

## Original Article

A New Species of the Genus *Oligoaeschna* (Odonata, Aeshnidae)  
from Northeast India

Haruki Karube

Kanagawa Prefectural Museum of Natural History, 499 Iryuda, Odawara, Kanagawa 250-0031, Japan

**Abstract.** A new dragonfly from Northeast India is described under the name of *Oligoaeschna speciosa* sp. nov. This belongs to the member of 'section *pryeri*' by Lieftinck (1968) and is allied to the *Oligoaeschna martini* from Assam though distinguished by the structure of caudal appendage.

**Keywords :** *Oligoaeschna*, new species, NE India.

In last year, I could get many specimens of Odonata from Darjeering of India by the courtesy of Mr. Tetsuo Miyashita. These include some interesting species. Of these, one specimen of the genus *Oligoaeschna* specially attracted the attention of me. That specimen looks like *Oligoaeschna pryeri* of Japan at first sight, and undoubtedly belongs to the same species group.

Until now, 3 species of the genus are recorded from India and are included in 'section *pryeri*' by Lieftinck (Lieftinck, 1968). After a careful study, it is clear that the questionable specimen is surely new species belonging to the same species group.

Before going further, I wish to express my hearty thanks to Mr. Masatoshi Takakuwa of the Kanagawa Prefectural Museum of Natural History, Odawara for his critical reading of the original manuscript, and to Mr. Itsuro Kawashima, Yokosuka for his splendid illustrations of thorax and abdomen inserted in this paper, and to Mr. Tetsuo Miyashita for

supplying this interesting specimens, and to Messrs. Mitsuharu Ohshima and Hiroyuki Yamashita for their kind help with the scanning electron microscopy, and to Mr. Shuichi Niida for his image processing of S. E. M. photograph.

*Oligoaeschna speciosa* sp. nov.

**Male.** Abdomen (incl. appendage) 45.8mm in length. Hind wing 37.3mm in length, with maximum width 11.6mm.

Colour black with green maculations, Slender and belonging to Lieftinck's 'section *pryeri*'.

Head reddish brown with green and black markings; labium, labrum, anteclypeus and postclypeus reddish brown; antefrons rather protruded anteriorly, black except for ventral about half, with vertical surface coarsely wrinkled; frons black with a pair of green rectangular spots behind anterior crest (so, black ground seems to broad T-spot), with fairly longitudinal median groove on dorsal surface; eyes meeting about 1.5mm; vertex strongly globularly protruded anteriorly above median ocellus; occiput black, wedge-shaped, very small and rised posteriorly, covered with long hairs.

Prothorax yellowish, blackish above. Pterothorax black, symmetrically with green marks as follows: antehumeral stripe cigar-shaped, not reaching antealar ridge; elliptical patch present along antealar ridge; mesepimeron with slightly broad stripe at middle, which is not reaching ventral border; two small maculations on metepisternum present on upper border and middle; metepimeron also largely green. Mesinfraepisternum, metinfraepisternum and coxae brown. Legs black.

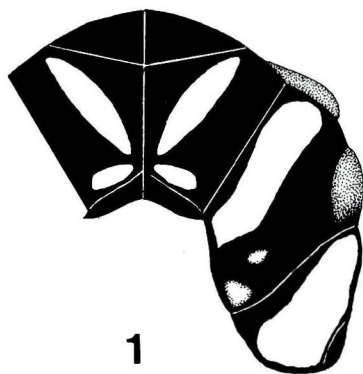


Fig. 1. thorax in dorsal view.



Fig. 2. abdomen in lateral view.

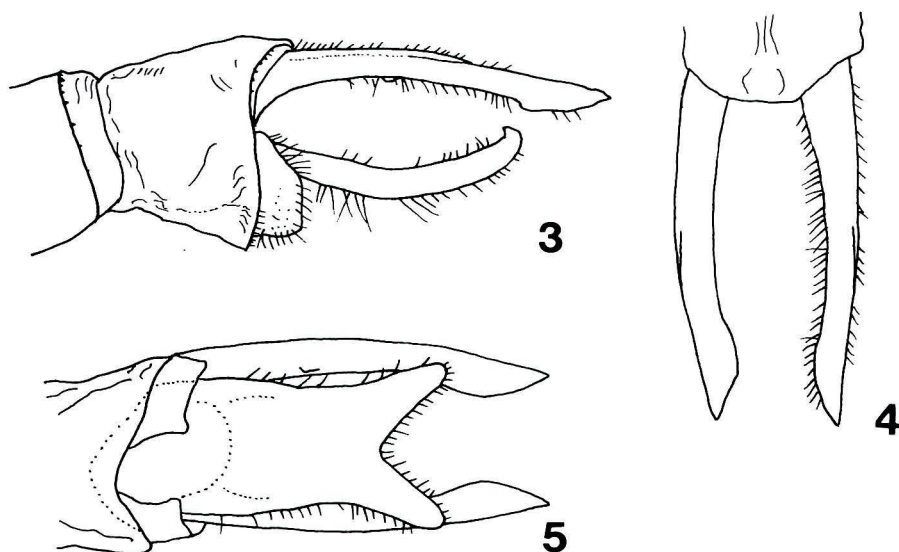


Fig. 3 . caudal appendage in lateral view.

Fig. 4 . superior appendage in dorsal view.

Fig. 5 . caudal appendage in ventral view.

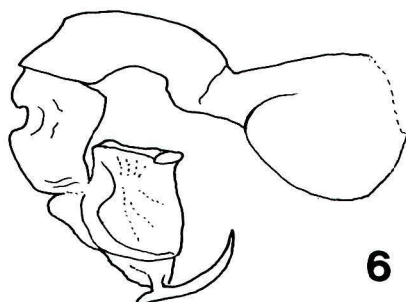


Fig. 6 . penis in lateral view.

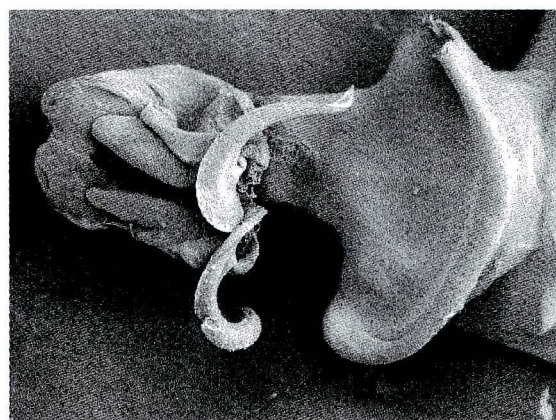


Fig. 7 . penis in oblique ventral view (by S. E. M. ).

Wings hyaline, tinted with golden yellow at base; median space free; each triangle with 3 cross veins; anal loop 5-celled; two rows of cells between MA—M<sub>sp</sub>l present in all wings; nodal index: 5-15:17-6/7-10:10-8; pterostigma brown, 2.9mm in length in the fore, 2.8mm in length in the hind.

Abdomen black with green markings, inflated at basal 2 segments, sharply thin from posterior 1/4 of 2nd to anterior half of 3rd, then slightly expanded at 4-6th, 7-10th thinned apicad; 1st segment with a large lateral spot at medio-posterior area; 2nd with triangular spot at dorso-anterior border, with two pairs of dorsal spots, one of which present at medio-dorsal, and the other are sited at dorso-posterior border, the latter approached each other, and also with two lateral maculations on auricle and latero-posterior; 3rd to 7th each with a pair of rectangular spots at posterior border which are gradually becoming smaller posteriad, and also with a pair of small triangular spots at middle of 3rd to 5th; 8-10th entirely black.

Caudal appendage black. Superior appendage slender, slightly curved inwards and downwards, pointed at apex, with a very small ventral spine inside basal about 2/5, and heel-

shaped at apical about 1/5 of inner edge. Inferior appendage very slender, in lateral view, gently curved upwards and shaped as small hook at apex, in dorsal view, broadly emarginate at sides of basal 2/3 and bilobed at apex which is suddenly strongly curved outwards near apex.

Penis broad; vescicle cup-shaped, very widely bilobed (apex of penis fitted into the notch of vescicle); 2nd curved dorsad; 3rd bell-shaped, with shallow broad notch at post-ventral part; ventral part of 4th shaped as a pair of hooks, apex warped anteriad, with dorsal part flat and bilobed.

**Female.** Unknown.

**Holotype**, ♂, Darjeeling, NE. India, 20. VI. 1993, leg. native.

**Type depositary.** The holotype is deposited in the Kanagawa Prefectural Museum of Natural History, Odawara.

**Notes.** This new species resembles to *Oligoaeschna martini* (Laidlaw) from Darjeeling, though that species has some difficult problems (see in Lieftinck, 1968): the type specimen is only one female which is now lost, and moreover, though Navas described *Aeshna nigripes* (also the type is now lost) based on one male from Darjeeling, Fraser regarded that

as a junior synonym of *Oligoaeschna martini*. Thus, it is difficult to becoming clear the true identity of *Oligoaeschna martini*.

However, if we believe the figures and description of male of *Oligoaeschna martini* (= *Aeshna nigripes*) made by Navas, the present new species is easily distinguished from that by having the characters of more slender and curved inferior appendage and quite different shape of inferior appendage.

#### 摘 要

苅部治紀, 1998. 北東インドからのサラサヤンマ属の1新種. 神奈川県立博物館研究報告 (自然科学), 27:81-83. (H. Karube, 1998. A New Species of the Genus *Oligoaeschna* (Odonata, Aeshnidae) from Northeast India. Bull. Kanagawa prefect. Mus. (Nat. Sci.), 27:81-83.)

インド北東部、ダージリンから、サラサヤンマ属の1新種 *Oligoaeschna speciosa* sp. nov. を記載した。インドからはこれまで3種のサラサヤンマ属が記録されており、この新種は他の3種と同様に、この属の中の section *pryeri* に属し、アッサムから記載された *Oligoaeschna martini* に近縁であると考えられる。前種とは尾部付属器の形状などから区別される。

#### References

- Fraser, F.C., 1936. Odonata III, in The Fauna of British India, including Ceylon and Burma. xi+461pp., 125figs., 2 pls. and map.
- Lieftinck, M. A., 1968. A review of the genus *Oligoaeschna* Selys in Southeast Asia. Tijdschr. Ent., 111 (5):137-186.

(Received : Nov. 30, 1997; Accepted : Dec. 11, 1997)