(coll. mea).

DESCRIPTION OF NEW INDO-MALAYAN ACRIDIDAE

(ORTHOPTERA)

by C. WILLEMSE

Part VII.

Phalaca atrata nov. sp.

¿. General coloration black. Antennae black, basal joint black, long reaching the apex of elytra. Head from above black, with a yellowish-brown longitudinal stripe on each side, running from the apex of fastigium of vertex, backward along the inner upper margin of the eye, on to the sides of the disc of pronotum, continuing into a broad, longitudinal band in the middle of and terminating into the apex of elytra.

Face with yellowish-brown spots, one between the antennae, one at the base of antennae on each side, and one on each side just above the clypeal

margin.

Clypeus, labrum and mandibles with yellowishbrown spots, palpi yellowish. Below the eye, at the insertion of antennae, with a yellowish-brown stripe, running acrosa the cheeks. Eyes blackishbrown.

Pronotum black, disc with a yellowish-brown, longitudinal stripe on each side; lateral lobes black, anterior margin and 3—4 irregular large spots yellowish-brown.



Fig. 1. Phalaca atrata nov. sp. 8 type.

Epimerum of meso- and metathorax black with a yellowish-brown stripe. Prosternal spine black, with the apex yellowish-brown.

Elytra blackish-brown, with a broad yellowish-brown stripe in the middle, from base to apex. Wings infumated throughout. Anterior and median legs black. Hind femora and tibiae black, spines black. Hind tarsi black, bordered with yellow on the outer side.

Sternum and abdomen with yellowish-brown spots on each side. Fig. 1.

		13.9	TENERS		8		
Length	of bo	dy			26	mn	1 .
,,	" pro	onoti	ım			,,	
,,	" ely					,,	
,,	" hir				14	,,	
Locality: I	Philippi	nes,	Dinagat	Isl,	1	8,	type.

Phalaca atrata var. siargaoensis nov. var.

This female agrees in the principal features with the type, but differs somewhat in the coloration being less spotted with yellowish-brown. Face without the yellowish-brown spots above the clypeal margin, mouthparts mostly black. The yellowish-brown pattern on the lateral lobes of pronotum less indicated. Prosternal spine entirely black. Elytra olivaceous black, the yellowish-brown band much narrower. Hind femora black with an almost complete small yellowish prae-genicular ring.

ength	of	body	29	mn
,,	,,	pronotum	7	,,
,,		elytra	15	,,
		hind femora	14	

Locality: Philippines, Siargao-Isl, 1 ♀, (type, coll. mus. Stockholm).

Phalaca malaccensis nov. spec.

\$\phi\$; General coloration dark brown. Antennae blackish brown, towards the apex and apical joint somewhat lighter coloured; reaching about the middle of elytra. Head dark brouwn; face with a small yellow spot on each side just below the median ocel; a narrow yellow stripe is running from the base of antennae, across the cheek, along the lower margin of the eye to the anterior margin of lateral lobes of pronotum, where it is continuid into a row of yellow spots.

Head from above with a narrow yellow stripe on each side, beginning at the lateral margin of fastigium of vertex running along the inner upper margin of the eye on to the anterior margin of pronotum, where it is continuid into a row of small yellow spots on the disc of pronotum.

Eyes brown. Labrum and palpi olivaceous green. Pronotum dark brown, disc with a row of 5 small yellowish spots on each side, the first one beginning on the anterior margin, the last one small and not quite reaching the posterior margin.

Lateral lobes of pronotum dark brown, the lower part with a row of 5 small yellow spots, the first one beginning on the anterior margin, the last one touching the posterior margin, the third one is lying a bit lower than the other ones and touches the lower margin.

Epimerum of mesothorax with a yellow spot, of metathorax dark brown. Prosternal spine dark

olivaceous green.

Elytra yellowish brown or greenish. Wings

slightly infumated.

Anterior and median legs dark brown or olivaceous brown.

Hind femora with the outer area dark olivaceous green or brown, inner area yellowish with a black

Hind knee yellowish brown with a complete praegenicular ring; arcus genicul, black. Hind tibiae yellowish brown, spines with black tips. Hind tarsi brown.

Abdomen yellowish brown. & unknown.

			¥	
Length	of	body	21 mm	
,,		pronotum	6 ,,	
,,	,,	elytra	11 ,,	
		hind femora	12.5	

Lolacity: Malacca, Selangore, 1 $\,^{\circ}$, (type coll. mea).

Phalaca viridis nov. spec.

 δ , $\, \varphi \, : \,$ General coloration olivaceous green. Antennae blackish brown, except the basal joints that are olivaceous green; reaching the middle of elytra.

Head olivaceous green, with a faint indication of a more yellowish green longitudinal stripe from above on each side, running from the apex of fastigium of vertex, along the inner upper margin of the eye to the anterior margin of pronotum. Eyes reddish brown or brown.

Pronotum olivaceous green. Elytra green. Wings slightly infumated.

Prosternal spine olivaceous green. Epimerum of

meso- and metathorax olivaceous green.

Anterior and median legs olivaceous green, tarsi from below more yellowish green. Hind femora olivaceous green, knee reddish brown, with an incomplete yellow praegenicular ring only indicated from above; outer kneelobe yellowish white. Hind tibiae olivaceous green, reddish brown at the insertion; spines with black tips. Hind tarsi blackish brown or olivaceous green from above, yellowish brown from below. Abdomen olivaceous brown.

	8	9
Length of body	20 mm	24 mm
" " pronotum	5 ,,	7 ,,
" " elytra	10.5 ,,	13 ,,
,, ,, hind femora	12 ,,	14 ,,

Locality: N. Borneo, Bettotan, N. R. Sandakan 5, 8, 1927, at light 1 3, 1 2, (type coll. mea).

Phalaca siebersia nov. spec.

ô, ♀: General coloration yellowish brown
with dark olivaceous green. Antennae black, apical
joint yellowish, reaching the middle of elytra.

Head dark olivaceous green, a broad yellowish band is running from the middle of the frontal ridge across the cheek and along the lower margin of the eye, crossing the lower part of the lateral lobes of pronotum and there only interrupted by the transverse sulci, on to the epimerum of mesoand metathorax.

Head from above with a yellow, longitudinal stripe on each side, running from the apex of fastigium, along the inner upper margin of the eye, to the anterior margin of pronotum and continuing on each side of the disc of pronotum, terminating into a broad yellow stripe in the middle of elytra.

Clypeus, labrum and mandibles with yellowish brown spots, palpi yellowish. Eyes brown.

Pronotum dark olivaceous green, disc on each side with a broad yellowish band; lateral lobes with a transverse yellowish band from the lower angle of anterior margin to the posterior one, only interrupted by the transverse sulci.

Epimerum of meso- and metathorax with a yel-

low spot.

Prosternal spine olivaceous green, apex somewhat darker.

Elytra greenish, with a yellowish median longitudinal stripe from base to apex. Wings cycloid,

hyalinous or only slightly infumated.

Anterior and median legs olivaceous green or brown, with brown longitudinal stripes. Hind femora olivaceous brown or green, knee reddish brown, with an incomplete yellow prae-genicular ring only indicated from above; outer kneelobe lighter coloured. Hind tibiae yellowish or reddish brown at the insertion, olivaceous green, spines with black tips.

Hind tarsi olivaceous green or yellowish, first and second joint blackish from above. Abdomen

yellowish brown or brown.

		8	9
Length o	of body	21 mm	24 mm
,,	" pronotum	5.5 ,,	6 ,,
	,, elytra	12 ,,	13 ,,
,,	" hind femora	12	13

Locality: Central East Borneo, 26. 8. 1925, 1 &; 11. 10. 1925, 1 &; 26. 9. 1925, 1 &; 5. 10. 1925, 1 &, H. C. Siebers (type Mus. Buitenzorg).

Key to the species of Phalaca, known to me.

1. Pronotum of a uniform olivaceous green colour, without any trace of darker or lighter coloured longitudinal stripes or spots.

viridis nov. spec.

2. Hind femora black, knees black. Antennae long, reaching the apex of elytra.

atrata nov. spec.

3. Elytra with the anterior margin and apex broadly bordered with black, posterior margin more narrowly bordered with black. Lateral lobes of pronotum with two broad yellow spots in the anterior half, only separated by the blackish brown second transverse sulcus.

coleoptrata Bol. I.

Elytra uniformly coloured or with a lighter coloured longitudinal stripe in the middle. Lateral lobes of pronotum with a complete, lighter coloured transverse band from the anterior to the posterior margin or with a transverse row of spors

5. Lateral lobes of pronotum with a transverse row of 5 yellow spots, about in the middle.

malaccensis nov. spec.

Lateral lobes of pronotum with a complete yellow transverse band in the lower part.

sarawakensis Will.

6. Head from above and disc of pronotum with a broad yellow longitudinal stripe on each side.

siebersia nov. spec.

Head from above and disc of pronotum without yellow stripe, posterior margin of disc more or less broadly marginated with yellowish brown.

grylloïdes Walker

Noliba mjöbergi nov. sp. 1)

\$\phi\$: General coloration dark olivaceous green or blackish green. Antennae long and slender, reaching the middle of abdomen, black except the basal joints that are olivaceous green. Head and pronotum dark olivaceous green or blackish green, with two broad, yellowish, longitudinal stripes; the upper one running from the apex of fastigium of vertex along the inner upper margin of the eye, across the occiput on to the sides of the disc of pronotum and terminating in the posterior margin of pronotum; the lower one running from the base of antennae along the cheeks and across the lower part of lateral lobes of pronotum, terminating on the sides of meso- and metapleura.

Face in the middle, clypeus and labrum on each side and mandibles with a yellow spot. Palpi brown.

Elytra with the anterior and posterior margin slightly narrowing towards the apex, apex rounded, hyalinous, with a dense, reddish-brown reticulation.

Wings infumated throughout, especially in the apex and along the apical and hind margin, veins reddish brown.

Sternum dark olivaceous green, prosternal spine yellowish-brown, meso- and metasternum with a



Fig. 2. Nobila mjöbergi nov. sp. 9 type.

yellowish-brown spot in the middle. Abdomen brown, eight tergit with a broad yellowish spot on each side; supra-analplate with a basal yellowish spot, anal pieces blackish-brown, cercus brown.

Anterior and median legs dark olivaceous green,

coxae with a small yellow spot.

Hind femora green or yellowish green, knee reddish-brown with black, with a yellow complete genicular ring.

Hind tibiae green, basal part reddish, apical part

blackish, spines black.

Hind tarsi yellowish-brown, black from above. 8 unknown. Fig. 2.

			2
Length	of	body	32 mm
,,		pronotum	5.5 ,,
,,	,,	elytra	19 ,,
,,	,,	hind femora	16 ,,
. ,,	,,	hind tibia	14 ,,
		hind tarsi	7 ,,

Locality: Borneo, Sarawak, 19 (E. Mjöberg).

Type Mus. Stockholm.

This species differs, from the only known other species, elegantula Bol. C., by the colour and form of the elytra, the elytra with the anterior and posterior margin narrowing towards the apex, the reddish brown colour of the veins, by the olivaceous green sternum with a yellowish brown spot in the middle of meso- and metasternum and by the yellowish green hind femora.

¹⁾ In honor of Mr. E. Mjöberg, who made large collections of insects during bis stay in Borneo.