

A revision of the deltocephaline leafhopper genus *Scaphoideus* (Hemiptera: Cicadellidae) from the Indian subcontinent

C.A. VIRAKTAMATH & G.S. MOHAN

Department of Entomology, University of Agricultural Sciences, GKVK, Bangalore 560 065, India

TABLE OF CONTENTS

ABSTRACT	2
Introduction	2
Genus <i>Scaphoideus</i>	3
Checklist of species of <i>Scaphoideus</i> of the Indian subcontinent	4
Key to species of <i>Scaphoideus</i> of the Indian subcontinent	5
<i>Scaphoideus assamensis</i> Distant	9
<i>Scaphoideus asymmetricus</i> sp. nov.	11
<i>Scaphoideus baeticus</i> (Distant)	13
<i>Scaphoideus bicoloratus</i> sp. nov.	13
<i>Scaphoideus bifidus</i> sp. nov.	15
<i>Scaphoideus coloratus</i> Rao	16
<i>Scaphoideus consanguineus</i> Distant	16
<i>Scaphoideus elegantulus</i> Melichar	17
<i>Scaphoideus harlani</i> Kitbamroong and Freytag	20
<i>Scaphoideus hirsutus</i> sp. nov.	20
<i>Scaphoideus illustris</i> Rao and Emiliyamma	22
<i>Scaphoideus inequalis</i> sp. nov.	23
<i>Scaphoideus insignis</i> (Distant)	25
<i>Scaphoideus jogensis</i> sp. nov.	25
<i>Scaphoideus karachiensis</i> Ahmed, Murthaza & Malik	28
<i>Scaphoideus katraini</i> Rao and Ramakrishnan	28
<i>Scaphoideus kirti</i> sp. nov.	28
<i>Scaphoideus lamellaris</i> sp. nov.	29
<i>Scaphoideus malaisei</i> sp. nov.	30
<i>Scaphoideus morosus</i> Melichar	33
<i>Scaphoideus orientalis</i> Kitbamroong & Freytag	33
<i>Scaphoideus ornatus</i> Melichar	33
<i>Scaphoideus rathani</i> Ghosh	34
<i>Scaphoideus russus</i> Distant	34
<i>Scaphoideus sabourensis</i> Rao and Ramakrishnan	36
<i>Scaphoideus sculptellus</i> sp. nov.	36
<i>Scaphoideus sculptus</i> sp. nov.	38

<i>Scaphoideus spiculatus</i> sp. nov.	39
<i>Scaphoideus stigmaticus</i> Distant	40
<i>Scaphoideus trilobatus</i> sp. nov.	42
<i>Scaphoideus varna</i> sp. nov.	43
<i>Scaphoideus vaticus</i> sp. nov.	45
<i>Scaphoideus zhangii</i> sp. nov.	45
ACKNOWLEDGEMENTS	47
REFERENCES	47

ABSTRACT

The species of the genus *Scaphoideus* Uhler (type species: *Jassus immistus* Say) from the Indian subcontinent (including Pakistan, India, Sri Lanka, Nepal, Bhutan, and Myanmar) are revised and a key is included. All taxa treated are redescribed and illustrated. The following 16 new species of *Scaphoideus* are described: *S. asymmetricus* sp. nov. (India: Karnataka), *S. bicoloratus* sp. nov. (India: Karnataka, Kerala), *S. bifidus* sp. nov. (India: Uttar Pradesh, West Bengal), *S. hirsutus* sp. nov. (India: West Bengal), *S. inequalis* sp. nov. (India: Karnataka), *S. jogensis* sp. nov. (India: Karnataka, Kerala), *S. kirti* sp. nov. (India: Karnataka, Kerala), *S. lamellaris* sp. nov. (Myanmar: Nam Tama Valley), *S. malaisei* sp. nov. (Myanmar: Kambaiti), *S. sculptellus* sp. nov. (Sri Lanka), *S. sculptus* sp. nov. (India: Karnataka, Kerala, Tamil Nadu), *S. spiculatus* sp. nov. (Myanmar: Mishmi Hills, Nam Tama Valley), *S. trilobatus* sp. nov. (Myanmar: Kambaiti), *S. varna* sp. nov. (Myanmar: Bhamo), *S. vaticus* sp. nov. (Myanmar: Bhamo), and *S. zhangii* sp. nov. (India: Meghalaya, West Bengal). *S. brachycephalus* Distant 1918, *S. nutans* Distant 1918 and *S. pallifrons* Distant 1918 are treated as junior synonyms of *S. elegantulus* Melichar 1903, syn. nov.; and *S. polymitus* Distant 1918 is treated as a junior synonym of *S. ruscus* Distant 1918, syn. nov.

Key words: Hemiptera: Cicadellidae, *Scaphoideus*, key, revision, new species, India

Introduction

The deltocephaline leafhopper genus *Scaphoideus* Uhler includes some of the most beautifully coloured Indian leafhoppers. Members of the genus occur in all zoogeographical regions of the world, and feed and breed on grasses, herbs, shrubs, and trees. Although none of the Old World species of *Scaphoideus* is known to transmit disease agents, the New World species *S. littoralis* Ball and *S. luteolus* Van Duzee transmit western X-disease and flavescence doree of grapes (Nielson, 1979). Chatterjee (1939) incriminated a species of *Scaphoideus* as a suspected vector of spike disease of sandal (*Santalum album* L.); however, this has not been confirmed by later workers.

Melichar (1903) and Distant (1908b, 1918) together described 17 species of *Scaphoideus* (type species: *Jassus immistus* Say) in addition to erroneously recording *S. festivus* Matsumura from the Indian subcontinent (Freytag, 1976). Distant (1918) also described one new species each in the genera *Hussa* (type species: *Hussa insignis* Distant) and *Bola-*