

**A new species of *Desmoptera* I. Bolívar, 1884 from West Irian (New Guinea)  
(Orthoptera: Pyrgomorphidae: Desmopterini)**

by

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**ABSTRACT.** — A new species of *Desmoptera* (Pyrgomorphidae), *D. irianica*, is described from western New Guinea. It differs from other species of the genus in having relatively very short wings and more pronounced granular tubercles on the pronotum and thoracic pleura.

The tribe Desmopterini of the family Pyrgomorphidae is restricted to the Philippines, Moluccas, New Guinea and associated islands, and northeastern Australia. The type-genus of the tribe, *Desmoptera* I. Bolívar, 1884, as currently recognized, is absent only from the first of these regions; it was revised by Kevan (1963), only one species, *D. novaeguineae* (Haan, 1842) being hitherto found in New Guinea. A full bibliography for all species is given by Kevan (1977).

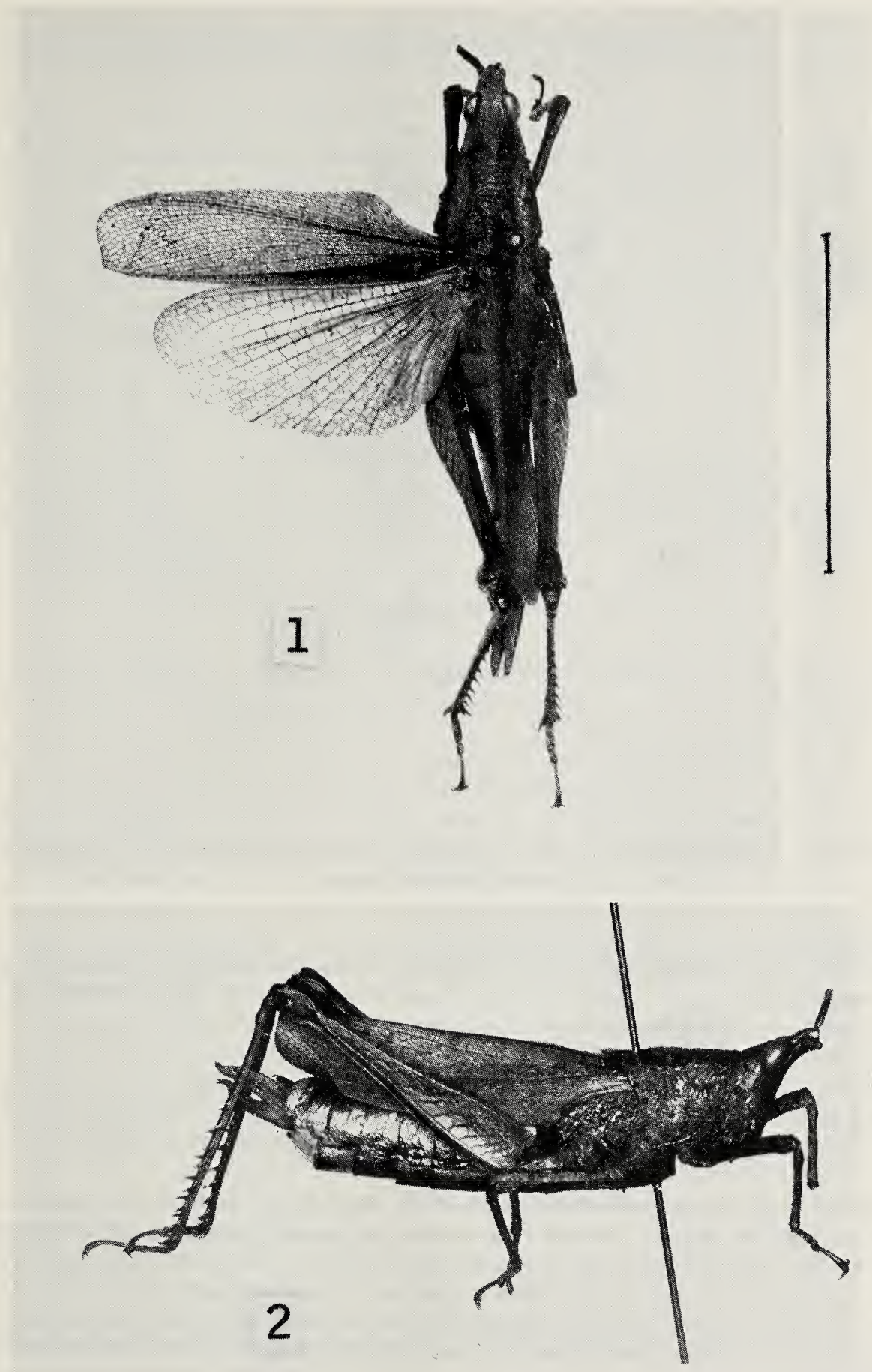
*Desmoptera (Desmoptera) irianica*, n. sp.  
(figs. 1-4)

Through the good offices of Dr. F. M. H. Willemse, I have recently examined a specimen of a second (new) species of the nominate subgenus from West Irian (New Guinea). Even although there is but a single example, and that a female (figs. 1, 2), it is sufficiently distinctive to warrant its description without waiting indefinitely for the discovery of further material. Although not identical, the dorsal aspect of the female subgenital plate (fig. 3), and the spermatheca with its appendix and duct (fig. 4), are very similar to those of *D. (D.) novaeguineae* (see Kevan, 1966; Kevan, Akbar & Chang, 1972), but the granular tubercles on the pronotum and thoracic pleura are more pronounced and the wings considerably abbreviated. As a result of the shortening of the wings, the tegmina, which do not extend beyond the ovipositor or hind femora when at rest, appear relatively broad and truncated, the costal margin curving abruptly into the apical margin (fig. 1). These features are thus no longer diagnostic for the subgenus *Platydesmoptera* (cf. Kevan & Akbar, 1964; Kevan, 1966), but the more prominent posterior apical point to the tegmen, the slightly narrower remigium of the hind wing, and the longer terminal appendix of the spermatheca (Kevan, 1966) remain as features that distinguish the nominate subgenus. One may only presume for the present that the male genitalic characters will eventually be shown to uphold the distinctive between subgenera, a distinction which has, indeed, already been questioned (Kevan, 1966). That the new species is not merely a short-winged form of *D. (D.) novaeguineae*, the only other known New Guinea species, is apparent from the distinct, granular sculpturation of pronotum and thoracic pleura and the slight differences in the female subgenital plate. In size, also, the new species is considerably smaller, which is emphasized by the shortness of the wings. The new species, in external morphology, stands in the same relationship to other species of *Desmoptera* s. str., as do species of the short-winged genus *Stenoxyphula* Kevan, 1963, to those of *Stenoxyphus* Blanchard, 1853 (see Kevan, 1963). These genera are, however, distinguishable from each other on the basis of their phallic structures (Kevan, 1966).

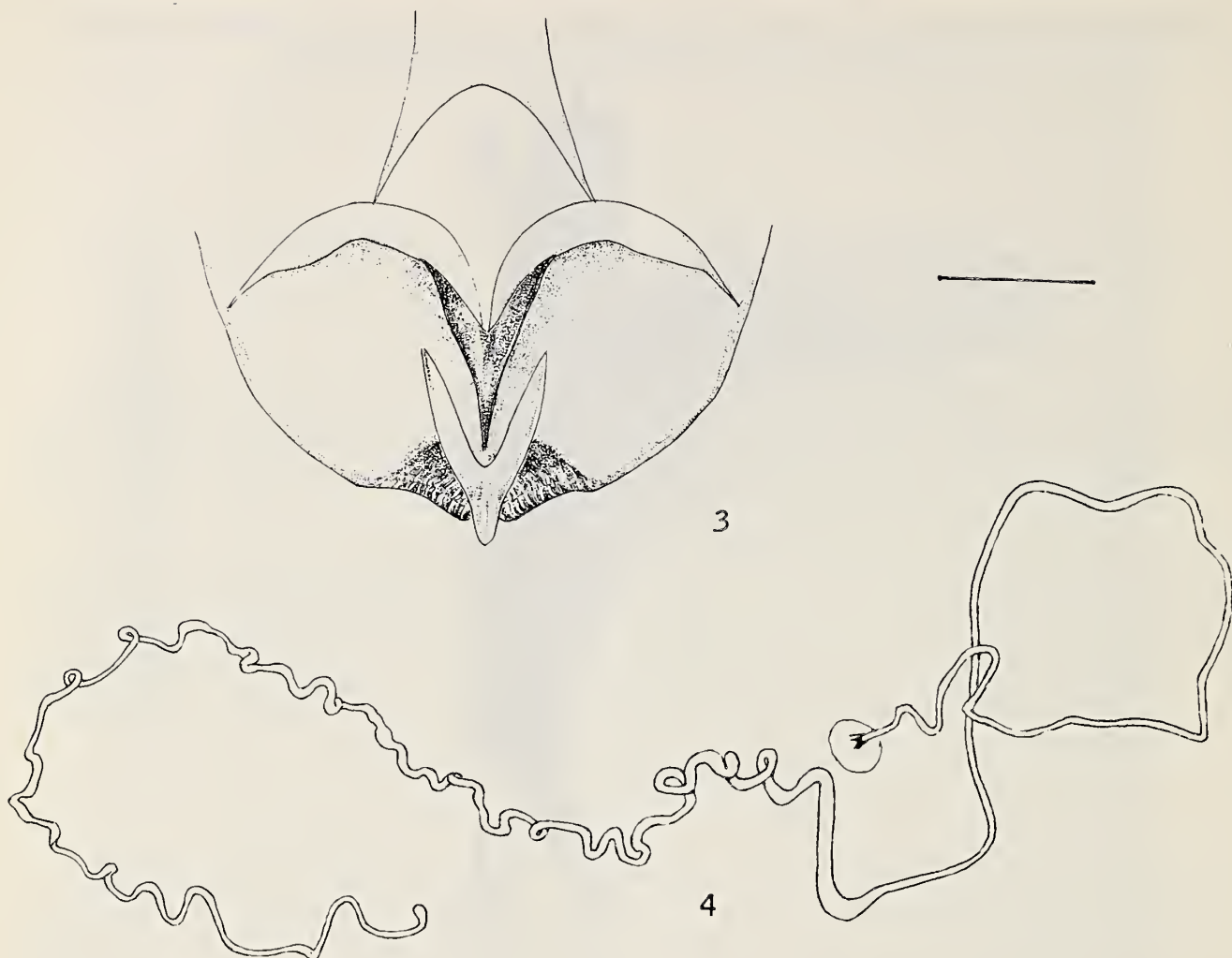
The only known specimen of the new species comes from the Paniai region near the western end of the Snow Mountains, and within the general distributional range of *D. novaeguineae* (see Kevan, 1969), as follows:

Holotype. — ♀, West Irian, „Museum Leiden Nieuw Guinea Exp. K.N.A.G. 1939. Dejatada en berg Barara 11.IX.1939” [Rijksmuseum van Natuurlijke Historie, Leiden].





Figs. 1, 2. *Desmoptera (Desmoptera) irianica*, n. sp., ♀ holotype. 1, dorsal; 2, from right.  
Scale = 2 cm.



Figs. 3, 4. *Desmoptera (Desmoptera) irianica*, n. sp., ♀ holotypes, concealed copulatory structures. 3, subgenital plate, dorsal; 4, receptaculum seminis (spermatheca, appendix and duct). Scale = 1 mm.

#### Diagnosis:

Agreeing in general form with the characteristics given by Kevan (1963, 1966) for the genus and subgenus *Desmoptera*, but with wings not quite reaching the end of the abdomen or hind femora when at rest, tegmina more abruptly truncated.

#### Description:

Head. — Conical, frontal profile concave, particularly below fastigium of the vertex (fig. 2); latter dorsally subtriangular, as broad basally as long; dorsal impressions (foveolae) wide and distinctly demarcated; median carinula faint; tubercles forming oblique row behind eye rather weak.

Thorax. — Pronotum with numerous, generally dispersed granulations and small granular tubercles, latter particularly evident along anterior margin and at lateral carinae of prozona of pronotal disk, and especially along ventral margins of lateral pronotal lobes; anterior margin of pronotal disk more or less straight, posterior margin forming an angle somewhat less than a right-angle, with slightly concave margins; median transverse sulcus of pronotal disk very slightly sinuous, crossing pronotum at about one-third of its length; posterior (typical) transverse sulcus more or less straight, crossing pronotal disk somewhat before middle; median pronotal carina weak but expanded posteriorly in metazona to form a tapering ridge that is accentuated by a pair of lateral depressions in the disk; all pleura with strong scattered granular tubercles, particularly toward coxae; prosternal tubercle typical for genus; interspace between mesosternal lobes about  $1\frac{1}{2}$  times as wide as long; metasternal interspace distinctly transverse.

Wings. — As illustrated (fig. 1), at rest falling a little short of apices of abdomen and hind femora; tegmen only 4 times as long as greatest width, costal margin strongly arcuate near ba-



se, nearly straight thereafter, almost to apex where it bends abruptly backwards to form a strongly truncated apical margin; hind wing distinctly shorter than tegmen.

Genitalia. — Ovipositor rather long and slender (fig. 2); subgenital plate, receptaculum seminis (spermatheca, appendix and duct) as illustrated in figs. 3 and 4.

Coloration. — More or less uniform brown, including all tibiae and tarsi and veins of hind wings (membrane hyaline); though there is a very distinct general mottling, the granular tubercles are a little darker, and there is a slightly paler streak above the lower carina of the outer face of the hind femur.

Measurements. — Length (fastigium to apex of ovipositor), 35.0; head (length, including fastigium of vertex,  $\times$  greatest width)  $4.9 \times 3.5$ ; fastigium,  $1.5 \times 1.5$ ; pronotum (mid-dorsal  $\times$  greatest width between interoposterior angles of lateral lobes),  $8.0 \times 6.4$ ; hind femur  $17.8 \times 3.7$ ; hind tibia, 15.1; tegmen,  $21.5 \times 5.8$ ; hind wing  $18.2 \times 10.0$  mm.

#### ACKNOWLEDGEMENTS

I have to thank Dr. Fer M. H. Willems of Eijgelshoven, Netherlands, for drawing my attention to this new species. The photographs (figs. 1 and 2) were supplied by Mr. Pierre Langlois of the McGill University Department of Entomology, and figs. 3 and 4 by Dr. C.-C. Hsiung of the Lyman Entomological Museum and Research Laboratory.

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COENONYMPHA TULLIA (MÜLLER) (LEP.: SATYRIDAE). De heer Jac. Storms te Posterholt liet me een mooi exemplaar van deze soort zien, op 31 juli 1981 door hem te Meiweg (Herkenbosch) gevangen.

Deze soort werd nog niet eerder uit dit gebied gemeld.

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