NEW SPECIES OF EAST INDIAN GALL MIDGES.

by

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The descriptions of the following new species are based upon a small collection received from W. Docters van Leeuwen, Director of the Botanic Gardens, Buitenzorg, Java, under date of February 27, 1925. In addition to the new species described below, it is interesting to record the occurrence of the Indian Schizomyia assamensis Felt on Rubus moluccanus at Buiter zorg, originally recorded on Rubus assamensis, Schillong, Assam. It will be noted that several species have been tentatively referred to certain genera, although subsequent studies may justify the erection of a genus for one or more of these species. It should be noted, that much has yet to be learned of the gall midge fauna of the Orient.

Dasyneura tetrastigma n. sp.

An excellent series of females only was reared from a stem gall 1) on *Tetrastigma pergamaceum* PLANCH., (Vitaceae), collected at Mt. Gedeh, Tjibodas, altitude 1500 M., 30, XII, 1924, D. v. L.

Female. Length 1.75 mm. Antennae extending to the third abdominal segment, sparsely haired, fuscous yellowish, 18 sessile segments, the fifth with a length about twice its diameter and with somewhat high circumfila at the basal fourth and distal fifth, the last segment normally somewhat reduced, ovate. Palpi, first segment broadly oval, the second narrowly oval, with a length about twice its width, the third a little longer, more slender, the fourth more than twice the length of the third, the distal segments with numerous narrowly oval scales; mesonotum dark brown, scutellum and postscutellum fuscous yellowish, abdomen reddish-brown, the ovipositor nearly as long as the abdomen, rather stout, obtuse apically, halteres and legs mostly fuscous yellowish, the tarsi somewhat darker.

Type Cecid. A3392, N. Y. State Museum.

Calopedila polyalthiae n. sp.

The species described below was recorded as having been reared from a fruit gall ²) on *Polyalthia subcordata* BL. (Anonaceae), collected at Mt. Gedeh, Tjibodas, altitude 1400 M. XI, 1923, D. v. L. The generic reference is tentative, pending further study.

¹⁾ Docters van Leeuwen-Reijnvaan. The Zoocecidia of the Netherlands East Indies. Batavia. 1926, p. 351. No. 887. Figure 633.

Male. Length 2 mm. Antennae nearly as long as the body, sparsely haired, pale yellowish, 20 segments, the fifth with a stem $\frac{1}{4}$ the length of the cylindrical basal enlargement, the latter with a length $\frac{1}{2}$ greater than its diameter, the terminal segment greatly reduced, subconical. Palpi short, the first segment broad, obconical, the second cuboidal, the third with a length $\frac{1}{2}$ greater than the second, broadly fusiform; thorax and abdomen apparently a nearly uniform yellowish-brown, wings hyaline, the third vein uniting with the margin a little before the apex; halteres and legs pale straw. the claws unidentate, the pulvilli as long as the claws. Genitalia, basal clasp segment moderately long, stout, terminal clasp segment rather short, tapering, dorsal plate deeply and narrowly incised, the lobes broadly rounded, ventral plate broadly and triangularly emarginate, the lobes tapering and narrowly rounded,

Female. Length 3 mm. Antennae nearly as long as the body, sparsely haired, pale yellowish, 21 sessile segments, the fifth with a length $\frac{1}{2}$ greater than its diameter, terminal segment reduced, subconical, ovipositor about $\frac{1}{2}$ the length of the abdomen, the terminal lobes narrowly oval and with a length about 3 times the width. Otherwise nearly as in the male.

Pupa. Length 2.5 mm. Moderately stout, fuscous reddish; antennae with long, broad, basal processes, the latter with a length about 3 times the width, the inner angles greatly produced, broadly rounded apically, the outer angles near the distal third and acute; the antennae extend nearly to the base of the abdomen, the wing cases nearly to the tip of the abdomen and the legs well beyond its apex, the abdomen, the wings and the legs variably fuscous.

Type Cecid. A3386, N. Y. State Museum.

Oligoxenomyia n. g.

The similar, cylindrical, short-stemmed antennal segments in both sexes, the triarticulate palpi, the simple claws with rudimentary pulvilli and the short ovipositor readily separate this genus from all other Oligotrophiariae.

Type O. radicis n. sp.

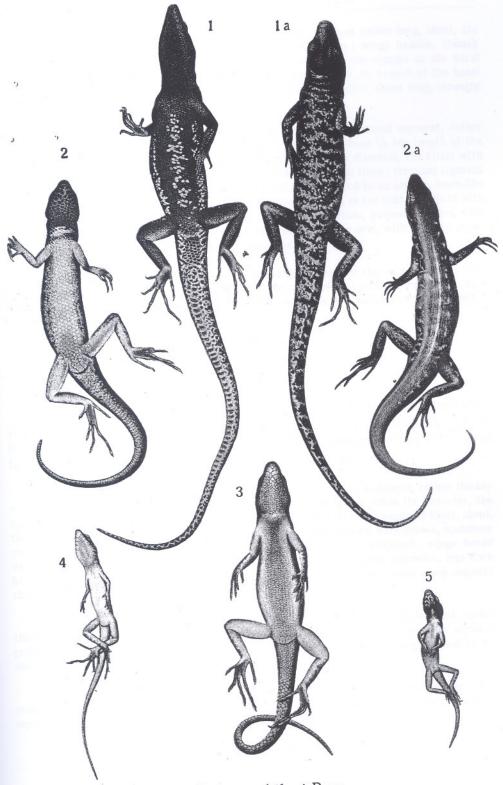
Oligoxenomyia radicis n. sp.

An excellent series of midges were reared from a most remarkable gall ¹) on the strong aerial roots of *Freycinetia valida* RIDL. (Pandanaceae), collected at Bolang, near Buitenzorg, altitude 600 M., III, 1924, D. v. L.

Male. Length 2.75 mm. Antennae extending to the base of the abdomen, thickly haired, pale straw, 14 segments, the fifth with a stem about \(^{1}/_{5}\) the length of the basal enlargement, the latter with a length 3 times its diameter, with a somewhat well marked constriction near the basal third and thick whorls of moderately long, dark setae basally and at the distal third; terminal segment produced, with a length about 5 times its diameter, the distal fifth somewhat constricted and broadly rounded. Palpi, first segment subglobose, the second a little longer, obpyriform, the third about as long as the second and tapering irregularly to a slender apex; mesonotum reddish-brown, scutellum and postscutellum brownish-yellow, abdomen fuscous yellowish and rather thickly clothed with dark hairs. Genitalia yellowish,

¹⁾ DOCTERS VAN LEEUWEN-REIJNVAAN. loc. cit. p. 63. No. 45.

TREUBIA VOL. IX.



Lygosoma kühnei Roux.

1, 1a = 0. -2, 2a, 3 = 0. -4, 5 =Jugendform. -1, 1a, 2, 2a, 5 von Teoen. -3, 4 von Tepa, Babar. -1a, 2a in Dorsalansicht, alle übrigen in Ventralansicht. Alle Figuren in nat. Gr., SOEDIRMAN del. et pinx.

basal clasp segment moderately long, stout, terminal clasp segment rather long, stout, the distal portion somewhat swollen, subpyriform and plainly darker; wings hyaline, though rather thickly clothed with fuscous scales, subcosta uniting with the margin at the basal third, the third vein beyond the apex, the fifth at the distal fourth, its branch at the basal third; halteres and legs fuscous yellowish, the tarsi somewhat darker, claws long, strongly curved basally and apically; pulvilli rudimentary.

Female. Length 3 mm. Antennae extending to the third abdominal segment, rather thickly haired, fuscous yellowish, $\mathbf{1}_4$ segments, the fifth a stem about $^1/_5$ the length of the cylindrical basal enlargement, the latter with a length $3\frac{1}{2}$ times its diameter, the latter with thick whorls of moderately long, stout setae basally and at the distal third; terminal segment with a length over 4 times its diameter, the distal portion constricted to an obtuse, knob-like process. Palpi, first segment obpyriform, the second about as long as the first, the third with a length twice the second, slender and tapering at both extermities; ovipositor short, with a length less than $\frac{1}{4}$ that of the abdomen, the terminal lobes broadly oval, with a length about $2\frac{1}{2}$ times the width. Other characters nearly as in the male.

Pupa. Length 2.75 mm. Rather slender, the basal processes of the antennal cases with a length about 3 times the width, obtuse apically, the antennae extending about to the base of the abdomen, the fuscous wing cases to the third abdominal segment and the somewhat fuscous legs beyond the tip of the abdomen.

Type Cecid A3391, N. Y. State Museum.

Asphondylia bursaria n. sp.

A series of midges were reared from a stem gall ¹) on *Symplocos fasciculata* Zoll, collected on Mt. Gedeh, Tjibodas, altitude 1500 M., II, 1925, D. v. L. It is stated that the chamber of the gall is in the beginning totally filled with fungus mycelium, afterwards eaten in one or two months.

Male. Length 2 mm. Antennae extending to the base of the abdomen, rather thickly haired, fuscous yellowish, $\rm I_4$ segments, the fifth with a length 3 times its diameter, the terminal segment with a length $\rm 3\frac{1}{2}$ times its diameter. Palpi, the first segment short, stout, the second slender, with a length $\rm \frac{1}{2}$ greater than the first; mesonotum dark brown, scutellum yellowish-brown, postscutellum reddishbrown, abdomen fuscous yellowish, wings broad with numerous fuscous hairs, especially along costa; halteres fuscous yellowish, legs dark brown, the tarsi blackish, the pulvilli as long as the claws. Genitalia, basal clasp segment short, stout, terminal clasp segment short, swollen, bidentate.

Female. Length 2.5 mm. Antennae extending to the fourth abdominal segment, rather thickly haired, fuscous yellowish, the fifth with a length 4 times its diameter, termina' segment globose, ovipositor nearly as long as the body, the dorsal pouch with a height equal to 1/3 the diameter of the segment. Other characters nearly as in the male.

Pupa. Length 2 mm. Moderately stout, tapering to a broadly rounded posterior extremity; mesonotum dark brown, wing pads fuscous and extending to the third abdominal segment, the leg cases to the fifth, the abdomen mostly fuscous yellowish.

Type Cecid. A3393, N. Y. State Museum.

¹⁾ DOCTERS VAN LEEUWEN-REIJNVAAN. loc. cit. p. 460. No. 1216, fig. 877.

Asphondylia ixora n. sp.

Several females were recorded as having been reared from a flower gall of *Pavetta* (*Ixora*) timoriensis Decne, Island Klein-Kombuis, north from Batavia, 20, V., 1923, D. v. L. The species is somewhat peculiar on account of the dorsal prolongation of the first antennal segment.

Female. Length 2 mm. Antennae nearly as long as the body, sparsely haired, fuscous yellowish, 14 segments, the first with a distinct dorsal prolongation, the fifth with a length 4 times its diameter, the 13th with a length ½ greater than its diameter and the 14th globose. Palpi, first segment short, obconic, the second with a length nearly 3 times its diameter, the 4th more than twice the length of the third, slender and rather thickly haired; mesonotum reddish-brown, scutellum and postscutellum yellwish-brown, abdomen reddish-brown, the ovipositor when extended nearly as long as the entire body, the dorsal pouch moderately conspicuous, legs mostly pale straw, the claws stout, strongly curved, the pulvilli as long as the claws.

Type Cecid. A3389, N. Y. State Museum.

Diceromyia orientalis n. sp.

A gall midge tentatively referred to this genus was reared from a stem gall ²) on *Phoebe declinata* NEES, collected in Virgin Forest on the east coast of Sumatra, near Sibolangit, dated 3, II, 1924, D. v. L. The one specimen is badly broken and although not entirely characteristic of the genus, it is tentatively placed here pending the obtaining of more material.

Male. Length 2 mm. Antennae probably nearly as long as the body, only the two basal segments remaining, the first with a length about ½ greater than its diameter, obconical, the second cylindro-globoid, the length being about ¾ the diameter. Palpi, the one segment short, broadly fusiform, with a length about twice its diameter, thorax fuscous, abdomen and wings thickly clothed with long fuscous hairs. Genitalia vertical, the posterior face smooth, rather thickly clothed with long, stout setae, basal clasp segment short, stout, aproximate; terminal clasp segment short, tapering to a broadly excavated apex, the lateral angles produced as stout, tooth-like processes with a length 3 times the major diameter; legs fuscous yellowish, claws rather long, slender, strongly curved, the pulvilli nearly as long as the claws.

Type Cecid A3387, N. Y. State Museum.

Gnesiodiplosis garcinia n. sp.

The gall midges provisionally referred to this genus were reared from a leaf gall ³) on *Garcinia dioica* BL., Dèpok, near Batavia, altitude 100 M., VIII, 1922, D. v. L.

¹⁾ DOCTERS VAN LEEUWEN-REIJNVAAN. loc. cit. p. 532. No. 1433, fig. 1016.

²⁾ DOCTERS VAN LEEUWEN-REIJNVAAN. loc. cit. p. 209. No. 468, fig. 331.

³⁾ DOCTERS VAN LEEUWEN-REIJNVAAN. loc. cit. p. 387. No. 993, fig. 708.

Male. Length 2,5 mm. Antennae nearly as long as the body, sparsely haired, fuscous yellowish, 14 segments, the fifth slightly trinodose, the basal portion of the stem with a length ½ its diameter, the distal part with a length ½ greater than its diameter, the basal enlargement subcylindrical, with a length nearly equal its diameter, the distal enlargement with a length 1 greater than its diameter and with a rather distinct constriction near the basal third suggestive of three en'argements; circumfila moderately long, whorls of long setae basally on the proximal enlargement and near the middle of the distal enlargement; terminal segment produced, the basal enlargement subglobose, the basal portion of the stem with a length about ½ its diameter, the distal enlargement with a length about 3 times its diameter and rather distinctly constricted at the basal third, terminal portion fusiform with a length 3 times its diameter and distinctly constricted basally, Palpi, consisting of one short, broadly oval segment; mesonotum yellowish-brown, scutellum pale yellowish, postscutellum yellowish-brown, abdomen mostly pale yellowish, wings hyaline, halteres whitish, legs pale straw, claws simple, strongly curved basally, the pulvilli rudimentary. Genitalia, basal clasp segment moderately long, stout, terminal clasp segment long, slightly curved, tapering; dorsal plate broadly and triangularly emarginate, the lobes obliquely truncate; ventral plate broad, truncate, rather deeply and narrowly incised.

Female. Length 3 mm. Antennae extending to the fifth abdominal segment, sparsely haired, pale straw, 14 segments, the fifth with a stem about \(\frac{3}{4}\) the length of the cylindrical basal enlargement, the latter with a length about 3 times its diameter; terminal segment produced, the basal portion with a length 4 times its diameter, the apical part fusiform, distinctly constricted basally and with a length about 4 times its diameter. Palpi, one short, subconical segment; ovipositor short, the terminal lobes narrowly oval, with a length about twice the diameter.

Pupa. Length 2.5 mm. Rather stout, yellowish-brown, eyes black, antennal cases extending to the first abdominal segment, the wing cases to the third abdominal segment and the leg cases nearly to the tip of the abdomen.

Type Cecid. A3388, N. Y. State Museum.