# SOME DESCRIPTIVE NOTES ON CHANGWHANIA CEYLONENSIS (BAKER) (HOMOPTERA : CICADELLIDAE) FROM INDIA

## K. RAMACHANDRA RAO

### Zoological Survey of India, Southern Regional Station, MADRAS

#### INTRODUCTION

Changwhania ceylonensis (Baker) is known to have a wide range of distribution. Originally it was described and reported from Sri Lanka by Melichar (1903) while Pruthi (1930) recorded it from "Bengal", Central "India" and "Madras". Kwon (1980) and Webb and Hellar (1990) reported it from South East Asia. While working on Indian leafhoppers, the author came across the species from Meghalaya and from Periyar district of Tamil Nadu and the same is reported here. Although this species is well distributed, it has been described by various authors under different taxa causing much difficulty in it's identity and therefore it is described here in detail.

### Changwhania ceylonensis (Baker

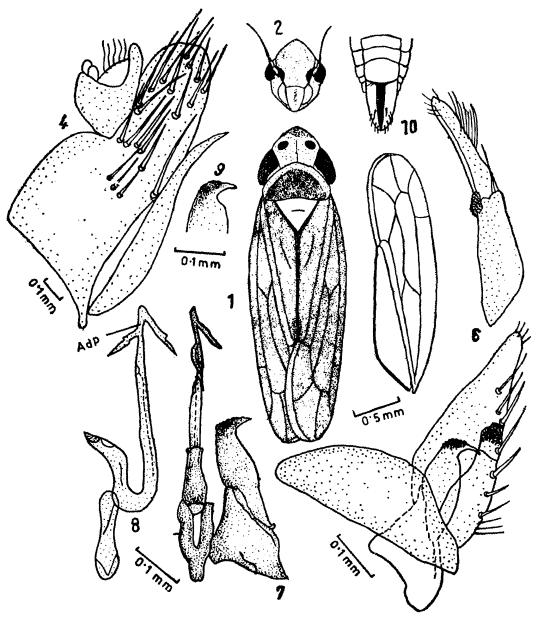
(Figs. 1-10)

- 1903. Deltocephalus bimaculatus Melichar, Hom. Fauna, Ceylon, 204.
- 1908. Deltocephalus bimaculatus : Distant, Fauna Brit. India, Rhynchota, 4 : 388.
- 1925. Deltocephalus ceylonensis Baker, Nom. nov,. Pro. Deltocephalus bimaculatus Melichar, 1903, nec. Deltocephalus bimaculatus Gillette and Baker, 1895, Philippine Jour. Sci. 27: 537.
- 1930, Cicadula bipunctatus Sing-Pruthi, Mem. Indian Mus., 11: 59; Datta 1972, Zool. Anx., 189: 420.
- 1980. Changwhania changwhani Kwon, Comm. Pap. Kim's. 60th Ann., 95: 102.
- 1990. Changwhania ceylonensis : Webb and Heller, Stutt. Beitr. Natur. Ser. A. (Biol) 452 : 10.

Vertex brightly ochraceous with two large round spots at the anterior margin of eyes. Face longer than broad ochraceous, frontoclypeus below antenna at the lateral margins with oblique piceous spots, lateral frontal sutures extending to ocelli; lora small narrow, not reaching apex of clypellus; clypellus long, ochraceous. Eyes grey with irregular dark maculations. Pronotum as long as vertex, anterior margin rounded, posterior margin almost truncate. Scutellum ochraceous, transversely impressed in the middle Forewing hyaline, margin brown, with three apical and two anteapical cells. abdomen and legs ochraceous; posterior femoral spinulation 2+1+1.

# Male genitalia :

Pygofer dorsoventrally flattened with numerous setae at the dorsocaudal end, each pygofer with a ventral process which is curved ventrally near apex. Male plate long,



# LEGEND Changwhania ceylonensis (Baker)

- Fig. 1. Habitus
- Fig. 2. Face
- Fig. 3. Forewing
- Fig. 4. Pygofer
- Fig. 5. Value, Male Plate and Style
- Fig. 6. Male Plate
- Fig. 7. Style, Connective and Aedeagus
- Fig. 8. Aedeagus and Connective
- Fig. 9. Style, apex
- Fig. 10. Female genitalia

- ... Dorsal view
- ... Ventral view
- ... Dorsal view
- ... Dorsal view
- ... Ventral view
- ... Lateral view
- ... Dorsal view
- ... Lateral view
- ... Dorsal view
- ... Ventral view

broad at base and narrowed towards apex with numerous hair-like setae on the lateral margin. Style broad at base, preapical lobe poorly developed apophysis short, its caudal lateral angle produced to form beak-like structure and end of style with fine tooth-like serration and sculphum. Aedaeagus with well developed dorsal apodeme, shaft considerably long with two asymmetrical processes at the ends, the processes notched in the middle on the outer margin.

# Female genitalia :

Seventh sternum small, ochraceous, posterior margin produced slightly in the middle. Pygofer large with stout setae on lateral and posterior margins; ovipositor long reaching posterior extremity of abdomen.

## Measurments :

Males 2.68 to 3.05 mm long and 0.67 to 0.81 mm wide. Females 2.82 to 3.44 mm long and 0.72 to 0.84 mm wide.

### Specimens examined :

3. 3 3 4 ♀ ♀, Meghalaya : Mairang Nongklah, 1.×1. 1977 Coll. K. R. Rao; 1 3, 299, Tamilandu : Periyar Dist : Geethsal, Hassanur 4.1-1990, Coll. P.T. Cherian.

Distribution : India, Sri Lanka, South East Asia,

## Remarks :

Changwhania ceylonensis (Baker) resembles Changwhania terauchii (Matsumara) and Changwhania distanti (Baker) in having two black round spots on the vertex but differs from the former in the possession of deeply curved pygofer process, asymmetrical aedeagal processes and smaller black spots on the frontoclypeal margins. Besides it differs from the latter species in the absence of a mid longitudinal ridge on the face.

### Summary

Changwhania ceylonensis (Baker) is described in detail and its occurrence in Meghlaya and Periyar dist. of Tamil Nadu is reported for the first time.

#### ACKNOWLEDGEMENTS

The author thanks Dr. K. V. Lakshmi Narayana, Officer-in-Charge for all the laboratory facilities offered. He also thanks Dr. Webb of the Natural History Museum at London, for having sent the illustrations of *Changwhania teraucnii* (Matsumara) and *C. changwhani* Kwon.

### Abstract

Detailed description of *Changwhania ceylonensis* (Baker) is given along with a note on its distribution.

#### References

Melichar, L. 1903. Fauna Von Ceylon, 1-248.

- Datta, B. 1972. On Indian Cicadellidae (Insecta : Homoptera), Zool. Anz., 189: 420.
- Distant, W. L. 1908. Fanna, Brit. India, Rhynchota, 4: 387.
- Kwon, Y. J. 1980, Changwhania gen. n., new palaerctic genus of leafhoppers from the subtribe Deltocephalina (Homoptera : Cicadellidae). Comm. Pap. Prof. C. W. Kim's 60th Birthd. Ann., 95-102.
- Metcalf, Z. P. 1967. General Catalogue of the Homoptera Fasc vi, Euscelidae. 10 (2): 1121.
- Sing-Pruthi, H. 1930. Studies on Indian Jassidae (Homoptera) Part I. Mem. Indian Mus., 11: 59.
- Webb, M. D. And Heller, F. R. 1990. The leafhopper genus *Pseupalus* in the Old-World tropics with a check list of the Afrotropical and Oriental Paralimnini (Homoptera : Cicadellidae : Deltocephalinae). *Stuttgarter. Beitr. Naturk. Ser.* A. No. 452 : 1-10.