

Mem. Bost. Soc. N. Hist. IV.

T u t t, J. W. Practical Hints for the Field Lepidopterist. Vol. I—III. 1901—1905.

V e c h t, J. v. d. Aanteekeningen over Nederlandsche Hymenoptera. Zoöl. Mededeel., XIII, 1/2, 1930.

W a s m a n n, E. Kritisches Verzeichnis der myrmekophilen und termitophilen Arthropoden. 1894.

W h e e l e r, W. M. The social Insects. 1928.

W i l d e, O. Die Pflanzen und Raupen Deutschlands. Thl. I—II. 1860—1861.

W o o d, W. Index entomologicus. Lepidopterous Insects. 1839.

Revue Mensuelle Namuroise et Lambillio-  
nea. Ann. V, VI (1—3), XI (6—12), XII,  
XIII, XIV (1—7), XIX (1—4), XXVIII(11),  
XXIX (7—12), XXX, XXXI, XXXII, XXXIII  
(1—11). Suppléments. Nr. 1—29.

V e r e i n f. Schlesische Insektenkunde.

I. Ergänzungsheft zum 68. Jahresber. 1890. (Bevat  
o.a. Hieronymus, G. Beitr. zur K. d. europ.  
Zoocecidien u. d. Verbreitung derselben.)

II. Festschrift zur Feier des 50jähr. Bestehens des  
Vereins, 1847—1897. 1897.

(D. MAC GILLAVRY).

## Description of some new *Traulia* sp., with key to the known species (Orthopt. Acrididae).

### *Traulia hosei* nov. spec.

General coloration blackish brown. Antennae brown, darker apically. Head blackish brown; face yellowish brown, with the upper part above the median ocel and a transverse band along the clypeal margin black. Cheeks yellowish brown, with a black spot near the lower margin. Behind the eye with a black postocular band. Fastigium of vertex and vertex yellowish brown with a blackish stripe or band in the middle. Mouthparts black with yellowish brown spots, palpi yellow. Pronotum yellowish brown from above, with a broad brown median band faintly indicated, from the anterior to the posterior margin; prozona with a very small and metazona with a larger, black velvety spot on each side; lateral lobes brownish black, lower margin broadly bordered with yellow.

Elytra and wings reaching the top of abdomen.

Elytra brown with a longitudinal black stripe in the middle, from the base to the apex.

Wings bluish, top and posterior margin infumated.

Epimerum of meso- and metathorax with a yellowish brown, oblique stripe. Meso- and metasternum black with a yellowish brown spot in the middle. Abdomen yellowish brown with blackish spots on the sides. Anterior and median legs brown, top of femur and tibiae on the inner side black. Hind femora red, outer area yellowish red, upper part of outer area black along the upper outer keel in the basal half, continuing posteriorly in a transverse black spot reaching from the upper to the lower outer keel, kneelobes black, with a complete broad yellowish brown praegenicular ring; upper area brown, lower and inner area red. Hind tibiae black, with a small yellow spot from above at the base, spines brown with black tips. Hind tarsi blackish brown.

♀

Length of body .....	29 mm
„ pronotum .....	8 „
„ elytra .....	20 „
„ hind femora .....	17 „

Locality: Borneo, Batu Song Mt. and Apoh River, 1 ♀, Hose Coll. Mus. Oxford, type.

***Traulia media* nov. spec.**

General coloration blackish brown. Antennae blackish brown, apical joints yellowish white. Head blackish brown, with a transverse yellow band running from the lower part of the front, across the cheeks backwards, along the lower part of the lateral lobes of pronotum on to the epimerum of mesothorax.

Frontal ridge near the clypeus with the margins black, clypeal margin black. Behind the eyes with a black postocular band, continuing on the lateral lobes of pronotum.

Fastigium of vertex brown, vertex black.

Pronotum with the disc brown, with an indication of a more yellowish brown, narrow, longitudinal stripe on each side; lateral lobes in the upper part black, lower part yellow. Epimerum of meso- and metathorax with a yellow, oblique stripe.

Elytra somewhat shorter than the abdomen, brown, with a blackish brown stripe in the middle from the base to the apex.

Wings bluish, apex and posterior margin infumated.

Prosternal spine yellowish brown, with the apex black.

Meso- and metasternum black with a large yellow spot in the middle, posterior margin of metasternum yellowish brown.

Abdomen brown with black spots on the sides, posterior margin of sternits bordered with blackish brown.

Anterior and median legs olivaceous brown. Hind femora red; area externa red or reddish brown, along the outer upper keel with a blackish stripe more or less indicated; upper area

brown, lower and inner area red; kneelobes black, with a yellow praegenicular ring, bordered in the outer area with a black spot.

Hind tibiae with the basal third black, apical part red, extreme tip blackish; spines with black tips.

Hind tarsi brown.

	♂	♀
Length of body .....	20—22	— 29 mm
„ pronotum .....	5—6	— 7 mm
„ elytra .....	13—14	— 16 mm
„ hind femora .....	12—13	— 15 mm

Locality: Central East Borneo (H. C. Siebers) 9 ♂ ♂, 4 ♀ ♀, type Mus. Buitenzorg.

### *Traulia palawana* nov. spec.

General coloration blackish brown. Antennae brown, darker apically, apical joints yellowish. Head brown, face brown, without spots.

Fastigium of vertex and vertex brown, with a blackish brown, median band from the fastigium to the anterior margin of pronotum.

Behind the eyes with a faint indication of a blackish brown postocular band.

Pronotum brown, prozona and metazona with a dark longitudinal band on each side of the median keel and velvety black stripes on these bands. Lateral lobes brown, upper part blackish.

Epimerum of meso- and metathorax brown.

Elytra and wings reaching a little beyond the middle of abdomen.

Elytra brown, with a dark longitudinal stripe in the middle, reaching from base to apex.

Wings bluish, apex and posterior margin infumated.

Sternum and abdomen brown.

Anterior and median legs brown, inner sides of femora black.

Hind femora brown, outer area blackish brown, lower inner and inner area red, with a black spot just before the complete yellow praegenicular ring, knee blackish brown.

Hind tibiae blackish brown, with a broad yellow ring at the base, apex brown, spines with black tips.

Hind tarsi brown. ♀

Length of body .....	32 mm
„ pronotum .....	8 mm
„ elytra .....	15 mm
„ hind femora .....	18 mm

Locality: Borneo, N. Palawan, Binaluan, Nov.-Dec. leg. G. Boettcher, 1 ♀, type Mus. Berlin-Dahlem.

## Key to the species.

1. Pronotum with a broad, black or blackish brown, median band on the disc, bordered with yellow or yellowish brown, or without this band, but in that case with a small velvety black spot on each side in the metazona (*bimaculata*). In the anterior part of the prozona and in the metazona, this band is partly formed by a large or more small velvety black spot on each side ..... 2  
 Pronotum with or without black median band, but always without these velvety black spots ..... 10
2. Hind tibiae totally black, with a complete or incomplete, yellow ring at the base ..... 3  
 Hind tibiae black, with yellow and red ..... 4
3. Face with a quadrate black spot on the lower part of the frontal ridge. Velvety black spots on the disc of pronotum small. Elytra and wings reaching the apex of abdomen ..... *hosei* nov. spec.  
 Face without black spots, unicolorous. Velvety black spots on the prozona large. Elytra and wings only reaching a little beyond the middle of abdomen .....  
 ..... *palawana* nov. spec.
4. Hind tibiae black, with a yellow basal ring, in the apical half red or yellow, apex black ..... 5  
 Hind tibiae black, with or without a yellowish brown basal ring, in the apical half red, apex red ..... 6
5. Elytra long, reaching the apex of hind femora. Hind femora with a narrow, oblique, yellow stripe on the outer area at the base, the yellow praegenicular ring complete ..... *azureipennis* Serv.  
 Elytra short, lateral, not reaching beyond the second abdominal tergite. Hind femora without oblique yellow stripe on the outer area at the base, the yellow praegenicular ring incomplete, only indicated on the inner side ..... *brunneri* Bol. C.
6. Hind femora without oblique, yellowish band on the outer area at the base, lower area red ..... 7  
 Hind femora with oblique yellow band on the outer area at the base, lower area yellowish or black ... 8
7. Disc of pronotum with velvety black spots in pro- and metazona. Elytra not reaching beyond the 3d abdominal tergite. ♂ unknown ... *philippina* Bol. C.  
 Disc of pronotum with velvety black spots only in the metazona. Elytra reaching the top of abdomen ..... *bimaculata* Will.
8. Anterior and median legs unicolorous yellow or brown, only with a small black spot on the inner side of the apex of hind femora ..... 9  
 Anterior and median legs with the anterior area

- yellow or brown, posterior area black or blackish brown ..... *ornata* Shir.
9. Face with a distinct, quadrate, black spot on the lower part of the frontal ridge, margins of frontal ridge distinct and sharply indicated .....  
 ..... *antennata* Bol. C.  
 Face without distinct black spot on the lower part of frontal ridge, margins of frontal ridge obtuse and rounded ..... *annandalei* Bol. C.
10. Elytra and wings as long as or longer as the abdomen ..... 11  
 Elytra and wings short, reaching the middle of abdomen or somewhat longer by the male, but not reaching the top of abdomen, or lateral, not touching each other in the middle ..... 17
11. Face black, cheeks yellow ... *ferruginata* Br. v. W.  
 Face and cheeks with a yellow transverse band ... 12
12. Hind femora with the outer area red or brownish red, the yellow praegenicular ring bordered in the outer area by a small black spot ..... 13  
 Hind femora coloured differently ..... 14
13. Hind femora with a small yellow spot in the middle of the outer lower keel. Hind tibiae with a yellow basal ring ..... *borneensis* Will.  
 Hind femora without this small yellow spot near the middle of the outer lower keel. Hind tibiae without yellow basal ring, the basal third black, the other part red ..... *media* nov. spec.
14. Hind femora black, with a light yellow praegenicular ring faintly indicated ..... *incompletus* Will.  
 Hind femora coloured differently ..... 15
15. Hind femora blackish brown, upper area brown; outer area in the middle near the lower outer keel with a red spot; praegenicular ring red. Hind tibiae totally black or blackish brown ... *sanguinipes* Stål.  
 Hind femora coloured differently ..... 16
16. Hind femora black with two yellow transverse bands. Hind tibiae black with a basal yellow ring .....  
 ..... *pictilis* Stål.  
 Hind femora black or brown, at the base yellowish brown, in the basal half with an oblique yellow band, a yellowish brown spot in the middle of the lower area and a yellowish brown praegenicular ring. Hind tibiae black on the basal half, with a yellow basal ring, the apical half red with the apex black ..... *aurora* Will.
17. Hind tibiae black or blackish brown, with a yellow complete or incomplete basal ring or the basal part olivaceous green; apical half black or brown ..... 18

- Hind tibiae black, with or without yellow basal ring,  
apical half red ..... 26
18. Elytra in both sexes lobate, lateral ..... 19  
Elytra in both sexes touching each other in the middle,  
reaching the middle of abdomen or in the male so-  
mewhat longer ..... 22
19. Hind femora with a yellow praegenicular ring ..... 20  
Hind femora without yellow praegenicular ring ... 21
20. Hind femora with a yellow longitudinal stripe along  
the middle of the lower outer keel .....  
..... *flavo-annulata* Stål.  
Hind femora without yellow stripe along the lower  
outer keel; black, with a yellow praegenicular ring  
..... *elegans* Will.
21. Disc of pronotum yellow or yellowish brown. Hind  
tibiae brown or dark green, with an indication of a  
yellow or green basal ring ..... *flava* Will.  
Disc of pronotum brown, bordered with yellow. Hind  
tibiae olivaceous green in the basal half, apical half  
brown ..... *insularis* Will.
22. Hind femora black, with a yellow incomplete prae-  
genicular ring, only distinct on the inner side .....  
..... *lineata* Br. v. W.  
Hind femora with a complete yellow or red prae-  
genicular ring ..... 23
23. Hind femora with the praegenicular ring red, outer  
area with a yellow stripe along the outer upper and  
lower keel; lower area black ..... *superba* Will.  
Hind femora coloured differently ..... 24
24. Hind femora black, upper area brown ochraceous,  
a small yellowish stripe along the lower outer keel;  
lower area black ..... *aphanea* Will.  
Hind femora reddish brown, upper area brown, with  
or without a small yellow spot in the middle of the  
lower outer keel; lower area red ..... 25
25. Hind femora thick, not reaching beyond the top of  
the abdomen, without yellow spot in the middle of  
the lower outer keel ..... *stâli* Bol. C.  
Hind femora longer, reaching beyond the top of the  
abdomen, with a small yellow spot in the middle of  
the lower outer keel ..... *stigmatica* Bol. I.
26. Elytra very short, lateral, not reaching beyond the  
posterior margin of the second tergite ... *pumila* Will.  
Elytra longer, reaching the middle of the abdomen  
and touching each other in the middle ..... 27
27. Hind tibiae reddish brown, without yellow basal  
ring ..... *haani* Will.  
Hind tibiae with a distinct yellow or reddish yellow,  
basal ring ..... 28

28. Lower part of the frontal ridge near the clypeus with a quadrate black spot ..... *affinis* de Haan.  
 Lower part of the frontal ridge without black spot ..... *rosea* Will.  
 Eygelshoven (L.). C. WILLEMSE.

### Nederlandsche vlindervormen. III.

*Lythria purpurata* L. Toen ik in 1933 verschillende collecties bestudeerde, om na te gaan, of werkelijk wel beide *Lythria*'s in ons land voorkomen, heb ik talrijke exemplaren van *L. purpurata* L. onder de oogen gehad, waarbij mij bleek, dat deze soort uiterst variabel is. Een volledig overzicht van alle vormen van beide soorten heb ik gegeven in Lambillionea, 1934, p. 14—21 en 36—46, pl. I, fig. 1—25 en Ia, fig. 1—13.

A. 1. gen. vern. *demaisoni* Prout, Seitz IV, p. 156, 1914. De voorjaarsgen. is veel kleiner en donkerder dan de zomer- gen. Banden duidelijk zichtbaar. Tot deze gen. behooren :

2. ab. *unicolora* Lempke, Lamb., 1934, p. 42. Voorvls. een- kleurig zwartachtig, zonder purperen banden. Hengelo, Groenekan.

3. ab. *pseudo-suffusa* Lempke, l.c. Grooter, minder donker bestoven, doch meestal kleiner dan ab. *suffusa* der zomer- gen. Breda, 's-Gravenhage, Wassenaar.

4. ab. *pseudo-typica* Lempke, l.c. Even klein als *demaisoni*, maar met de heldere kleuren van de zomer- gen. Breda, Soest.

B. 5. gen. aest. *purpurata* L. Hiertoe behooren :

6. ab. *hilariata* Kitt, Verh. Z. B. Ges., vol. 68, p. (199), 1918. Grondkleur der voorvleugels geel. Kijkduin, 's-Graven- hage, Hilversum, Soest, Bilthoven, Montferland, Breda, Ber- gen op Zoom, Apeldoorn.

7. ab. *suffusa* Lempke, Lamb., 1934, p. 38. Grondkleur der voorvls. donker olijfgroen, banden minder duidelijk. Kijk- duin, Den Haag, Soest, Scherpenzeel (Fr.), Montferland, Vlijmen, Weert, Rolduc.

8. ab. *nigricaria* Lempke, l.c. Voorvls. zwartachtig, zonder banden. Montferland, 1-7-33 (L. H. Scholten leg.).

De abs., die betrekking hebben op de twee purperen ban- den, kunnen in beide generaties voorkomen. Uit ons land zijn mij alleen bekend :

9. ab. *tenuivittata* Lempke, l.c. Met smalle banden. Loos- duinen, Kijkduin, Den Haag, Hilversum, Vlijmen, Ginneken.

10. ab. *griseovittata* Lempke, op. cit., p. 39. Banden grijs. Soest, 21-8-33 (R. Tolman leg.).

11. ab. *effusata* Lempke, l.c. Kleur der banden normaal, doch slechts flauw zichtbaar, grondkleur normaal. Loosduinen, Den Haag, Bilthoven, Breda, Tegelen, Vaals.

12. ab. *trilineata* Hannemann, Int. Ent. Z. Guben, vol. 11,