

RESEARCH ARTICLE

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A new species of genus *Heriades* Spinola (Hymenoptera: Apoidea: Megachilidae) from India

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ABSTRACT

A new species Heriades krishnae of genus Heriades Spinola (Family Megachilidae) has been described. The distinctive features of this species are: chitinous hooks lie in the middle of sting bulb and both the hooks are at equal distance; palp appendages constricted below the apex, apices are narrow and pointed; punctures on sternum 6 are close.

Key words: *Heriades Spinola, Family Megachilidae, Hymenoptera*

INTRODUCTION:

The genus *Heriades* is reported polylectic in habit (Mitchell, 1962). In India they have been collected from the composites only, that too only from the steps regions of North West Himalayan range (around 1000-1500 meters heights).. The new species described here falls under subgenus *orientoheriades* on the basis of the characters: Mandibular surfacial ridges united at basal region of mandibles and apically run parallel up to outer premarginal impressed line; clypeal margin tuberculate or dentate.

REVIEW LITERATURE:

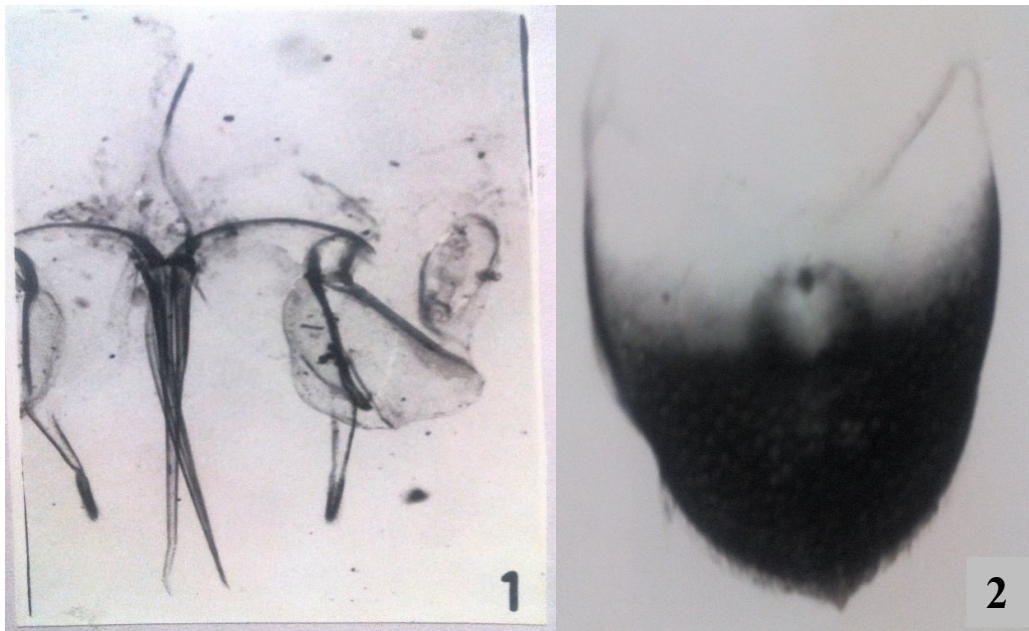
Heriades himself provided the type species for many new combinations among them few are: *Ashmeadiella* Cockerell, 1897 (*Heriades opuntiae* Cockll.), *Prochelastoma* Robertson, 1903 (*Heriades philadelphi* Rob.), *Proteriades* Titus, 1904 (*Heriades semirubra* Cockll.) and *Pseudoheriades* Peters, 1970 (*Heriades moricei* Friese). Besides a large no. of species were also transferred to *Noteriades* Cockll. However, author has failed to find any trace of this genus from Australia region, particularly north-west as well as most of the Holarctic around Russia and China.

METHODOLOGY:

The adults 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. The insect was identified as *Heriades* Spinola. The collected specimens were examined taxonomically and studied for diagnostic characters including genitalia. The standard technique given by Robinson (1976) and Zimmerman (1978) has been followed for wing venation and genitalia, respectively. In the field and laboratory observation, specimens were photographed prior to studies.

Heriades (Orientoheriades) Krishnae* sp. nov.*DESCRIPTION:****Measurement:****Total length:** 228 lines (5.7 mm)**Integument:** Absolutely black, shining apical margins of terga slightly red. Punctured mostly like "pits".**Pubescence:** Exclusively white on all over the body; last tergum, some marginal area and scopa, of light pale yellow, partially plumose.**Genitalia:****Quadrante plate:** Inner margin of the plate is more convex.**Sting bulb:** Both hooks are at the equal distance.**Palp appendages:** Constricted below the apex; apices are narrow pointed.**Sternum 6:** (a) surface- slightly transversely convex, closely punctate and well covered with scopal hairs. (b) Triangular plate, apex narrowly rounded. (c) Apex- with a permanent apical marginal fasciae of long pale hairs - retards in size.**Distribution:** Mandi (Himachal Pradesh) at 1300 m height on 24.X.1985 (V.K.)**Floral Record:** *Tegetes erecta*.**Male:** not known.

This specimen has been named after the name of author's father Sri. Krishna Varshney.

Fig. 1: *Heriades (Orientoheriades) kishnae* (1: Female genitalia 2: Sternum 6)**Material Examined:** Holotype; female deposited at Z.S.I Calcutta, Paratypes: 6 females at deptt. of Zoology and Entomology, Agra College, Agra.**REMARKS/CONCLUSION:**The new species is close to *Heriades (Orientoheriades) himachalensis*. However, *Heriades kishnae* sp. nov. can be distinctly separated from *H. Himachalensis* by: inner margin of quadrante plate is more convex; both the chitinous hooks are

present at the equal distance and lie in the middle of sting bulb; palp appendages are constricted below the apex, apices are narrow and pointed; punctures on sternum 6 are close.

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