

A new species of *Notanisis* Walker (Hymenoptera: Pteromalidae) from Southern Western Ghats, Karnataka, India.

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Abstract

A new species of Pteromalidae, *Notanisis elongatus* sp. n. is described from Southern Western Ghats of Coorg district, Karnataka. The affinities of new species with related species are discussed.

Keywords: Hymenoptera, Pteromalidae, *Notanisis*, new species, Coorg, Karnataka, Southern Western Ghat.

Introduction

The genus *Notanisis* Walker, 1837 belongs to the subfamily Cleonyminae under the tribe Cleonymini of Pteromalidae and is represented by 11 described species and many undescribed species in the old world (Gibson, 2003, Noyes, 2003). The species of *Notanisis* are tiny parasitoids of either wood-boring coleopterans or hymenopterans developing inside the stems of grasses (Boucek, 1988, Gibson, 2003). Only one species *N. versicolor* Walker is known from the Oriental Region reported from India (Tamil Nadu, Bihar) (Boucek *et al.*, 1979, Subba Rao & Hayat, 1986). According to Boucek *et al.*, 1979, the report of *N. versicolor* from India by Saraswat & Mukherjee (1975) appears to be different from that species, though it may belong to the same genus. Since the observation of Boucek *et al.* 1979 is not based on the study of the specimens, here the report of *N. versicolor* from India is treated as such. *Notanisis* species are very rare and random appears in sweep net collections and the present species is described here based on a single female specimen. All efforts to collect further specimens from the area did not yield any additional material due to the rare nature of the genus.

Materials and Methods

The specimen of the present study was collected by sweep net from the forested tracts of Southern Western Ghats falling in the Coorg

District of Karnataka, represented by moist deciduous forests. The specimen was card mounted and studied under a stereoscopic binocular microscope (Leica M 205C) and photographs were taken with the camera MC170 HD attached with the microscope. The terminology used in the paper generally follows Boucek (1988) except for the terms mesosoma and metasoma used for thorax and gaster respectively. The type specimen is deposited in the National Zoological collections of Zoological Survey of India, Western Ghat Regional Centre, Calicut (ZSIK). The following abbreviations are used in the text: F1–F5- Funicular segments 1 to 5; MV- Marginal vein; OOL- Ocellocular distance; PMV- Post marginal vein; POL- Post-ocellar distance; SMV- Submarginal vein; STV- Stigmal vein; T1-T5- Gastral tergites 1-5.

Notanisis Walker

Notanisis Walker, 1837: 352. Type species *Notanisis versicolor* Walker, 1837 by monotypy. For further synonyms refer Gibson (2003).

Diagnosis: Body with metallic lusture. Head without distinct scrobal depression and with inter-antennal and lower parascrobal regions weakly convex. Antennae 13-segmented, formula 11173, inserted at least below the lower eye margin in females, but either below or above lower margin of eyes in males. Female flagellum

A new species of *Notanistus* Walker from Southern Western Ghats

with apical margin of the preclaval segment angulate or extending more conspicuously as attenuated fingerlike process along side of clava, clava variably with distinct digit like process apically; male flagellum ramose, with 4-6 long, slender rami. Pronotum elongated, with posterior margins parallel; females macropterous, sometimes micropterous or brachypterous, forewings usually with variable infusate patterns. Gaster petiolate, the petiole at least subquadrate or longer.

Distribution: Old world, North America (accidentally introduced) (Gibson, 2003).

Notanistus elongatus Raseena et Sureshan sp.n.
(Figs.1-4)

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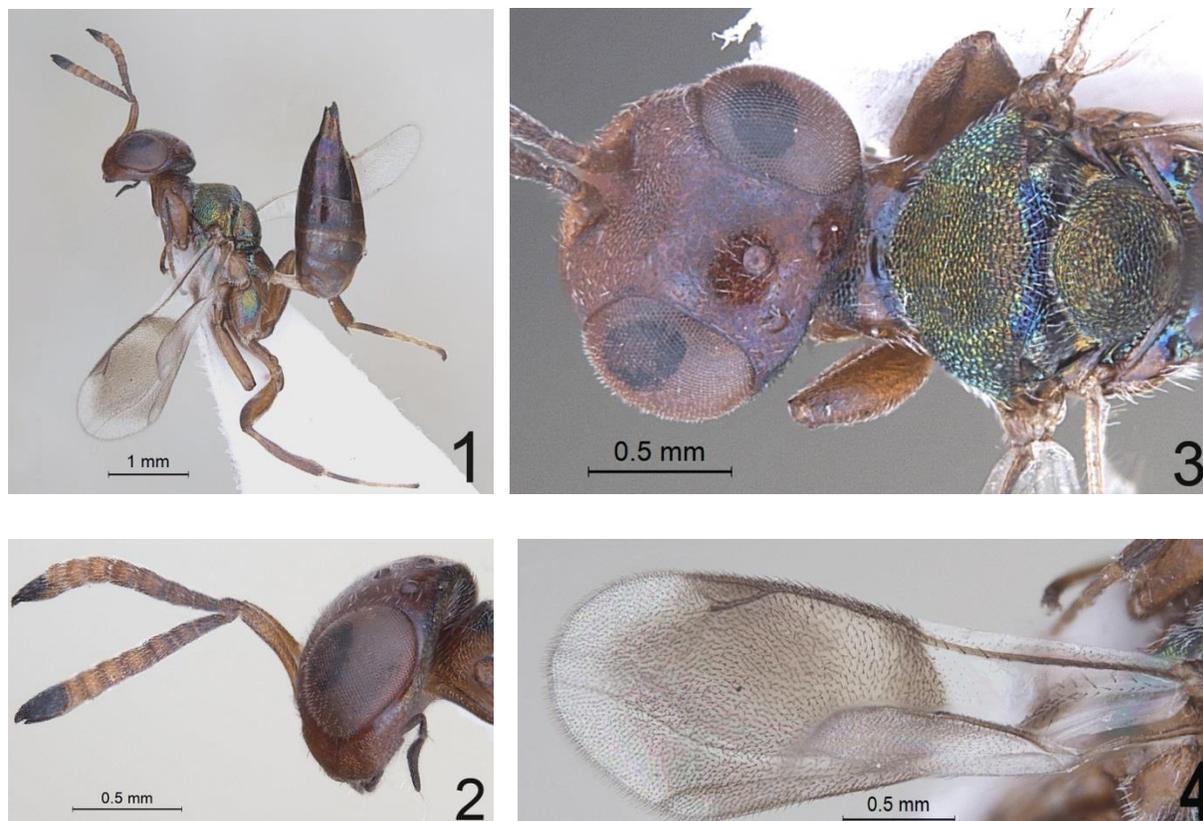
Material examined: Holotype: Female, India: Karnataka, Coorg, Brahmagiri Wildlife sanctuary, Mepalli, 2.xi.2013, coll. P. M. Sureshan. Reg.No. ZSI/WGRS/IR/INV/3980.

Description: Female: Length 4.51mm. Body honey brown except for the following: mesoscutum and scutellum completely, dorso-lateral corners of pronotal collar, metanotum and dorsellum dorsally, prepectus, mesopleuron and anterior lateral part of hind coxae bright metallic bluish green with golden refraction. Posterior margin of mesoscutum and axillae violaceous. Antennae yellowish brown except terminal part of clava black, scape paler. Eyes cupreous, ocelli brown. Legs yellowish brown. Forewing with two brown infuscations, one broad, below marginal and stigmal veins and other very narrow on cubital setal line. Gaster petiole testaceous, epipygium bluish green.

Head: (Figs. 1, 2, 3) in front view 1.2x as broad as long, in dorsal view 2x as broad as long; malar grooves distinct with a fine ridge at the basal part. Face up to a little above middle distinctly reticulate punctate, pubescence small and white; rest of the face up to posterior margin

of vertex broadly engraved reticulate, almost shiny, pubescence sparse; gena moderately reticulate; scrobal area slightly depressed and reticulate; eyes separated 1.5x their length at level of toruli; occiput anteriorly moderately reticulate; rest of the area moderately and transversely reticulate; temple narrow, 0.2 x as long as eye length; POL 2.26x OOL. Antenna (Fig.2) inserted slightly below lower margin of eyes, toruli separated 2.1x their individual diameter; inter antennal area raised; scape 0.85x as long as eye and slightly swollen towards the tip, pedicel plus flagellum 0.91x head width, pedicel 1.3x as long as broad, anellus 0.3x F1, 1.43x as long as broad. Relative lengths of F1 6, F2 7, F3 8, F4 7, F5 7, F6 5.5, F7 5, clava 15.

Mesosoma: (Figs. 1, 3) Pronotum as long as broad and 0.58 less wider than mesoscutum, collar distinctly reticulate in the anterior half and shiny in posterior half. Mesoscutum 1.71x as broad as long, uniformly punctuate reticulate, pubescence white, notauli incomplete; axilla moderately reticulate in anterior part with transverse rugae in posterior part. Scutellum little wider than long, reticulate punctuate, shiny towards posterior end, frenum not separated. Dorsellum broad and shiny. Propodeum 1.61x as broad as median length. 0.6x as long as scutellum medially, smooth, median carina distinct and complete, anterior, posterior and lateral margins and area of median carina with distinct crenulated groove separated by longitudinal rugae, plical groove with similar groove separated by longitudinal rugae, spiracles large and oval, separated by own diameter from the hind margin of metanotum, callus shiny with scattered long hairs. Mesopleuron distinctly reticulate except upper mesepimeron shiny. Metapleuron almost shiny. Forewing (Fig.3) 3.04x as long as broad, basal half partly bare, costal cell with a row of hairs in the middle, speculum present, basal hair line not indicated, cubital hair line with numerous setae at tip, basal cell bare, discal pubescence dense with hairs in the form of setae. Relative lengths SMV 4.7, MV 2.7, PMV 1.5, STV 1.2. Hind coxae 1.4x as long as broad, distinctly reticulate,



Figs.1-4. *Notanisus elongatus* Raseena & Sureshan sp.n. Female: 1. Body profile view; 2. Head in profile view; 3. Head and mesosoma in dorsal view; 4. Forewing.

punctate dorso-laterally, femur engraved reticulate, hind part smooth, hind tibia with two spurs.

Metasoma: (Fig.1) Petiole 2x as long as broad, shiny, with a pair of longitudinal rugae laterally, gaster 2.6x as long as broad in dorsal view and slightly shorter than head plus mesosoma combined (0.95x), posterior margin of tergites straight, T1 with 3-4 hairs on dorso-lateral sides; T4 & T5 largest and equal. T3 almost half of T4 dorsally, T3 onwards finely reticulate dorsally, reticulation on epipygium distinct.

Comments: This species resembles *N. versicolor* Walker, 1937 in some general morphology but differs in having body not slender with pronotum short, forewing with different pattern of infuscations, one broad below MV, STV and PMV and other small on cubital setal line, gastral petiole long, 2x as long as broad, scutellum distinctly reticulate with

bottom of individual areolae microreticulate, propodeum shiny with distinct crenulated groove on median area, anterior, posterior and lateral margins separated by distinct rugae and antennae with anelli almost quadrate (in *N. versicolor*, body more slender with pronotum longer, forewing with different infuscations, there are two, one broad below STV and one narrow below parastigma both separated by a clear hyaline band, gastral petiole about 1.5x as long as broad, scutellum reticulate, bottom of individual areolae shiny, propodeum except the median crenulated double groove smooth).

Etymology: The species name is derived from the elongate gastral petiole.

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A new species of *Notanisus* Walker from Southern Western Ghats

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