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A NEW GENUS AND NEW SPECIES OF GALL MIDGE [CECIDOMYIIDAE : DIPTERA] FROM INDIA

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ABSTRACT : Descriptions of new genus *Kitella* and new species *orientalis* from India together with key to the related genera is given.

KEY WORDS : *Kitella orientalis*, new genus and new species, Diptera : Cecidomyiidae.

INTRODUCTION

While studying the gall midges from Maharashtra [India], these cecidomyiid flies were collected at light by one of us [THS] at Hadgaon, Dist., Nanded, Maharashtra, India in the year 1994. On the closer observations of these flies, a new genus *Kitella* a new species *orientalis* are described.

Kitella gen. nov., is readily distinguished from closely placed genera viz., *Delodiplosis* Tav; *Phyllodiplosis* Kieffer; *Paradiplosis* Felt; *Styradiplosis* Tav; *Plesidiplosis* & *Plemeliella* Seitan in possession of (a) entire sub dorsal plate, (b) kite shaped dorsal plate, (c) terminal clasp segment greatly swollen basally and with a tooth apically.

Key to the related genera

(Modified from Grover 1975 – Couplet no. 156 on words)

1. Subdorsal plate long and linear
Subdorsal plate broad. 2

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2. Subdorsal plate lobed (i) *Delodiplosis* Tav
 (ii) *Phyllodiplosis* Kieffer
 (iii) *Paradiplosis* Felt
 (iv) *Styradiiplosis* Tav.
 (v) *Plesidiplosis* Kieffer
 (vi) *Plemeliella* Seitan.
- Subdorsal plate entire *Kitella* gen. nov.,

Kitella gen. nov.

Eyes confluent above. Trophi normal. Palpi quadriarticulate. Antenna : 2 + 12 segments, flagellate segments binodose with long stems, two whorls of long setae, one on each enlargement, three whorls of regular circumfila, one on basal and two on apical enlargements, third and fourth antennal segments confluent; wing hairy, vein R₅ reaching wing margin well beyond its apex and latter interrupted at its union with costa, vein Cu forked, forks obsolete; claws simple on all legs; empodium shorter than the claw. Genitalia : basal clasp segments large, without lobe, terminal clasp segments greatly swollen basally, without lobe, narrowed apically, ending with a pointed tooth; dorsal plate entire, kite shaped, with a pair of short spines medially, lobed apically, subdorsal plate broad, entire, rounded apically; adeagus shorter than subdorsal plate, tip round, sclerotized and pointed apically.

Type species : *Kitella orientalis* gen. et. sp. nov.

Remarks : On *Kitella orientalis* sp. nov.

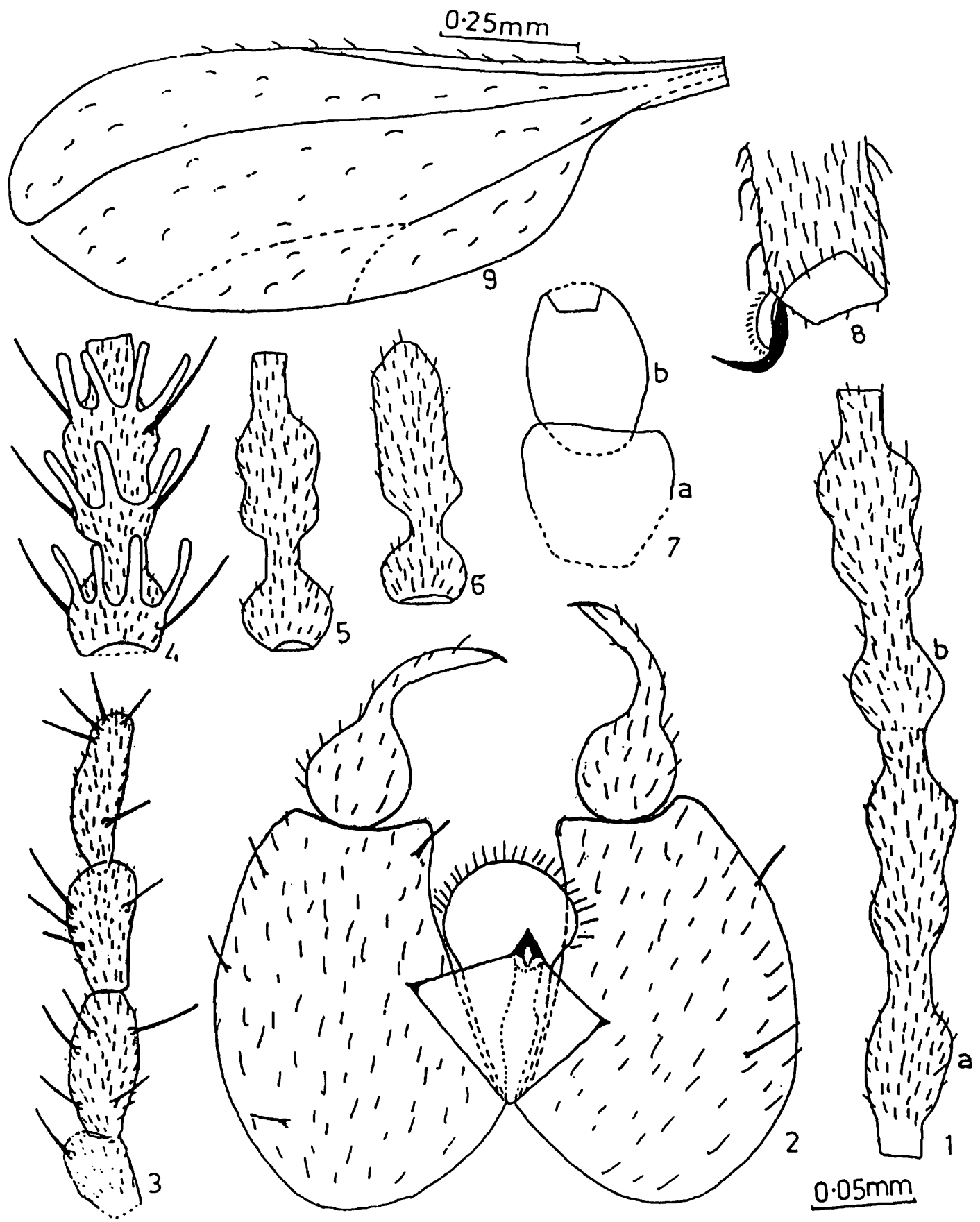
Kitella orientalis is characterised in having :

- i. Subdorsal plate broad and entire, longer than dorsal,
- ii. Dorsal plate kite (quadrate) shaped, lobed apically and with a pair of spine laterally,
- iii. Terminal clasp segment greatly swollen basally and with a tooth terminally.

Kitella orientalis sp. nov.

(Figs. 1-9)

MALE : Body : 0.90 mm long. Palpus quadriarticulate, sparsely setose, first segment [6 : 4] cylindrical, broad apically, length 1.5 X its maximum thickness; second segment [10 : 4] cylindrical, length 1.6 X its maximum thickness; third segment [9 : 4] cylindrical, slightly shorter than second, length 2.25 X its maximum thickness; fourth segment [11 : 3] longest of all, length 3.66 X its



Figs. 1-9. : *Kitella orientalis* sp. nov. ♂ : 1a. Third antennal segment, 1b. Fourth antennal segment; 2. Genitalia; 3. Palpus; 4. Fifth antennal segment; 5. Penultimate antennal segment; 6. Terminal antennal segment; 7a. Scape, 7b. Pedicel; 8. Claw; 9. Wing.

maximum thickness. Antenna : shorter than body, with 2 + 12 segments, segments with binodose enlargements and long stems, stems becoming longer and thinner towards the apex of the antenna, with two whorls of long setae, one on each enlargement, three whorls of regular circumfila, one on the basal and two on apical enlargements; scape cup shaped, narrow at base and broad apically, nearly as long as broad [10 : 11]; Pedicel suboval, longer than scape, length 1.20 X its thickness [12 : 8]; third segment [30] confluent with and longer than fourth, with a small basal prolongation [2 : 2], basal enlargement [8 : 5] 0.26 the length of the segment and 1.60 X its maximum thickness, basal stem [3 : 3] 0.37 the length of the basal enlargement and as long as thick, apical enlargement [13 : 5] 0.43 the length of the segment, 2.40 its maximum thickness, apical stem [4 : 3] shorter than apical enlargement, 1.3 x its maximum thickness; fourth segment [23], basal enlargement [5 : 6] globose, 0.20 the length of the segment and slightly thicker than long, basal stem [3 : 3] shorter than basal enlargement, apical enlargement [10 : 6] twice the length of basal and 1.66 X its maximum thickness, apical stem [5 : 3] shorter than apical enlargement and 1.66 X its maximum thickness; fifth segment [21] slightly shorter than fourth; sixth to eleventh segments slightly shorter and similar to fifth; penultimate segment [20] shorter than ninth; terminal segment [17] shortest of all, basal enlargement [4 : 5] 0.23 the length of the segment, basal stem [2 : 2] as long as thick, apical enlargement [11 : 4] 2.71 X its maximum thickness, apical stem round apically. Wing [37 : 15], hairy, 2.46 X as long as broad, vein R₁ meeting costa nearly at the middle of the wing, vein R₅ reaching wing margin well beyond its apex and interrupting costa at its union, vein Cu forked, forks obsolete distally. Legs : long, densely hairy, metatarsus [17] shorter than terminal tarsal segment, second tarsal segment [89] longest of all and shorter than the following segments combined together [89 : 98]; claws : simple on all legs, evenly curved, empodium shorter than claw [5 : 7]. Genitalia : small, sparsely setose, basal clasp segment [25 : 7] oval, without lobes, 1.47 X as long as thick, terminal clasp segment [16 : 6] greatly swollen basally, curved medially, ending in a pointed tooth, 2.66 X as long as its maximum thickness; dorsal plate [10 : 13] Kite [quadrate] shaped, shorter than subdorsal plate, with a pair of spine medially, broader than long lobed apically, subdorsal plate [15 : 8] entire, narrow basally, broadly rounded apically, 1.87 X its maximum thickness; aedeagus [11 : 3] shorter than subdorsal plate, narrow basally, rounded and sclerotized at tip, 3.66 X its maximum thickness.

FEMALE : Unknown.

Material examined : HOLOTYPE : Male dissected and mounted on slide labelled "at light", Hadgaon, Dist. Nanded, Maharashtra, T. H. Shaikh, Coll. 12.VI.1994.

PARATYPE : One male dissected and mounted on slide, data as in Holotype.

ETYMOLOGY : The generic name pertains to the Kite-shaped [quadrate] dorsal plate. Type material is retained in first author's collection at Nanded for time being.

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