



RESEARCH ARTICLE

A new species of genus *Coelioxys* Latreille (Hymenoptera: Apoidea : Megachilidae) from India

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ABSTRACT

A new species *Coelioxys* (*Xerocoelioxys*) *tiwari* of genus *Coelioxys* Latreille (Family Megachilidae) has been described. The distinctive features of the species are: tergal margins and posterior half of sterna is golden pale in colour; silky white patches of pubescence present on front of head and scutellum; apical margin of clypeus is concave medially; apical lobe of gonocoxite of genitalia is narrow.

Key words: *Coelioxys*, Hymenoptera, Apoidea, Megachilidae

INTRODUCTION

Genus *Coelioxys* Litreille, from India has been represented by eleven species (Bingham, 1897), namely *Coelioxys decipiens* Spin., *C. fuscipennis* Smith, *C. angulatus* Smith, *C. ducalis* Smith, *C. minutus* Smith, *C. basalis* Smith, *C. sexmaculatus* (?), *C. cuneatus* Smith, *C. argentifrons* Smith, *C. confuses* Smith. A subgeneric revision of genus *Coelioxys* given by Mitchell (1973) state that the species described here falls under subgenus *Xerocoelioxys* Mitchell (1973). The species of this subgenus occurring in the more sandy, xerophytic areas and associated with the Megachilid subgenus *Xeromegachile*.

METHODOLOGY

The adults of this species were collected in the field with traps, manually and aerial sweep net. The collected insects were killed by using benzene. These were stretched, pinned, labelled, identified, preserved in the wooden collection boxes and deposited at Department of Zoology, Agra College, Agra in year 1988 during Ph.D. of first author. The insect was identified as *Coelioxys* Latreille. The collected specimens were examined taxonomically and studied for diagnostic characters including genitalia.

***Coelioxys* (*Xerocoelioxys*) *tiwari* sp. nov.**

DESCRIPTION

Measurement: 252 lines (6.3 mm)

Integument: Black, tegulae brownish; legs golden pale; tergal margins golden pale to brownish; sterna brown;

Pubescence: General body pubescence is silky white to palish.

Genitalia:

Gonobase:– (a) Flattened and transversely narrow. (b) Basal margin invaginated medially.

Gonoforceps: (a) Gonocoxites– (i) flattened and compressed. (ii) apical lobe– tabular and rod-shaped. (iii) basal lobe– broad and with straight outer margin.

(b) *Gonostylus*- (i) outer margin- slightly convex, (ii) inner margin roughly straight, (iii) basal lobe - broader than the apical lobe of gonocoxite.

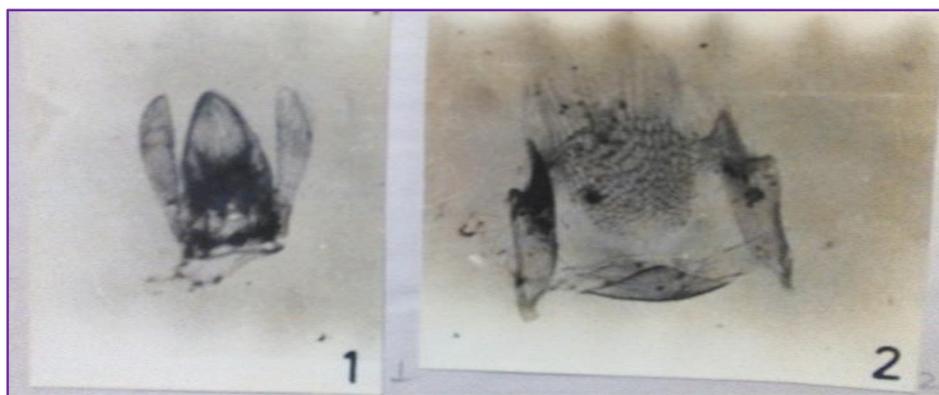
Volsellae- Elongated, thin and flattened.

Penis valve- (a) Elongated, flattened with broad base. (b) Apical lobe triangular. (c) Penis-membranous and reaching up to the top of penis valve.

Sternum 6- (a) Well developed. (b) Apical margin highly setose. (c) Lateral sides elongated anteriorly and posteriorly; anterior portion covered with long setae.

This specimen has been named after the name of author's research guide Dr. V.K. Tiwari.

Fig1: *Coelioxys (Xerocoelioxys) tiwari* (1: Male genitalia 2: Sternum 6)



MATERIAL EXAMINED

Holotype; male. Deposited at Z.S.I Calcutta.

REMARKS/CONCLUSION

This new species is closed to *C. (Xerocoelioxys) edita* Cresson. However, *C. tiwari* sp. nov. can be distinctly separated from *C. edita* by: "legs, tergal margins and posterior half of sterna is golden pale in colour; silky white, patches of pubescence are also present on front of the head and scutellum; apical margin of clypeus is concave medially; supraclypeal area is carinate medially; anterior portion of laterals of sternum 6 of male with long setae; apical lobe of gonocoxite of genitalia is narrow.

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