

- (9) C. Willemse (1951) gave an adequate, illustrated description of '*Phisis* sp.' from Ponape I. (= Pohnpei), but he declined to name it, although he suspected that it was new. I have examined Willemse's specimens and a very large number of others of the same species from the Caroline and Marshall Islands and find them to be quite distinctive. For convenience, prior to a revisional study by Miss X.-B. Jin and myself, I name this species, in honour of Dr C. J. M. Willemse, *Phisis willemsei*, n. sp. Of described species it is close *Ph. holdhausi* Karny, a species very widely distributed in the South Pacific (see Table 3). From this it differs in several characters such as the virtual lack of serration on the posteroventral aspect of the middle femur and, more obviously, in the male abdominal terminalia, especially the epiproct. This latter, though varying somewhat in exact dimensions, is more or less elongate-rectangular in shape (C. Willemse 1951: 339, fig. 15) and not expanded apically as in *Ph. holdhausi* or *Ph. pallida* (Walker) (*cf.* Chopard 1929b: 24, fig. 20 [not 21, which is of a different species]). This

is borne out by examination of the male, Samoan, holotype of the latter in the British Museum (Natural History), London. Willemse's six specimens have all been examined. All but one (indicated below) are in the B.P. Bishop Museum, Honolulu. Although not described as a new species, the specimens originally had 'Type', 'Allotype' and 'Paratype' labels (black printing on red), so that we know the intended 'type' status of each. The identification labels, however, merely state 'Phisis sp. det. C. Willemse'. Although material in better condition is available, we may make type designations from Willemse's material retaining his spurious type labels and indicating exactly how the data labels read, which is as follows:

*Holotype* (left wings spread), ♂: (1) 'Caroline Islands'; (2) 'Ponape I, III.14.' '36'; (3) 'Z. Ono coll'r.'. *Allotype* (left wings spread), ♀: data labels as for holotype except for date 'III.6.' '36'. *Paratypes* (wings not spread), 2♂♂: (1) as above; (2) 'Ponape I.'; (3) 'Nâ, II.24.' '36'; (4) 'S. Otomo coll'r.'. 2♂♂: (1) & (2) as preceding; (3) 'Reitao, III.1.' '36'; (4) 'Z. Ono coll'r.'. [One of the last is in the C. Willemse collection, Maastricht.].

*Phisis* sp.; Sugerman, 1972:275; Manser, 1974:7

"*Ph.n.sp.* of C.Willemse (1951)"; Jin, 1987:283.

*Phisis willemse* Kevan, 1987:296, 308, 319, 320.

*Ph.willemse* Kevan, 1987:314.

[*Phisis willemse*] *subsp.gilbertensis* Kevan, 1987:296, 308<sup>n</sup>, 314.

*Phisis holdhausi*; Kevan, 1987:308(part), 316(part).

*Phisis willemse gilbertensis* Kevan, 1987:320.

**Diagnosis:**

Body of small size (13-14 mm). Tympanal organ orifices of moderate size (Fig.40A). Front leg with femoral spurs 5/4, tibial spurs 7/7 (a few specimens with 6-7/6 variation). Middle leg with femoral spurs 4/1 (99%, few with 3/1), tibial spurs 6/6 in majority, with variation 6/7 or 7/7; dorsal sub-basal spur present in majority, absent in some, varying with individual and geographical populations (cf.VI.3).

Male epiproct forming a rather small, narrow rectangular plate, much less than half as long as cerci, almost equal to paraprocts, most with slight sinuate hind margin and about straight lateral margins (Fig.40B); some variation related to geographical distribution, the material from the Kiribati (Gilbert) Islands

having generally a smaller, slightly tapering epiproct. Paraprocts forming wide lobes, with one long posterior, ventrally-directed, finger-like process and one anterior to it, exact form varying with individual (cf. Map 21). Cerci simply cylindrical incurved, sometimes with a minute, inner basal tooth (in 84% of individuals the teeth are almost too tiny to be recognized (Fig.40A). Epiphallus wishbone-like, usually with a short neck; there is individual variation of its precise shape (Fig.40D,E,F,G,H,I).

Female epiproct usually small and unremarkable. Paraprocts hardly visible. Subgenital plate of majority with notched apex (Fig.40K), some with unnotched apex (Fig.40J,L), varying with individual and geographical populations (cf.VI.3). Ovipositor as in Fig.40M.

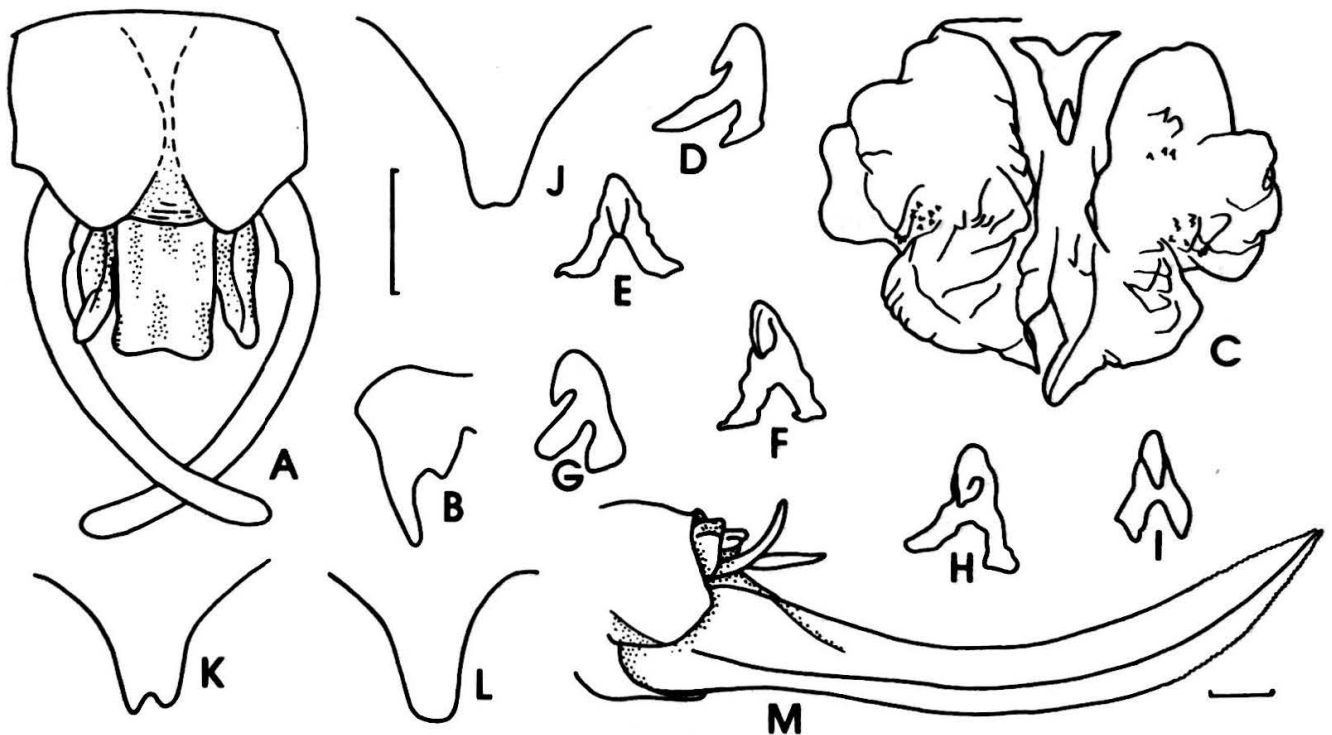


Fig.40. *Phisis willemsi*

A, male abdominal terminalia; B, male paraproct; C, phallic complex; D-I, epiphalli of different individuals; K,L, female subgenital plate; M, ovipositor.