

NEW JAVANESE GALL MIDGES

by

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The following descriptions are based upon a small collection of insects kindly submitted for study by Dr. W. DOCTERS VAN LEEUWEN, Director of the Botanical Gardens, Buitenzorg, Java, under date of July 15, 1920. The collection is of special interest since it has brought to light a very interesting new genus and has given additional data respecting the habits of the oriental *Orseoliella*, a genus which breeds in several grasses.

It should be noted in this connection that many of the gall midges were forwarded in some preserving fluid which apparently affected the circumfila in such a way that the ordinary processes of mounting in balsam resulted in their disappearance, and therefore, made it very difficult to be positive in regard to these structures.

Thorodiplosis n. g.

This genus is tentatively placed in the Bifili though further study may show that it belongs in the Trifili. It may be easily distinguished from all other known genera by the very long, narrow wings, the produced antennae, the simple claws with an almost right angled curve, and the short lobed ovipositor, type *T. impatientis* n. sp.

In the Bifili, this genus runs to *Thurauia* from which it is easily separated by the short, non-chitinized ovipositor. The tendency toward small, cylindrical antennal segments distally in the male suggests an affinity with *Prodiplosis* FELT and it is possible that the genus will ultimately be placed in this series. Unfortunately the two males have been so manipulated that it is impossible to refer the genus to one or the other of these sub-tribes.

Thorodiplosis impatientis n. sp.

The minute midges were received from W. DOCTERS V. LEEUWEN under date of July 15th, 1920 and labelled 21, Impatiens platypetala Lindl. Tjibodas, Mount Gedeh, 1500 m. Bull. Jard. Bot. Buitenzorg series III, volume 1, page 49, No. 599. An illustration of the gall shows it to be a marginal leaf roll on the upper surface. (Fig. 599).

Male. Length 3.5 mm. Antennae $\frac{1}{2}$ longer than the body, thickly haired, yellowish transparent, 14 segments, the 5th with stems 3 and $3\frac{1}{2}$ times their diameter respectively. The basal enlargement pyriform, the distal enlargement with a length about $\frac{1}{2}$ greater than its diameter, each with a whorl of long, stout setae and presumably with a moderately long circumfilum, the 10th and following segments having the basal portion of the stem with a length about $2\frac{1}{2}$ times its diameter, the distal enlargement cylindrical, somewhat produced and with a length over twice its diameter and the distal portion of the stem with a length 4 times its diameter, terminal segment somewhat produced, irregular, the basal portion of the stem being represented by a narrow constriction; the distal enlargement somewhat produced, and apically bearing a long, stout, tapering setose process. Palpi, first segment moderately long, irregular, the second with a length about 3 times its diameter, the third $\frac{1}{2}$ longer, more slender and the fourth a little shorter and more dilated than the third. Mouth parts produced as narrow, piercing organs with a length about $\frac{1}{2}$ the vertical diameter of the head; body yellowish, wings hyaline, very narrow, with a length about 3 times the width, the third vein uniting with the margin well beyond the apex, halteres and legs yellowish transparent, claws moderately long, stout, curved at nearly right angles, simple, the pulvilli a little shorter than the claws. Genitalia; basal clasp segment moderately long, slender, with an irregular lobe basally, terminal clasp segment as long as the basal clasp segment and rather stout, dorsal plate broad, triangularly emarginate, the lobes obliquely truncate; ventral plate long, broad, broadly and roundly emarginate.

Female. Length 3 mm. Antennae a little longer than the body, sparsely haired, pale yellowish, 14 segments, the 5th with a stem about as long as the sub-cylindrical basal enlargement, which latter has a length about 4 times its diameter and a distinct constriction near the basal third; basal enlargement of the terminal segment with a length about $2\frac{1}{2}$ times its diameter and apically with a moderately stout, tapering process. Mesonotum brownish yellow. Scutellum, postscutellum and abdomen yellowish, legs yellowish transparent, ovipositor short, the terminal lobes narrowly oval and sparsely setose, other characters nearly as in the male.

Type Cecid. A. 3153 N. Y. State Museum.

Orseoliella orientalis n. sp.

The specimens were received from W. DOCTERS v. LEEUWEN under date of July 15th, 1920, labelled 20, *Oplismenus compositus* P. B., Buitenzorg VI, 1920, Alt. 250 m. New gall D. v. L. ¹⁾ This species is very distinct from *O. javanica* KIEFF. and probably so from *O. graminis* FELT since it presents well marked colorational and certain structural differences in the female. A series of both sexes would be necessary in order to establish this definitely.

Male. Length 3 mm. Antennae a little longer than the body, thickly haired, light brown, 14 segments, the 5th with stems $1\frac{1}{2}$ and $3\frac{1}{2}$ times their diameters respectively. Basal enlargement pyriform, the distal enlargement sub-cylindrical, with a length over twice the diameter and slightly constricted near the basal third. Palpi, first segment short, subquadrate, second broadly oval, the third $\frac{1}{2}$ longer, more slender, the fourth a little longer and more slender than the third. Mesonotum reddish brown. Scutellum and postscutellum yellowish, abdomen yellowish brown, halteres pale yellowish, coxae and

¹⁾ A leaf-sheath gall as may be found on different grasses. D. v. L.

legs pale straw, claws moderately long, slender, strongly curved, the pulvilli as long as the claws. Genitalia; basal clasp segment long, with a distinct basal lobe; terminal clasp segment rather long, stout, nearly straight; dorsal plate short, deeply and triangularly emarginate; ventral plate long, broad and broadly rounded apically.

Female. Length 3.5 mm. Antennae extending to the 5th abdominal segment, sparsely haired, light straw, 14 segments, the 5th with a stem about $\frac{1}{4}$ the length of the cylindrical basal enlargement, which latter has a length $3\frac{1}{2}$ times its diameter; terminal segment produced, the basal enlargement with a length over thrice its diameter, and apically a moderately stout fusiform appendage about $\frac{3}{4}$ the length of the enlargement. Mesonotum reddish brown. Scutellum and postscutellum yellowish, abdomen light reddish brown, the short ovipositor yellowish, the lobes broadly oval and sparsely setose, coxae and legs pale straw, otherwise nearly as in the male.

Pupa. (Female.) Length 3.5 mm. Slender, antennal horns long, triangular, wing cases fuscous, extending to the third abdominal segment, leg cases to the sixth abdominal segment, abdomen yellowish orange.

Type Cecid. A 3152 N. Y. State Museum.

Parallelodiplosis javanica n. sp.

The midges described below were received under date of July 15th, 1920 from W. DOCTERS v. LEEUWEN. They were labelled 18, *Panicum indicum* L., Buitenzorg VI, 1920. Undescribed gall, ¹⁾ D. v. L., Alt. 250 m. The species appears to be new and is tentatively referred to the above genus.

Male. Length 2.5 mm. Antennae one half longer than the body, thickly haired, light brown, 14 segments, the 5th with stems each with a length about $2\frac{1}{4}$ times the diameter. The basal enlargement sub-globose, the distal enlargement with a length nearly twice its diameter, sub-cylindrical. Circumfila moderately long, stout, terminal segment produced, the basal portion of the stem with a length fully 5 times its diameter, the distal enlargement sub-cylindrical, with a length $2\frac{1}{2}$ times its diameter, apically a rather stout fusiform appendage. Palpi, first segment short, roundly quadrate, the second a little larger, subquadrate, the third one half longer, more slender and the fourth a little longer and more slender than the third, Mesonotum dark reddish brown. Scutellum and postscutellum yellowish brown. Abdomen yellowish, wings hyaline, halteres yellowish transparent, legs mostly pale straw, claws moderately long, stout, strongly curved, the pulvilli longer than the claws. Genitalia; basal clasp segment rather long, stout, terminal clasp segment short, stout, swollen basally; dorsal plate short, broad, deeply and triangularly emarginate, the lobes tapering to a narrowly rounded apex; ventral plate rather long, broad, narrowly rounded apically.

Female. Length 3 mm. Antennae extending to the sixth abdominal segment, sparsely haired, light brown, 14 segments. The 5th with a stem $\frac{1}{3}$ the length of the cylindrical basal enlargement, which latter has a length about 3 times its diameter. Terminal segment produced, the basal enlargement with a length 3 times its diameter and apically a stout fusiform process. Mesonotum dark brown. Scutellum and postscutellum yellowish, abdomen yellowish brown, the ovipositor short, yellowish, the terminal lobes narrowly oval and sparsely setose. Halteres yellowish transparent. Coxae and legs light straw, other characters nearly as in the male.

Type Cecid. A 3150 N. Y. State Museum.

¹⁾ A leaf-sheath gall.

Parallelodiplosis paspali n. sp.

This species was received from W. DOCTERS v. LEEUWEN under date of July 15th, 1920 and labelled. 19, Paspalum scrobiculatum Hook, Buitenzorg VI, 1920. New gall, ¹⁾ D. v. L., Alt. 250 m. The generic reference is tentative.

Male. Length 3 mm. Antennae $\frac{1}{4}$ longer than the body, thickly haired, light brown, 14 segments, the 5th with stems $2\frac{1}{2}$ and 3 times their diameters respectively. Basal enlargement sub-globose, distal enlargement with a length one half greater than its diameter and a distinct constriction near the basal third, circumfila rather long. Terminal segment produced, the basal portion of the stem with a length 5 times its diameter, the distal enlargement sub-cylindrical, with a length 3 times its diameter, apically with a slender fusiform appendage. Palpi, first segment short, stout, irregular, the second irregularly triangular, the third with a length $\frac{1}{2}$ greater than its diameter, ovoid, the fourth $\frac{1}{2}$ longer than the third, rather broad. Mesonotum yellowish brown, scutellum and postscutellum yellowish brown, abdomen yellowish. Genitalia slightly fuscous, wings hyaline, halteres yellowish basally, fuscous apically, legs pale straw, claws rather long, slender, strongly curved, simple, the pulvilli as long as the claws. Genitalia; basal clasp segment moderately long, stout, terminal clasp segment short, stout. Dorsal plate short, broad, broadly and triangularly emarginate. Ventral plate broad, broadly rounded apically.

Female. Length 3 mm. Antennae nearly as long as the body, sparsely haired, dark brown, 14 segments, the 5th with a stem $\frac{1}{3}$ the length of the cylindrical basal enlargement, which latter has a length $3\frac{1}{2}$ times its diameter. Terminal segment produced, the basal enlargement with a length 4 times its diameter and apically a slender, tapering process, slightly swollen basally. Mesonotum reddish brown. Scutellum and postscutellum yellowish, abdomen yellowish brown, halteres whitish transparent, legs pale straw, ovipositor short, the terminal lobes narrowly triangular and sparsely setose, other characters nearly the same as in the male.

Pupa. Length 3 mm., rather slender, antennal horns prominent, wing cases extending to the third abdominal segment, leg cases nearly to the tip of the abdomen, both brown or dark brown. The abdomen yellowish brown.

Type Cecid. A 3151 N. Y. State Museum.

¹⁾ A leaf-sheath gall.