nearest facet of eye 35-40 μ . *Eyes* slightly produced dorsally, large and prominent, slightly protruding anteriorly, their dorsal length 103 μ , dorsal width 66 μ , dorsal interval (just posterior to ocelli) 82 μ , ventral length 84 μ , ventral width 57 μ , ventral interval 101 μ . *Ocelli* 27-29 μ in diameter, the median one directed forward and somewhat upward and with its posterior margin about on a line with anterior margin of eyes, the posterior ones about 39 μ apart and 27 μ from the median one. *Antennæ* with segment VIII nearly conical, but not compactly united with VII; setæ and sense-cones short, the latter disposed as follows on the inner (and outer) surfaces of the segments: III 0 (1), IV 1 (2+1), V 1 (1+1), VI 1 (1+1), VII 1 dorsal. *Mouth-cone* broadly rounded at tip, extending about 165 μ beyond posterior dorsal margin of head.

Prothorax (Fig. 1, a) moderately large and strong, the median length of pronotum about two-thirds that of head and contained in the transcoxal width about 2.3 times; pronotum with anterior margin concave and concentric with posterior one, its surface subreticulately sculptured except at middle, its median apodeme large and heavy; major setæ brown, scarcely pointed, measuring as follows (in μ in one caustic-treated paratype): antero-marginals 92, antero-angulars 53, midlaterals 97, epimerals 144, postero-marginals 149, coxals 60. *Pterothorax* distinctly broader than prothorax across coxæ and narrowed posteriorly. *Fore legs* somewhat enlarged; fore tarsi with a strong, slightly curved tooth near base. *Fore wings* about 1.1 mm. long and 135 μ wide at middle, with 11-14 accessory setæ, with the three brown subbasal setæ rounded at tip and respectively 71-93, 95-105, and 94-111 μ long.

Abdomen about as broad as pterothorax, widest at segment IV; tergum I subreticulate, the other basal ones closely striate; setæ brown or black, those on

segment IX palest, all of them long and nearly or quite pointed; IX with seta I about 259 μ , II 270 μ , III 245 μ ; tube (segment X, only) about 0.95 as long as head and 2.6 times as long as greatest subbasal width, the apical width distinctly less than one-half as great, its sides slightly concave near base; terminal setæ about 206 μ long.

Measurements of female (paratype, caustic-treated), in mm.: Length about 2.48 (fully distended, 2.82); head total length 0.294, width across eyes 0.214, greatest width at posterior angles of eyes 0.218, least width near base 0.186, width across basal collar 0.195; prothorax, median length of pronotum 0.197, width (including coxæ) 0.450; pterothorax, width across anterior angles of mesothorax 0.507, greatest width 0.526, width at posterior margin 0.427; abdomen, greatest width 0.514; tube (segment X, only), length 0.280, greatest basal width 0.107, least apical width 0.049.

Antennal segments . .	1	2	3	4	5	6	7	8
Length (μ) . .	40 ⁽¹⁾	67	88	91	82	77	64	40
Width (μ) . .	48 ⁽²⁾	38	34-37	44	40	38	30	16

Total length of antenna, 0.549 mm.

Male (macropterous).—Length about 2.2 mm. Color as in female and structure very similar, but head more slender (see measurements below), and prothorax and fore legs (Fig. 1, *b*) somewhat enlarged, the fore tarsal tooth stronger; seta II on abdominal segment IX reduced in length, 63 μ long.

Measurements of male (allotype, caustic-treated), in mm.: Length about 2.2 (nearly fully distended, 2.48); head, total length 0.284, width across eyes 0.182, greatest width at posterior angles of eyes 0.182, least width just behind eyes 0.176, least width near base 0.158, width across basal collar 0.165; eyes, dorsal length 0.097, dorsal width 0.055, dorsal interval 0.071, ventral length 0.080, ventral width 0.051, ventral interval 0.080; median ocellus, diameter 0.023; posterior ocelli, diameter 0.026, interval 0.037, distance from median ocellus 0.028; postocular setæ, length about 0.120, interval 0.124, distance from nearest facet of eye 0.038; mouth-cone, length beyond posterior dorsal margin of head 0.157; prothorax, median length of pronotum 0.214, width (inclusive of coxæ) 0.440; antero-marginal setæ, length 0.055, antero-angulars 0.052, midlaterals 0.084, epimerals 0.124, postero-marginals 0.124, coxals 0.080; pterothorax, width across anterior angles of mesothorax 0.435, greatest width 0.452, width at posterior margin 0.350; fore wings, length 1.04, width at middle 0.108; abdomen, greatest width (at segment

(1) Dorsal exposed length.

(2) Basal width.

IV) 0.423; tube (segment X, only), length 0.246, greatest subbasal width 0.090, least apical width 0.046, length of terminal setæ 0.196; segment IX with seta I 199 μ , II only 63 μ , III 255 μ .

Antennal segments. . .	1	2	3	4	5	6	7	8
Length (μ).	35 ⁽¹⁾	63	86	80	77	74	61	36
Width (μ).	44 ⁽²⁾	36	34	40	36	33	29	15

Total length of antenna, 0.512 mm.

MEXICO: Temixco (near Cuernavaca), Morelos, June 21, 1939, 3 ♀♀ and 1 ♂ taken by Profesor Alfonso Dampf from folded leaves of *Pithecolobium dulce*. (Fig. 2). Holotype and allotype in author's collection.

In Bagnall's key to the species of *Teuchothrips*, published in Marcellia, 25: 189, 1929, this species runs to *T. pittosporiicola*, and agrees with it closely in size, the number of accessory wing-setæ, and the comparative lengths of the head and tube. The most conspicuous differences are colorational, and lie in the nearly black sixth antennal segment, and the wholly yellow third one, of the present species; the much darker fore wings; the black, instead of brownish yellow, middle and hind tarsi; and the dark brown or black major setæ, which in Bagnall's species are yellow or light brown.

RESUMEN

El presente trabajo da a conocer el primer representante americano del género Teuchothrips, el T. pithecolobii, n. sp., encontrado en el Estado de Morelos, en una altura de 1,500 m., en las hojas enrolladas de Pithecolobium dulce (Guamuchil). Las 14 especies de este género viven en Australia, Java y Ceilan, el hallazgo de una nueva especie en el Continente americano es por tal motivo de especial interés.

SUMMARY

The author describes the first American representative of the thysanopterous genus Teuchothrips (T. pithecolobii), found in deformed leaves of Pithecolobium dulce, near Cuernavaca, State of Morelos. The other 14 species of the genus are known from Australia, Java and Ceylon.

(1) Dorsal exposed length.

(2) Basal width.

ZUSAMMENFASSUNG

Neubeschreibung von Teuchothrips pithecolobii, aus dem Staate Morelos, Mexico, wo die Art in Pithecolobium dulce-Bueschen Blattgallen verursacht. Da die uebrigen Arten der Gattung indoaustralischer Hernunft sind, ist das Vorkommen eines Teuchothrips in Mexico von besonderem zoogeographischen Interesse.

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Fig 1. *Teuchothrips pithecolobii*, sp. nov.

- a). Head and prothorax, ♀ paratype (setae shown on head, prothorax, and fore coxae. only). Cabeza y protorace de la hembra, paratipo (cerdas de la cabeza, del protórax y de las coxas anteriores, representadas).
- b). Left fore leg, ♂ allotype (all setae omitted); (pata izquierda anterior del macho, alotipo, cerdas no representadas).

(Dibujo del autor; cámara clara.)

Fig. 2. *Pithecolobium dulce*, parte de una ramita con las agallas típicas del *Teuchothrips pithecolobii*; a y c, cortes transversales de las hojas afectadas. Nótese que la substancia de las hojas se encuentra hipertrofiada.

Part of a twig of *Pithecolobium dulce*, with deformed leaves, folded by *Teuchothrips pithecolobii*, a, c, cross sections thru the folded leaves.

(A. Dampf y E. Guzmán dib.)

