

DESCRIPTION OF A NEW SPECIES OF *MEGACRANIA* FROM OBI
(MOLUCCAS)

with remarks on *Megacrania alpheus* Westwood (Orthoptera, Phasmidae)

by

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Megacrania wegneri, nov. spec. (pl. 3).

Head longer than broad, with breadth across occipital base to median length of head as 6.5 to 10 in the male, as 8 to 12.5 in the female (somewhat variable); lateral margins subparallel, narrowing posteriorly; posterior angle rounded, occiput slightly globose, nearly smooth with a few shallowly impressed points and stripes. Between the small round-oval eyes, weakly domed both transversely and longitudinally, ocelli indistinct. Antennae situated a little before the eyes, basal joint a little broader than the other joints, composed of about 25, relatively thick joints, the five basal ones only a little longer than broad, the remaining joints elongate and less broad, especially in the female.

Pronotum about as long as broad; anterior margin slightly concave, on both sides at the corners somewhat thickened, lateral margins parallel in the metazonal part, from there narrowing anteriorly, the whole margin thickened and somewhat irregular; disc of pronotum domed, with the principal sulcus about in the middle, deeply impressed; parallel to the lateral margin there is an irregular impression; median sulcus incomplete and impressed; posterior margin practically straight; surface of pronotum without granules or spines. Metazona with a short impression on both sides of the median sulcus.

Mesonotum much longer than broad, its surface with numerous granules or low spines; lateral margins nearly parallel with a row of spines; anterior margin straight, posterior margin subconvex; there is an indication of an incomplete median sulcus or keel, more or less distinct.

♂.—Elytra reaching or nearly reaching the tip of the first abdominal tergite; long-oval, with its greatest width about in the middle, anterior and posterior margin regularly rounded and passing gradually into the rounded apex. Wing long, reaching a little beyond the hind margin of the

fifth abdominal tergite; width of the anterior part as long as one-fifth of the length of the wing (proportion 1 to 5), with regular venation.

♀.—Elytra reaching the middle of the first abdominal tergite, oval, anterior margin less rounded than the posterior one, with its greatest width about in the middle, apex rounded. Wing long, reaching about the posterior margin of the fourth abdominal tergite, width of the anterior part in proportion to the length of the wing as 1 to 5, with regular venation.

Anterior femora about one and a half time as long as the mesonotum, in the basal third slightly curved; upper keel finely serrate, lower median keel with 1—6 small spines, the other keels almost smooth. Median femora with the upper keel smooth, lower median keel with 2—6 small teeth, sometimes absent, the other keels smooth. Posterior femora with the upper keel smooth, the lower median keel with 2—6 spines or smooth, the other keels smooth. Tibiae of all legs without spines. First tarsal joint of anterior leg as long as the three following joints together, almost cylindrical, without keel or groove from above. First tarsal joint of the other legs about as long as the remaining ones, except the fifth joint which is elongated and much longer than the preceding ones. Area apicalis triangularis on the four posterior tibiae absent.

♂.—Segmentum anale longer than broad; posterior margin in the middle straight, laterally deeply cut out; lower margin straight, posteriorly curved upwards and forming with the posterior margin a blunt tooth. Supra-anal plate perceptible, very small, triangular. Cercus broad, lamellate, apex rounded, reaching a little behind the anal segment. Subgenital plate longer than broad, in the apical part narrowing posteriorly, posterior margin triangularly concave in the middle.

♀.—Segmentum anale about as long as broad, slightly narrowing posteriorly, hind margin triangularly rounded with a small shallow median triangular incision and a blunt tooth on both sides more or less distinct. Supra-anal plate little perceptible, very small, triangular. Cercus broad, lamellate, reaching beyond the segm. anale, widened apically, apex rounded. Operculum much longer than broad, not reaching beyond the anal segment, constricted at the base, margins gradually narrowing² apically, apex narrowly rounded, entire, its surface with irregular longitudinal ridges. The whole sternum smooth. Abdominal segments as broad as long or somewhat broader, tergites with a lateral, submarginal sulcus.

General coloration green or greenish brown. Head green or greenish brown, occiput with some irregular darker or lighter coloured stripes. Antennae with the basal joints dark green or brown, the remaining joints

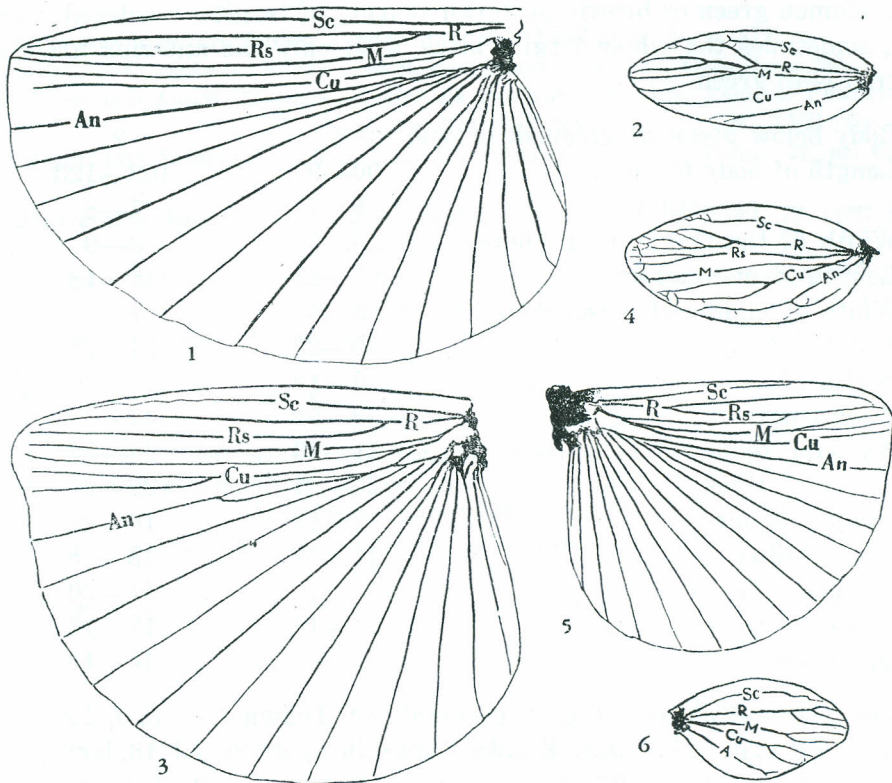


Fig. 1—4. *Megacrania wegneri*, nov. spec., Obi Lake; 1, ♂ elytron; 2, ♂ wing; 3, ♀ elytron; 4, ♀ wing.
 Fig. 5—6. *Megacrania alpheus* WESTWOOD, Obi I., Lodji Kasowari, ♀; 5, elytron and 6, wing.

reddish or greenish brown. Pronotum green or brown, anterior margin narrowly bordered with black, posterior margin broadly bordered with black, metazona with black stripes, median sulcus mostly blackish. Mesonotum green or brown, spines and granules mostly lighter coloured than the disc itself.

♂.—Elytra with the base and basal half vermillion red or reddish, near the apex more brownish. Wing with the anterior part red or reddish brown to greenish brown, posterior part hyaline.

♀.—Elytra green, posterior half often tessellated with brown in the small areas. Wing with the anterior part green or brownish green, posterior part hyaline.

Legs in the male of a beautiful vermillion red or greenish red, joints green, in the female of the same colour or yellowish green.

Abdomen green or brown, posterior margin of tergites bordered with black, sometimes the whole tergite black with only the anterior margin bordered with green.

Body below green or greenish brown.	♂	♀
Length of body (in mm)	90—97	108—123
— — pronotum	6—7	7—8
Width of the middle of pronotum	5—5.5	8—9
Length of mesonotum	9.5—12	15—18
Width at middle of mesonotum	5—6	7—9
Length of elytron	20—23	21—23
Width of elytron	9—10	9—10
Wing-length	50—53	42—45
Anterior femur	21—23	26—30
— tibia	20—21	22—26
Median femur	12—13	16—18
— tibia	11—12 ^v	13—15
Posterior femur	15—16	17—20
— tibia	13—14	17—18
Operculum		16—19

LOCALITY.—Moluccas: Obi I. (Central Obi, Telaga, 160 m, ♂, 1.8.1953 (type); ♀, allotype, 27.7.1953. Besides these 40 ♂, 38 ♀ and 18 larvae in different stages between 27 and 31 July, 1—3 Aug. and 2—6 Sept., 1953 were collected, all at the same locality.

This species is related to *M. alpheus* WESTW., but differs in the relatively narrower mesonotum (pl. 3, fig. 1), the form and length of elytra and wings (fig. 1—6) and the colour of elytra, wings and legs. It is very remarkable that *alpheus* occurs also in Obi, but only along the coast (Kasowari, Wajaloar) and not in the interior of the island, where *wegneri* is the only representative of the genus. A careful search of Mr. WEGNER for the male of *alpheus* remained without success: he never found a male, as contrasted with *wegneri*, where males and females occurred in the same quantities.

Named in honour of Mr. A. M. R. WEGNER, who discovered this species and made very interesting biological observations on it, his notes being embodied in the next article published in this volume of Treubia.

Megacrania alpheus WESTWOOD 1859

1859. *Megacrania alpheus* WESTWOOD, Cat. Phasm. p. 112, Pl. IV, fig. 2.

1865. *Platykrania alpheus* var. BATES, Trans. Linn. Soc. London, 25, p. 347.

1896. *Megacrania Batesii* KIRBY, Trans. Linn. Soc. London, 6 (2), p. 471.
 1904. *Megacrania alpheus*, *Megacrania Batesii* KIRBY, Syn. Cat. Orth. I, p. 385.
 1908. *Megacrania batesi*, *Megacrania alpheus* REDTENBACHER, Ins. Fam. d. Phasmid., p. 369, 370, Taf. XVI, fig. 16, Taf. XVII, fig. 1.
 1910. *Megacrania batesi* GIGLIO TOS, Boll. Mus. Zool. Anat. comp. Torino, 25, no. 625, p. 35.
 1915. *Megacrania batesi* subsp. *speiseri* CARL, Nova Caledonia, Zool. 2, Lief. II, no. 9, p. 193.
 1926. *Megacrania bakeri* WILLEMSE, Trans. Entom. Soc. London, (1925) parts III, IV, p. 523 (nov. syn.).
 1929. *Megacrania batesi*, *Megacrania alpheus* GÜNTHER, Mitt. Zool. Mus. Berlin, 14, p. 624.
 1931 (1932) *Megacrania alpheus*, *M. Batesii*, *M. Batesii speiseri* GÜNTHER, Ibid. 17, p. 790.
 1932. *Megacrania tsudai* SHIRAKI, Dobutsugaku Zasshi, 45, p. 532.
 1933. *Megacrania alpheus* GÜNTHER, Verh. Naturf. Ges. Basel, 82, p. 95.
 1935. — — GÜNTHER, Naturh. Maandbl. 24, p. 126.
 1935. *Megacrania tsudai* SHIRAKI, Mem. Fac. Agric. Taihoku Univ. 14, p. 70, Pl.X(VII), fig. 5.
 1937. *Megacrania alpheus* GÜNTHER, Vierteljahrsh. Naturf. Ges. Zürich, 82, p. 95.
 1937. — — GÜNTHER, Mitt. Deutsch. Ent. Ges. 8 p. 5.
 1951 (50) — — WILLEMSE, Eos, tomo extraordinario, p. 328, 356.

Remarks on the species

M. alpheus was described by WESTWOOD after a female from Ceylon (a doubtful locality and never again recorded) and the Philippines. In 1865 BATES described a variety from Goram, Gilolo and New Guinea after three females. They differ in having longer elytra and wings and the New Guinea specimen also in the colour, which was brown instead of green. Later, KIRBY (1896) described this variety as a distinct species under the name *M. Batesii*, but remarks that the original specimens were in a bad condition and some of them immature. In 1933 GÜNTHER declared them to be synonyms, *batesi* not even being a variety, which in 1935 he officially stated under the heading of *M. alpheus*. In 1931 GÜNTHER gave a short description of the anal segment of the male and as far as I could find out there has never been published a full description of the male. The first male indicated came from GIGLIO TOS (1910), found in „Korido-Misori” (Supiori I., Schouten Is.). In 1933 GÜNTHER also indicated the occurrence of males, but without description. For comparison with the male of *wegneri* it will be necessary to describe the male of *alpheus*, which seems to be rare. Its geographical distribution as known from the literature is as follows:

Ceylon?; Sumatra; Phillippines (Luzon); Borneo; Formosa (Kankau); Goram (E. of Ceram); Caroline Is. (Pulau (= Pelew Is.), Ponape I.); Halmahera (= Djilolo = Gilolo = Dschilolo); Ambon; Obi I.; Key Is. (Dulan); Aru Is.; Miori Is. (= Schouten Is., Korido); New Guinea (Papua, Paup, Toricelli Mts.); Admiralty Is. (Pak, Drana, Buijang); New Britain (= Neupommern); Duke of York I., Mioko; New Hannover I. (Neuopas); Solomon Is.; St. Cruz Is. (Vanikoro, Peu, Is. Isabella, Tatamba Regi); New Hebrides (Espirito Santo, Hog Harbour, Malo); Australia.
