



## FIRST DESCRIPTION OF MALE OF *DRABESCUS KEMPI* PRUTHI (CICADELLIDAE) FROM INDIA

K PRAVEEN AND K A SUBRAMANIAN\*

Southern Regional Centre, Zoological Survey of India, Chennai 600028, Tamil Nadu, India

\*Email: subbuka.zsi@gmail.com (corresponding author)

### ABSTRACT

**The male of *Drabescus kempi* Pruthi is described and illustrated for the first time from Tamil Nadu, India. A checklist and key to the species of the genus *Drabescus* from India is also provided.**

**Key words:** India, Cicadellidae, Drabescini, *Drabescus*, taxonomy, checklist, key to species, description, genitalia, Tamil Nadu

The Old World arboreal leafhopper genus *Drabescus* Stål, (1870) belongs to the subtribe Drabescina (Deltocephalinae: Drabescini) and comprises of 58 species worldwide (Lu et al. 2019). Zhang and Webb (1996) revised the World Drabescinae and in the recent past Lu et al. (2019) and Yu et al. (2019) dealt with Chinese species of *Drabescus*. The Indian species of *Drabescus* were mainly described by Distant (1908, 1918), Pruthi (1930) and Rao (1989). Pruthi described *Drabescus kempi* with a single female specimen (Pruthi, 1930). In the present work the male of *Drabescus kempi* Pruthi is described from Tamil Nadu, India for the first time.

### MATERIALS AND METHODS

The specimen was collected through light trap by survey team of SRC, ZSI, Chennai. The external morphology was studied, imaged and the male genitalia was dissected by using Leica SAPO microscope. The male genitalia images were taken with the help of Leica DM 3000 LED slide microscope and were processed by using Adobe Photoshop CS5.

### RESULTS AND DISCUSSION

***Drabescus* Stål (1870). Type species:** *Bythoscopus remotus* Walker, 1851

This genus mostly occurs in the Palaearctic and the Oriental and Pacific Regions. The generic characters are as discussed by Zhang and Webb (1996).

#### Checklist of species (India)

*angulatus* Signoret (1880) Type locality: North India; Distribution: India (Uttarakhand, Jammu and Kashmir).  
*kempi* Pruthi (1930) Type locality: Palani Hills, Tamil

Nadu; Distribution: India (Tamil Nadu).

*nervosopunctatus* Signoret (1880) Type locality: North India; Distribution: North India.

*nigrofacialis* (Distant, 1918) Type locality: Chikkaballapura, Karnataka; Distribution: India: (Karnataka).

*shillongensis* Rao (1989) Type locality: Shillong; Distribution: India: (Shillong).

*stramineus* Distant (1908)

Type locality: Nilgiris, Tamil Nadu; Distribution: India (Tamil Nadu).

#### Key to species (India)

1. Pronotal anterior margin bordered with white.....2  
.....2
- Pronotal anterior margin not bordered with white.....3
2. Head and thorax stramineous.....  
*stramineus* Distant
- Head and thorax brown .....  
..... *shillongensis* Rao
3. Head, thorax and forewings reddish brown; mesoscutum with one longitudinal orange yellow stripe on either side of median line (Fig. 2A & 2C); male pygofer with ventral margin dentate (Fig. 2B).....*kempi* Pruthi
- Head and thorax either dark brown or stippled with dark brown on lemon yellow ground colour; male pygofer with ventral margin not dentate.....4
4. Aedeagal shaft with basal pair of processes .....5

- Aedeagal shaft without basal processes.....  
.....*nigrofacialis* (Distant)
- 5. Male pygofer in lateral view strongly narrowed at basal 1/3, tapered distally and terminated by spine-like process.....  
.....*angulatus* Signoret
- Male pygofer in lateral view not strongly narrowed and tapered, distally without spine-like process.....  
.....*nervosopunctatus* Signoret.

### *Drabescus kempi* Pruthi (male) (Figs. 1, 2)

#### Redescription

Terminology follows Pruthi (1930). Body is large, reddish brown. Vertex evenly produced across the eyes; 5.3x as wide as long; prominently ridged at the anterior margin; which is almost angulate and is marked with black near the ocelli and eyes. Eyes large and oblique.

Face flattened much broader than long. Frontoclypeus is triangular, wider between the ocelli and tapered towards anteclypeus; evenly coloured in reddish-brown. Anteclypeus black, slightly elevated ridge in the median region. Lorae flattened, plate like 2x as long as wide. Genae reddish-brown, wedge shaped, inflated near eyes. Pronotum 2.4x as wide as long with many transversely striated, more prominent in the posterior region; anterior margin convex projected between eyes. Posterior margin concave and lateral margins convex. Anterior region with many flavescent spots. Mesonotum reddish brown; two light yellowish color bands running from the anterior margin towards the scutellum, space between two bands brownish. Scutellum prominent, ochraceous, inverted triangular in shape with transverse striations. Legs stout, anterior tibiae very much dilated (Figs. 1G, 1F). Hind femur macrosetal formula 2+1 (Fig. 1E). Tegmina much longer than the body; subhyaline; coarsely punctuate, reddish brown, tegminal veins dark

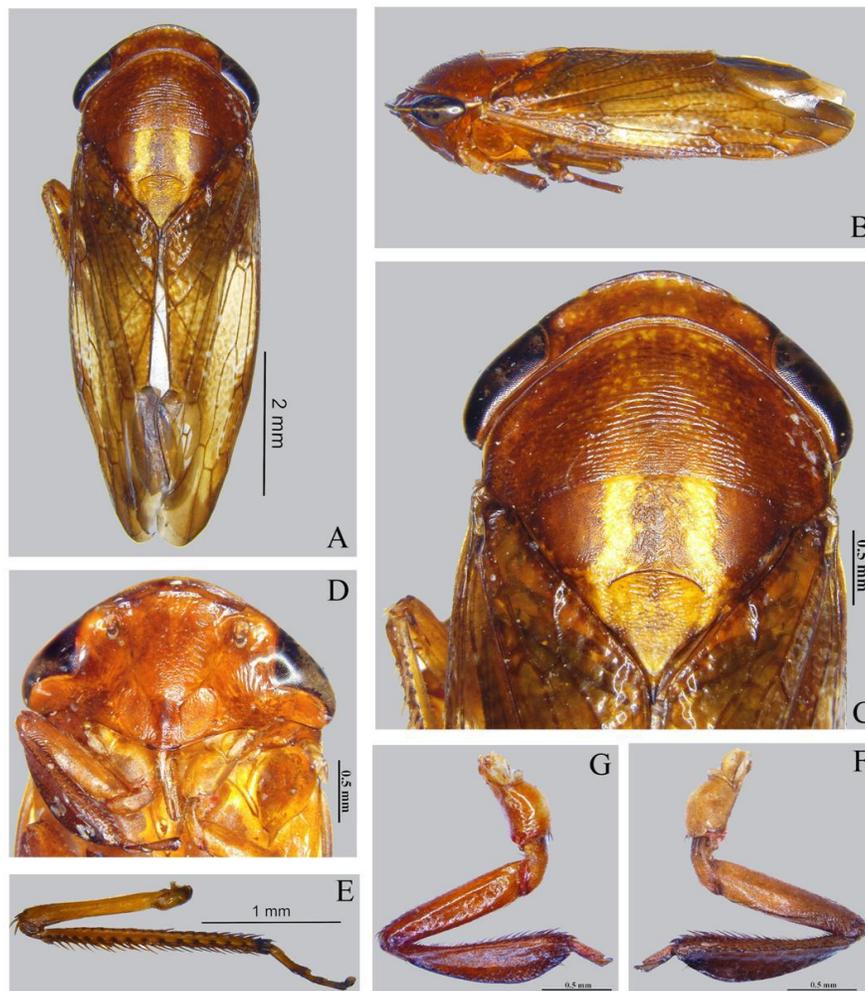


Fig. 1. (A-G) *Drabescus kempi* Pruthi Male Habitus: A. Dorsal view; B. Lateral view; C. Head; D. Face; E. Hind Leg dorsal view; F. Fore leg dorsal view; G. Fore leg ventral view

brown thick and prominent (Pruthi, 1930).

Male genitalia: Pygofer slightly longer than wide (Fig. 2A), caudal lobe broadly rounded with three macro setae; anterior region yellowish-brown; posterior region blackish. Mid ventral process extending up to the anterior margin, slightly darker base with some micro setae. In the ventral view of pygofer dentate margin is very prominent (Fig. 2B) concave internally, sclerotized with thick stout denticles. Valve triangular nearly two times as wide as median length (Fig. 2C). Subgenital plate elongate, triangular with tapering apex. The outer margins are covered with fine setae; median grooves present in each subgenital plate. Connective Y-shaped with stem as long as arms (Fig. 2D). Style broad at base, apical process short, laterally curved without any

pre apical lobe (Fig. 2H). Aedeagus with shaft broad at base and narrow towards apex with pair of processes directed posteriorly; dorsal apodeme absent.

**Length (including tegmen):** ♂ 7.2 mm.

**Material examined:** 1♂, India, Tamil Nadu, Dindigal Dist, Devathanpatti Range, Westren Ghats, Kumbakarai Falls, 21.iii.2016, Coll. R. Babu, At Light. 10.1808N, 77.52975E. Alt. 400m, Reg. No. I/H-2718. The examined specimen is deposited in the National Zoological Collection, Southern Regional Centre, Zoological Survey of India, Chennai.

**Remarks:** This species can be distinguished by two light yellowish bands running from the anterior margin of mesonotum towards the scutellum.

**Distribution:** India: Tamil Nadu (Palani Hills, Kumbakarai Falls).

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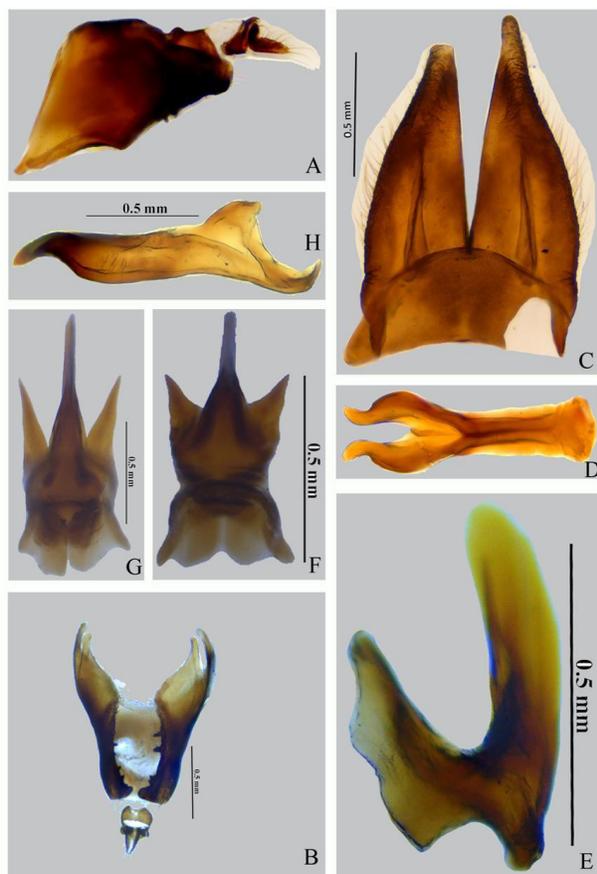


Fig. 2. (A-H) *Drabescus kempi* Pruthi Male genitalia: A. Pygofer and anal tube lateral view; B. Pygofer ventral view; C. Subgenital plates showing with valve; D. Connective and base of aedeagus ventral view; E. Aedeagus lateral view; F. Aedeagus ventral view; G. Aedeagus posterior view; H. Style ventral view

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