

PRELIMINARY RESEARCH NOTE

**SOME GOMPHINE MATERIAL FROM SURINAM, PRESERVED IN THE  
LEYDEN MUSEUM OF NATURAL HISTORY, WITH A NOTE ON THE  
LARVA OF *DESMOGOMPHUS TIGRIVENSIS* WILLIAMSON (ANISOPTERA:  
*GOMPHIDAE*)**

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An annotated list is given of larvae, exuviae and newly hatched imagines pertaining to 19 gomphine species from Surinam, and additional descriptive notes and a fresh figure of the exuviae of *D. tigrivensis* are provided.

INTRODUCTION

The present report deals with a fragment of the large gomphine material preserved in the collections of the State Museum of Natural History (Rijksmuseum van Natuurlijke Historie), Leyden, The Netherlands, brought together by Dr. D.C. Geijskes during his field work in Surinam (1938-1965). It has been my privilege to study and to place on record this (alcohol) material, which comprises newly emerged imagines, exuviae, and immature and mature larvae, referable to 19 out of 35 gomphine species known from Surinam.

Genera and species are listed in alphabetic sequence. Locality names are given in English, although on the original labels they are in Dutch. If not stated otherwise, the specimens have been collected by Dr. D.C. Geijskes.

LIST OF RECORDS

*Agriogomphus sylvicola* Selys, 1869

Surinam River, Section O, small creek in bush, reared ♀ with its exuviae, 4.XI.1942 (ultimate larva), and 21.XI.1942 (imago), 7.VI.1944, 1 ♂ immature larva.

*Archaeogomphus nanus* Needham, 1944

Temomaiem, small creek in bush, 26.VII.1939, 1 ♂ (mature larva); – Surinam River, Gansee-Goddo, VII-VIII.1942, 1 ♀ (teneral imago), L. Schmidt leg.; – Marowijne River, Gonsoetoe Fall, 21.X.1953, 1 ♀ (teneral imago).

*Cacoides latro* (Erichson, 1848)

Zanderij (airport), pool in savanna, 13.VII.1952, 3 ♂ (mature larvae), 1 ♀ (mature larva), 2 ♂ (immature larvae), 1 ♂ (exuviae), 2 ♀ (exuviae).

*Cacoides mungo* (Needham, 1940)

Coropina Creek (upper part), Zanderij, 29.X.1949, 1 ♀ (immature larva), 1 ♀ (mature larva); – Carolina Creek, 18.XI.1962, 1 ♂ (immature larva), 1 ♀ (mature larva), B. Malkin leg.; – Lawa River, Anapaiké village, on bank near a tree, close above water surface, XI.1963, 1 ♂ (exuviae), S. Ligorie leg.

*Cyanogomphus demerarae* Selys, 1894

Wane Creek, hatching in shadow on trunk at 9 a.m., 10.V.1945, 1 ♂ (teneral imago and its exuviae); – Wane Creek, 10.V.1945, 1 ♀ (exuviae); – Coppename River, Raleigh Falls, VIII.1957, 1 ♂ (exuviae).

*Cyanogomphus minutus* Belle, 1970

Wilhelmina Mountain Range, sandy creek, Kwattakamp, track I, km 3, 2.IX.1943, 1 ♂ (immature larva); – Saramacca River, Toekoemoetoe Creek, track Tafelberg, km 3, VI.1944, 1 ♂ (immature larva), L. Schmidt leg.; – Nassau Mountain Range, km 11.2, creek, 15.III.1949, 2 ♂ (immature larvae).

*Desmogomphus tigrivensis* Williamson, 1920

Tafelberg, Kamp 1, falls, 27.III.1958, 1 ♂ (exuviae).

Earlier I have published a figure of the larval cast-off skin of this species, obtained from a reared specimen (BELLE, 1970). The drawing was based on a dry specimen (deposited in the State Museum of Natural History, Leyden). It seems that due to this condition the skin did not exhibit the vestigial dorsal hooks on the abdominal segment 4, which are clearly visible in the present alcohol specimens. The hooks of the double row are vestigial and mere dark spots on the segments 4 and 5; they are well-developed and high on segments 6 and 7. Figure 1 is an improved version of figure 53 in BELLE, 1970.

On my request, Dr. D.C. Geijskes has generously presented the specimen to me. It is deposited now in the Florida State Collection of Arthropods, Gainesville, United States.

*Mitragomphus* sp. (supposition)

Coeroeni River, Coeroeni Island, IX.1959, 1 ♂ (exuviae of an immature larva).

*Phyllocycla ophis* (Selys, 1869)

Coeroeni River, Coeroeni Island, 27.VIII.1959 (at 10 a.m.), 1 ♂ (exuviae), IX.1959, 2 ♀ (immature larvae).

*Phyllocycla modesta* Belle,  
1970

Coeroeni River, Coeroeni Island, IX.1959, 1 ♂ (exuviae), 1 ♀ (mature larva), 8 ♂ (immature larvae).

*Phyllogomphoides andromedae* (Selys, 1869)

Marowijne River, Bonnidoro Falls, on stones, 30. IX. 1952, 1 ♂ (exuviae), 1 ♀ (exuviae), Gonsoetoe Fall, 21.X.1953, 1 ♀ (exuviae), – Kabelstation, on stone at fall, 9.IV.1957, 1 ♂ (exuviae); 1 ♀ (exuviae); – Coeroeni River, Coeroeni Island, 27.VIII.1959 (at 10 a.m.), 1 ♂ (exuviae), 1 ♀ (exuviae), IX.1959, 8 ♂ (exuviae), 8 ♀ (exuviae).

According to GLOYD (1973) this species and *P. undulatus* (Needham) have been provisionally placed in *Phyllogomphoides* BELLE, 1970.

*Phyllogomphoides fuliginosus* (Hagen, in Selys, 1854)

Coeroeni River, Coeroeni Island, IX.1959, 1 ♂ (mature larva), 4 ♂ (exuviae), 5 ♀ (exuviae); – Corantijn River, Wonotobo Falls, on stones, 22.IX.1962, 1 ♂ (exuviae).

*Phyllogomphoides undulatus* (Needham, 1944)

Coropina Creek (upper part), Zanderij, 28.IV.1943, 1 ♂ (exuviae), 28.VIII.1946, 1 ♂ (exuviae), 29.X.1949, 1 ♂ (mature larva); – Lucie River, Luciekamp, on wooden piles at river, 8.VII.1963, 1 ♂ (exuviae), S. Ligorie leg.

*Progomphus brachycnemis* Needham, 1944

Kabelstation, Makambi Creek, 27.IX.1938, 2 ♀ (mature larvae), bank of river, 28.IX. 1938, 4 ♂ (immature larvae), 3 ♀ (immature larvae), on sandy river beach, 25.IX.1938, 1 ♂ (mature larva), 1 ♀ (mature larva); – Marowijne River, Porigoedoe (Poelogoedoe) Falls, on loamy bank, 30.VIII.1939, 1 ♀ (mature larva), Armina Falls, on beach hatching at 2 p.m., 28.IX.1952, 1 ♀ (teneral imago, no exuviae belonging to it), Porigoedoe (Poelogoedoe) Falls, on stone, 16.X.1952, 1 ♀ (exuviae), Bonnidoro Falls, 30.IX.1952, 2 ♀ (exuviae), Gonsoetoe Fall, 21.X.1953, 1 ♂ (exuviae), 1 ♀ (immature larva), 2 ♀ (exuviae); Coppename River, Raleigh Falls, VIII. 1957, 1 ♂ (exuviae), Kaaimanstation, Leguanen-

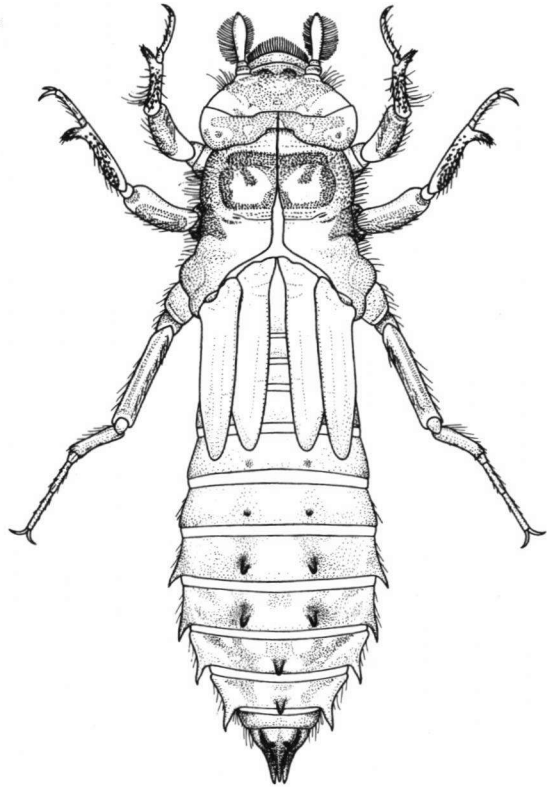


Fig. 1. *Desmogomphus tigrivensis* Williamson. – Exuviae, dorsal view.

eiland, hatched in sunshine at noon, 20.VII.1957, 1 ♂ (teneral imago and its exuviae); – Coeroeni River, Coeroeni Island, bank of river, 27.IX.1959, 1 ♂ (exuviae); – Sipaliwini River, II.1961, 1 ♂ (mature larva); – Corantijn River, Wonotobo Falls, hatching on beach in sunshine at 1 p.m., 22.IX.1962, 1 ♀ (teneral imago and its exuviae), on stones, 22.IX.1962, 1 ♂ (exuviae).

*Progomphus conjectus* Belle, 1966 (supposition)

Coeroeni River, Coeroeni Island, IX.1959, 1 ♂ (exuviae), 1 ♀ (exuviae); – Corantijn River, Wonotobo Falls, on stones, 22.IX.1962, 1 ♀ (exuviae).

*Progomphus geijskesi* Needham, 1944

Nassau Mountain Range, creek, km 11.2, 15.III.1949, 1 ♀ (immature larva); – Coppe-name River, Raleigh Falls, VIII.1957, 2 ♀ (exuviae).

*Progomphus guyanensis* Belle, 1966

Surinam River, Section O, in bush creek, 17.VI.1944, 1 ♂ (hatched imago and its exuviae); – Zanderij, Troelinde Creek (upper part), 28.X.1949, 5 ♂ (immature larvae), 1 ♀ (immature larva), Coropina Creek (upper part), 29.X.1949, 1 ♂ (immature larva), 2 ♂ (mature larvae); – Wilhelmina Mountain Range, Kamp 2, km 10, VI.1963, 1 ♂ (immature larva), S. Ligorie leg.

*Progomphus tibialis* Belle, 1973

Sipaliwini River, Viergebroeders Creek, 24.XI.1961, 1 ♂ (exuviae).

*Zonophora batesi* Selys, 1869

Saramacca River, Toekoemoetoe Creek, track Tafelberg, km 3.7, 12.IX.1944, 1 ♀ (exuviae), L. Schmidt leg.; – Coropina Creek (upper part), 24.III.1957, 1 ♂ (exuviae).

#### REFERENCES

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