

A NEW SPECIES OF GALL MIDGE (DIPTERA: CECIDOMYIIDAE) FROM INDIA

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Abstract

Neolestremia longipalpia sp. nov. is described from Maharashtra, India. Key to the Indian species of the genus is provided.

Keywords

Diptera, Cecidomyiidae, Lestremiinae, Neolestremia longipalpia, new species

Abbreviations

Cu - Cubitus
M3 - Media 3
R5 - Radius 5

M1 - Media 1
R1 - Radius 1

Introduction

The genus *Neolestremia* was erected by Mani (1934) for midges bred from the leaf bud galls of *Boerhavia* spp. from Chennai (South India). The genus approaches *Lestremia* Macq., very closely, but is chiefly distinguished from it by its triarticulate palpi. Later Sharma and Rao (1979) added one more species from Maharashtra. The present species is the third from India and second from Maharashtra. At present, the range of the distribution of the genus appears to be peninsular India, since, it is not yet recorded from other countries of Indian subcontinent.

The number of antennal segments in this genus has been a point of interest. Recorded information is that the male has 16 segmented antenna and the female has 11 segmented antenna.

Neolestremia longipalpia sp. nov.
(Figs. 1-7)

Material examined

Holotype: Male, 22.v.1993, labeled "at light, MSEB Office,

Bhokar, District Nanded", Coll. T.H. Shaikh. Dissected and mounted on slide.

Paratype: One male data same as holotype. Dissected and mounted on slide.

Type slides are retained in first author's collection at Nanded for the time being.

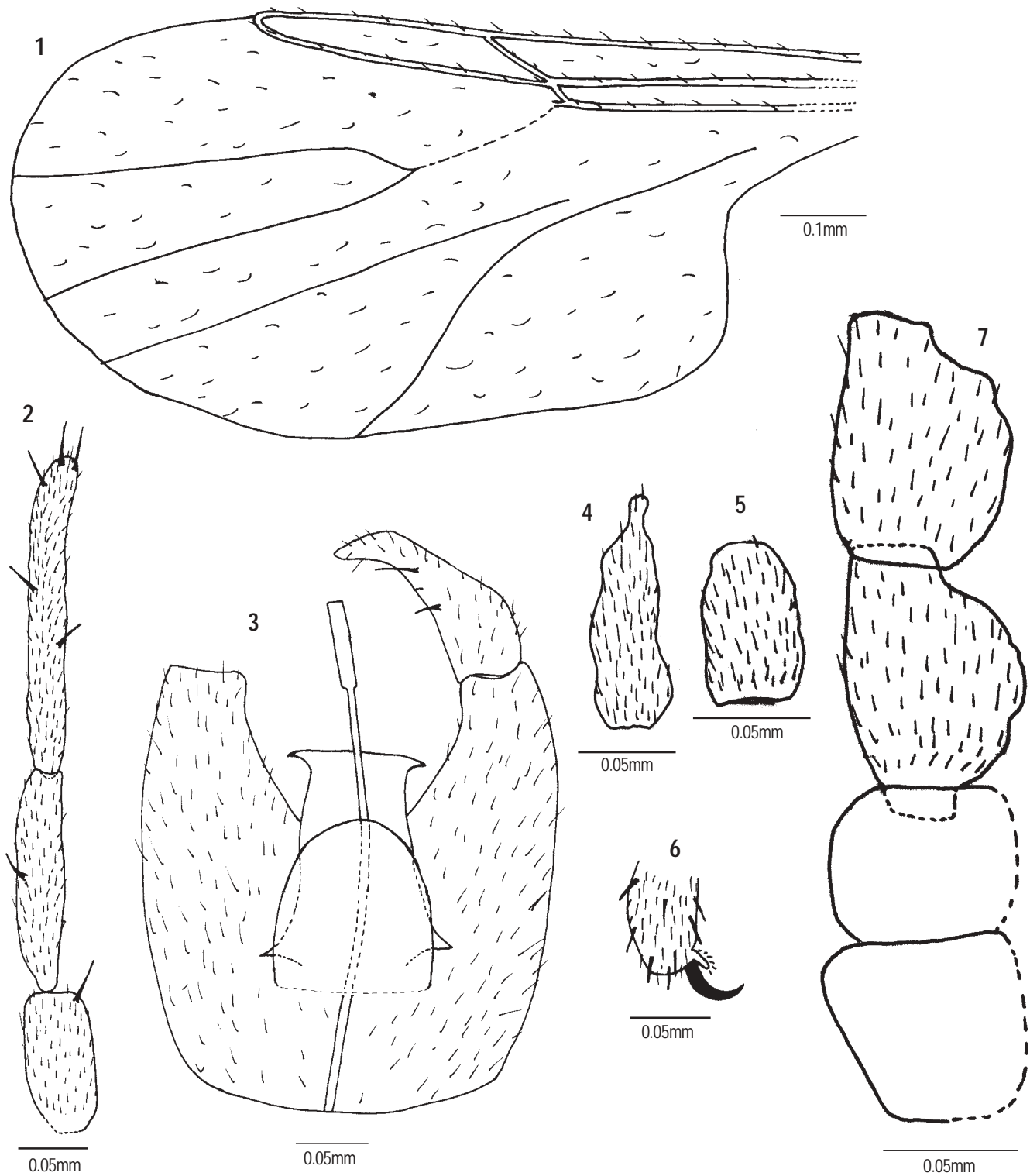
Etymology

The specific epithet *longipalpia* refers to long palpi.

Diagnostic features

Male: Body 0.90mm long. Eyes separate, ocelli two. Trophi normal.

Palpus: Triarticulate, long, densely setose; first segment, subcylindrical, short, length 2x its maximum thickness; second segment, cylindrical, longer and thinner than first, length 4.5 X its maximum thickness; third segment cylindrical, longest of all, length nearly 8x its maximum thickness.



Figures 1-7. *Neolestremia longipalpia* sp. nov. (male)

1 - Wing; 2 - Palpus; 3 - Genitalia; 4 - Terminal antennal segment; 5 - Penultimate antennal segment; 6 - Claw;
7 - Basal four segments of antenna

Antenna: Shorter than body, with 2+13 segments, each with subglobose enlargements and short apical stem, stems shorter than basal enlargements, the later enlargements with one whorl of long setae medially; scape quadrate, as long as thick; pedicel subglobose; third segment, not confluent but longer than fourth, basal prolongation short (1:3), enlargement (11:8) 0.84 the length of the segment and 1.37x its maximum thickness; fourth segment (12), with enlargement (10:8) 0.83 the length of the segment and 1.25x its maximum thickness, apical stem (2:3) broader than long; penultimate segment without apical stem, 1.50x its maximum thickness; terminal segment (15) with enlargement (13:5) 0.90 the segment and 2.60x its maximum thickness, apical stem (2:2) in form of a small apical prolongation. Wing (65:27) roughly rectangular, microtrichae evenly distributed, 2.40x as long as broad, vein R1 meeting costa at basal half of the wing, vein R5 joining costa beyond middle of the wing; fork of vein M1+2 longer than vein M1+2, the latter obsolete, vein M3+4 complete, vein Cu simple.

Legs: Long, densely setose, metatarsus (65) longest of all, shorter than the following segments combined together (74); claws (5) evenly curved, simple on all legs, empodium rudimentary.

Genitalia: Sparsely setose, basal clasp segment (35:16) roughly rectangular, length 2.20x its maximum thickness; terminal clasp segment (21:7) short, broad basally and tapering apically, ending

without tooth, shorter than basal clasp segment and 3.0x its maximum thickness; dorsal plate (15:14) entire, broad basally, round apically, nearly as long as thick; subdorsal plate (20: 12) entire, broad basally, longer and thinner than dorsal, 1.66x as long as thick, tip truncated, with a pair of lateral spines apically and basally; aedeagus (46) rod shaped, sclerotized, 1.30x as long as basal clasp segment, covered with a flat cap apically.

Female: Unknown.

Acknowledgement

The authors are thankful to the Principal, Science College, Nanded for providing laboratory facilities.

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Key to the Indian species of *Neolestremia* Mani, 1935

1. Antennal segments 15, ocelli present 2
 - 1A. Antennal segments 11 in female, ocelli absent; second palpal segment 2.0x its maximum thickness; length of third palpal segment more than 4x its maximum thickness *boerhaviae* female Mani, 1934
 2. Length of second palpal segment with length 1.28x its maximum thickness; third palpal segment 3.25x its maximum thickness; empodium half as long as the claw; dorsal plate triangular, subdorsal plate rounded apically, without spines; aedeagus cylindrical, rounded apically *orientalis* male Sharma and Rao, 1979
 - 2A. Second palpal segment with length 4.5 x its maximum thickness; third palpal segment nearly 8x its maximum length, empodium rudimentary; dorsal plate rounded apically, subdorsal plate with truncated tip and a pair of spine apically and basally; aedeagus rod like, covered with a flat cap apically *longipalpia* sp. nov. (male)