

kaken te moeten bewerken, kan men dikwijls deze met een flinken ruk naar buiten trekken.

Wie hem van dichtbij in zijn doen en laten wil gadeslaan, kan thuis in een glazen bak een soort kunstnest voor hem inrichten, waarvan een gedeelte met zand vast is gevuld, afgescheiden van het overige gedeelte door een tuitplaat, waarin een kleine opening is gemaakt. Daar kan men hem zien graven en werken en zien bijen vangen. Mocht men hem ook al eens een dag geen bijen kunnen serveeren, dan toont hij zich ook met suiker een tevreden gast.

Hierna volgen nog enkele kleinere mededeelingen, o.a. van Rector Jongen.

In de buurt van Vaals bevindt zich een inzinking in den aardbodem van eenige meters door-

snede, aldaar bekend onder den naam van „Vossekuil”. Vossen en Dassen huizen hier geregeld. Maar ook talrijke konijnen. Men beweert, dat deze laatste door Reintje steeds met rust worden gelaten.

De heer Mommers werd door 'n schooljongen uit Heer een levenden dodaar, *Podiceps ruficollis* (Tall.), gebracht. 't Beestje, 't welk geen enkele wonde of beschadiging vertoonde, wilde of kon niet vliegen. Wel liep 't in huis en tuin monter rond. Hij stelde 't ter hand aan den heer Stevens, die het deponeerde op den Zwanenvijver te Maas-tricht. Uit eigen beweging is 't vandaar verhuisd naar den Jeker bij 't hertenkamp, waar 't op het oogenblik nog te zien is.

Hierna sluit de Voorzitter de vergadering.

DESCRIPTION OF NEW INDO-MALAYAN ACRIDIDAE (Orthoptera)

PART II. ¹⁾

by

C. WILLEMSE

Subfam. Catantopinae.

Traulacris nov. gen.

♂. Size small or medium, body slender, finely rugosely punctate. Head distinctly exerted above the level of the pronotum, longer than the pronotum. Antennae long, filiform, composed of elongate joints, reaching the apex of abdomen. Face reclinate, in profile slightly concave, frontal ridge only indicated between the antennae and slightly projecting, not sulcated, smooth, beneath the median ocel subobsolete, scarcely developed. Lateral facial carinae distinct, obtuse.

Eyes strongly prominent sideways, subglobose, interocular distance as broad as the frontal ridge.

Fastigium of vertex slightly sloping, not separated from the frontal ridge by a distinct keel, forming with the latter a rounded angle; margins slightly narrowing towards the apex; vertex convex with rows of points.

Pronotum cylindrical, anterior- and posterior margin rounded, keels absent, transverse sulci indistinct, third sulcus behind the middle; lateral lobes somewhat higher than long, lower margin ascendant from its middle towards the anterior margin, anterior- and posterior angle obtusely rounded, posterior margin nearly straight.

Prosternal spine short, conical, acutely pointed, straight. Mesosternal lobes about as long as broad, their inner margin rounded, separated by a broad interspace, slightly widened posteriorly, about as broad as the lobe.

Metasternal lobes subcontiguous.

Elytra and wings well developed, not quite reaching the top of the abdomen. Elytra with the anterior margin subconvex, nearly parallel to the straight posterior margin, near the apex somewhat narrowing, apex rounded.

Wings subcycloid.

Anterior- and median legs slender.

Hind femora slender, extending far beyond the top of the abdomen, keels subserrate, kneelobes rounded or subacute.

Hind tibiae slightly curved, not expanded apically, with 8 inner and 6 outer spines, without outer apical spine.

Hind tarsi reaching a little beyond the middle of hind tibia, second joint distinctly shorter than the first one, third joint as long as the two others together.

♂. Supra-analplate triangular, apex rounded; with a short basal, median impression and a low median keel in the apical half. Cercus straight, somewhat conical, apex sub-rounded; reaching only a little beyond the supra-analplate.

Subgenital-plate short, obtuse. ♀ unknown.

Genotype: *Traulacris erecta* nov. sp.

Traulacris erecta nov. sp.

General coloration bluish-green. Antennae bluish-green, apical half blackish. Head bluish-green. Pronotum green. Elytra bluish-green, along the anterior margin with a broad blackish stripe, that is widened near the apex. Wings infumated.

Anterior- and median legs with their femora yellowish-brown, tibiae and tarsi more greenish-yellow.

¹⁾ The figures belonging to this part, shall appear in the following one.

Hind femora bright red in the basal half, knee reddish brown, with a broad greenish praegenicular ring, that is separated from the red-coloured basal half by a yellowish-red, incomplete and ill-limited ring.

Hind tibiae greenish-blue in the basal half, the apical half blackish, spines with black tips.

Hind tarsi greenish-brown. Sternum and abdomen yellowish brown.

	♂
Length of body	17 mm
" " pronotum	3 "
" " elytra	8.5 "
" " hind femora	11 "

Locality: N. Borneo, Bettotan, N.R. Sandakan, 2 VIII, 1927, 1 ♂. (Type mus. Singapore).

Euprepocnemis javana nov. sp.

♂, ♀. General coloration brown with dark-brown markings.

Frontal ridge distinctly widened towards the clypeus, in the female subobliterated near the clypeal margin, its margins very smooth and obtuse, its surface with scattered points and smooth. Lateral facial keels slightly curved.

Fastigium of vertex rounded or rounded truncate, without median carinula.

Antennae in the male not reaching behind the posterior margin of pronotum (in the female broken); yellowish brown.

Head yellowish-brown, in the female the face darker, mouthparts with whitish-yellow spots; on the vertex with a longitudinal, median, chestnut stripe, slightly widened posteriorly, bordered on both sides with dark-brown.

Pronotum with the anterior margin nearly straight, posterior margin slightly rounded truncate, median keel distinct, lateral keels distinct, somewhat undulated, in the metazona indistinct; principal sulcus far behind the middle.

Disc of pronotum chestnut brown, lateral keels more reddish-brown, lateral lobes yellowish-brown with some reddish brown or dark spots.

Prosternal spine cylindrical, apex obtuse, slightly bent backwards. Mesosternal lobes slightly transverse, their interspace somewhat longer than broad. Metasternal lobes contiguous behind the foveolae in the male, in the female short, subcontiguous near the foveolae.

Elytra and wings reaching the top of abdomen. Elytra with the anterior margin slightly convex, posterior margin nearly straight, apex rounded. Its coloration is yellowish or nearly hyalinous with irregular rows of brown round or square spots.

Wings totally hyalinous.

Anterior and median legs brown with some blackish-brown spots.

Hind femora brown with some, more or less indicated dark spots on the area externo- and internomedia, without distinct transverse bands; area interno-media and inferior more yellowish-brown; arcus geniculi blackish.

Hind tibiae in the basal third yellowish with two brown, incomplete rings, the remaining part red, spines with black tips.

Hind tarsi red or violet-red, the second and third joint more brownish.

Sternum and abdomen brown.

♂. Supra-analplate triangular, apex obtuse, with a shallow median sulcus from the base to the apex.

Cercus a little longer than the supra-analplate, attenuated towards the apex, near the apex recurved, apex pointed.

Subgenitalplate short, apex obtuse.

♀. Supra-analplate long, margins nearly parallel, apex triangularly rounded. Cercus very short, conical, obtuse.

Valves of ovipositor short, margins subcrenulate, apex hooked.

Subgenitalplate longer than broad, posterior margin triangularly produced.

	♂	♀
Length of body	18 mm	26 mm
" " pronotum	4 "	5 "
" " elytra	14.5 "	19.5 "
" " hind femora	11 "	18 "

Locality: Central Java, Kedoengdjati, 50 M. 13. IX. 22 1 ♂; 7. III. 23 1 ♀ (L. G. E. Kalshoven). Type mus. Buitenzorg.

Its nearest allies is *E. shirakii* Bol., known to occur in Japan, China, Baltistan, Korea and Manchuria.

It may be easily distinguished by the male cercus, that in *shirakii* is compressed, with widened and rounded apex and by its smaller size.

Parracilia.

♀. Size medium, body rather slender, finely, rugosely punctate.

Antennae filiform, composed of short joints, length? Face slightly reclinate, in profile straight; frontal ridge distinct throughout, shallowly sulcated, slightly widened towards the clypeus, punctate. Lateral facial carinae distinct, slightly curved. Eyes oval, interocular distance broad, more than twice as broad as the frontal ridge.

Fastigium of vertex broadly rounded apically, with a short median carinula. Vertex only slightly convex.

Head not erected above the level of the pronotum.

Pronotum distinctly widened posteriorly, anterior margin rounded-truncate, posterior margin triangularly excised; median keel subobsolete, lateral keels absent; transverse sulci distinct, though very fine, on the disc, the second and third one also on the lobes, third transverse sulcus far behind the middle. Lateral lobes of pronotum higher than long or as long as high; lower margin ascendant from its middle to the anterior margin, anterior angle obtuse, posterior angle rounded, posterior margin concave.

Elytra and wings rudimentar, lateral; elytra reaching a little beyond the 2e tergite, slightly widened apically, apex obliquely truncate.

Prosternal spine transverse, lamellate, apex with a triangular incision and somewhat widened.

Mesosternal lobes distinctly broader than long, their inner margin rounded, their interspace small, widened posteriorly.

Metasternal lobes subcontiguous.

Anterior- and median legs slender. Hind femora short, not reaching beyond the top of the ovipositor, somewhat compressed laterally, carinae smooth, kneelobes rounded.

Hind tibiae slightly curved, not expanded apically, with 9 inner and 8 outer spines, with distinct outer apical spine.

Hind tarsi short, second joint shorter than the first one, (third joint absent).

♀. Supra-analplate relatively long, triangular, apex obtuse, with a median sulcus throughout.

Cerci short, not reaching beyond the apex of supra-analplate, straight, apex obtuse.

Valves of ovipositor straight, hooked at their apex, margins subcrenulate, lower valves with an obtuse teeth at their base.

Subgenitalplate longer than broad, posterior margin rounded with a deep incision on both sides.

Genotype: *Parracilia luzonica* nov. sp.

Parracilia luzonica nov. sp.

General coloration yellowish brown. Antennae yellowish-brown. Head yellowish-brown, with a small, irregular dark-brownish postocular band, that continues along the middle of the elytra as a fine dark stripe.

Pronotum yellowish-brown. Anterior- and median legs yellowish-brown.

Hind femora yellowish brown, the inner lower area and part of the inner area red. Arcus genicul. blackish-brown.

Hind tibiae yellowish red, spines with black tips. Sternum and abdomen yellowish-brown.

	♀
Length of body	20 mm
" " pronotum	4 "
" " elytra	3.5 "
" " hind femora	11 "

Locality: Philippines, Bagio, Luzon 1 ♀. (Type coll. mea).

Butonacris nov. gen.

♂ Size medium, body slender, finely rugosely punctate.

Antennae missing. Face reclinate, in profile somewhat concave; frontal ridge distinct throughout, sulcated, margins parallel, with a slight dilatation at the median ocel, somewhat compressed between the antennae, its surface, like the whole face, rugosely punctured.

Lateral facial carinae indistinct, obtuse, callously thickened.

Eyes great, strongly prominent sideways, long oval, interocular distance small, somewhat less broad than the basal joint of antennae. Fastigium of vertex subhorizontal, not in the same level with the vertex, but lower, margins narrowing anteriorly, apex truncate. Vertex convex.

Pronotum cylindrical, scarcely widened posteriorly, anterior- and posterior margin rounded or rounded truncate, median keel indistinct, lateral keels absent, transverse sulci distinct on the disc, second

and third also on the lobes, third sulcus distinctly behind the middle; lateral lobes longer than high, lower margin ascendant from its middle to the anterior margin, anterior angle obtuse, posterior angle nearly 90°, rounded, posterior margin straight.

Prosternal tubercle broad at the base, in its middle suddenly narrowed, terminating in a short, conical teeth, with the apex subacute.

Mesosternal lobes about as long as broad, inner margin rounded; their interspace broader than long, widened posteriorly; metasternal lobes separated.

Elytra and wings well developed, reaching a little behind the apex of the abdomen. Elytra with a small dilatation of the anterior margin near the base, gradually narrowed towards the apex, apex rounded.

Anterior- and median legs slender.

Hind femora reaching a little behind the top of the abdomen, not compressed laterally, margins nearly smooth; kneelobes acutely pointed.

Hind tibiae slightly curved, with 9 inner and 9 outer spines, with distinct outer apical spine.

Hind tarsi short, not reaching behind the middle of the hind tibia, second joint shorter than the first one, third joint about as long as the two others together.

♂. Supra-analplate triangular, apex obtuse, with a basal median sulcus.

Cerci reaching a little behind the supra-analplate, conical, apex sharply pointed.

Subgenitalplate short, truncate. ♀ unknown.

Genotype: *Butonacris fasciata* nov. sp.

Butonacris fasciata nov. sp.

General coloration black, with yellow stripes. Antennae? Head black, with a yellow stripe along the lateral facial carinae, that is continuing on the lower margin of the cheek; face with two small yellow spots near the clypeal suture on each side of the frontal ridge, clypeus with some yellow spots. Behind each eye with a small yellow spot. Vertex black, with a fine yellow stripe on each side, beginning at the fastigium of vertex, running along the upper margin of the eye on towards the anterior margin of pronotum.

Pronotum black, with a small yellow median stripe, a small yellow stripe in the metazona on each side; lateral lobes black, with a yellow longitudinal stripe in the upper part, running from the anterior to the posterior margin; lower margin in the posterior half bordered with yellow. Epimerum of prothorax yellow. Epimerum of meso- and metathorax with a yellow spot.

Elytra blackish-brown, with a small yellow stripe in the mediastinal area and a broader yellow stripe along the whole of the anal vein.

Wings slightly infumated.

Coxae of anterior and median legs yellow. Anterior- and median legs greenish-yellow.

Hind femora yellow with red, with two broad blackish brown transverse bands on the outer side, one in the basal half, that is continuing only in the upper half of the inner side, one, complete on

the outer- and inner side, at the beginning of the apical half of hind femora. Knee brownish with a broad, complete yellow praegenicular ring.

Hind tibiae somewhat yellowish at the very base, bluish with the apical third brownish. Spines with black tips. Hind tarsi bluish-green.

Sternum and abdomen yellow, sutures black, abdomen with a black stripe from above and on the sides.

Subgenitalplate bluish-black.

	♂
Length of body	16 mm
" " pronotum	4.5 "
" " elytra	13 "
" " hind femora	12 "

Locality : Isle of Buton (North of Celebes)
H. Kühne, 1 ♂. (type Mus. Vienna).

Paramaga nov. gen.

♂. Size medium, body slender, finely punctate. Antennae filiform, joints elongate, reaching behind the posterior margin of pronotum. Face reclinate, straight in profile; frontal ridge distinct throughout, sulcate, margins nearly parallel. Lateral facial carinae distinct, slightly curved.

Eyes long-oval, interocular distance about twice as broad as the frontal ridge. Fastigium of vertex with the margins parallel, apex rounded, not separated from the frontal ridge by a transverse keel, forming an acutely rounded angle with it; its surface slightly depressed, not in the level with the vertex, with a small median carinula. Vertex subconvex.

Pronotum cylindrical, margins parallel, anterior margin rounded, posterior margin nearly straight, with a slight triangular incision in the middle; median keel obsolete, practically absent, lateral keels absent; transverse sulci shallowly indicated, second and third sulcus also on the lateral lobes third sulcus far behind the middle; lateral lobes somewhat longer than high, lower margin ascendant from its middle to the anterior margin, anterior angle obtusely rounded, posterior angle rounded, posterior margin slightly concave.

Elytra and wings rudimentar, lateral, reaching a little beyond the posterior margin of the second tergite, spatulate, apex rounded.

Prosternal spine transverse, lamellate, widened near the apex, apex slightly, concavely excised.

Mesosternal lobes about as long as broad, inner margin rounded, their interspace somewhat longer than broad, slightly widened posteriorly. Metasternal lobes contiguous. Anterior- and median legs short, relatively thick.

Hind femora extending a little beyond the top of abdomen, carinae smooth, kneelobes rounded.

Hind tibiae nearly straight, not expanded apically, with 10 inner and 9 outer spines, with small outer apical spine.

Hind tarsi short, not reaching beyond the middle of hind tibia, second joint shorter than the first one, third joint as long as the two others together.

♂. Supra-analplate long, triangular, apex rounded, with a median sulcus throughout. Cerci a little

longer than the supra-analplate, broad, straight, near the apex obliquely excised, the very apex acutely pointed.

Subgenitalplate short, conical, apex obtuse.
♀ unknown.

Genotype : *Paramaga olivacea* nov. spec.

Paramaga olivacea nov. sp.

General coloration olivaceous-green. Antennae black, apical joint somewhat lighter. Head, pronotum and elytra olivaceous green. Anterior- and median legs olivaceous green. Sternum and abdomen from the same colour. Hind femora reddish-brown, knee blackish. Hind tibiae bluish-green, spines with black tips. Hind tarsi bluish-green. Supra-analplate in the ♂ brickred.

	♂
Length of body	19 mm
" " pronotum	3.5 "
" " elytra	3 "
" " hind femora	11.5 "

Locality : Philippines, Imugan, Luzon. 1 ♂ (type Mus. Stockholm).

**EXPLORATION BIOLOGIQUE
DES CAVERNES DE LA BELGIQUE ET
DU LIMBOURG HOLLANDAIS.**

XIV CONTRIBUTION.

**Introduction et Liste des Grottes visitées
de décembre 1931 à janvier 1933.**

par Robert Leruth (Liège).

Liste des Grottes visitées
de décembre 1931 à janvier 1933.

(1 à 24)

SUITE.

B. 18. GROTTÉ EN PENTE — ROCHEFORT
— Province de Namur — Vallée de la Lomme.

Situation : — Cette grotte s'ouvre sur le versant de la colline boisée qui borde à gauche la route de Rochefort à Han-sur-Lesse, à un peu plus d'un kilomètre de Rochefort. L'entrée, orientée vers le Nord-Est se voit facilement, trois mètres au dessus de la route.

Description : — La grotte est constituée d'une simple galerie en pente descendante, régulière, parallèle à la route. A 20 mètres de l'entrée, la galerie se coude vers la droite, la pente s'accroît fortement et la grotte se termine 8 mètres plus loin, un bouchon de limon et de pierres obstruant le conduit devenu presque vertical. La hauteur de la galerie, de 1 m, 50 à l'entrée va en diminuant pour se maintenir aux environs de 0 m, 80 ; la largeur est de 0 m, 80 à 0 m, 60 ; la longueur totale de 29 mètres. La grotte est assez sèche avant le coude.