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First record of *Cleonis pigra* Scopoli, 1763 (Coleoptera: Curculionidae) from the Himalayas: Kashmir, India

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Abstract

The present study communicates the addition of newly recorded *Cleonis pigra* Scopoli, 1763 from Kashmir Valley and constitute first evidence of the occurrence of this species in the Kashmir Valley, India and extending the range of species into the Himalayan Region.

Keywords: faunistics, new record, cleonini, curculionidae, *Cleonis*, Kashmir, Himalayas

Introduction

The family Curculionidae (True Weevils) comprises of most interesting species collectively called as Weevils or Snout Beetles known for their elongated snouts with adult body size ranges from 1 to 40 mm.

The newly recorded species *Cleonis pigra* Scopoli, 1763 (Cleonini: Curculionidae: Coleoptera) belongs to subfamily Lixinae and tribe Cleonini. At the present time, the Cleonini weevils comprises of 97^[1,2] valid genus-group taxa and 546 valid species^[3,4].

The newly recorded species are trans-Palaeartic species known from Iberian Peninsula to the Far East, Southern Finland, Southern Norway, Russia, Ukraine, North America, South-eastern Canada^[5] and Central India^[6].

Materials and Methods

The specimen was collected from its host plant *Cirsium arvense* L. and was identified using morphological characters.

The images of the specimen were taken using Redmi Note 8 Pro Mobile Camera (Xiaomi Communications Co., Ltd. China) with an external 20 mm macro lens attached. The specimen is deposited in Division of Taxonomy & Biodiversity, Entomology Research Institute, Loyola College, Chennai, India-34

Results and Discussion

Cleonis pigra Scopoli, 1763. (Fig. 1-3) India, Jammu & Kashmir: District Shopian: Hirpora Wildlife Sanctuary (Fig. 4), [Host plant: *Cirsium arvense* (L.)], 33°40'39"N, 74°44'41"E, 2546m, 01 June 2021,

Muzafar Riyaz leg., S. Volovnik det. (Specimen Voucher ERIB-KMR-268). The specimen was collected from its host plant *Cirsium arvense* L. and was identified using morphological characters.

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Fig 1: Lateral view of Female (Photo Muzafar Riyaz)



Fig 2: Female *Cleonis pigra* on host plant *Cirsium arvense* (Photo Muzafar Riyaz)



Fig 3: Figure 3. Lateral view of Male *Cleonis pigra* (Photo Muzafar Riyaz)



Fig 4: Habitat: Forest Block, Hirpora Wildlife Sanctuary, Shopian Kashmir, India (Photo Muzafar Riyaz)

Cleonis pigra (Sluggish Weevil or Large Thistle Weevil) completes its life cycle in the roots of Asteraceae plants usually *Cirsium arvense*. Larvae of *Cleonis pigra* are mono, oligo or polyphagous and feeds on herbs and shrubs. Besides larvae, Adults were also observed feeding on the host plant. This species can be identified by its double V-pattern elytra and a rostrum with three sulci.

The variations in temperature and climate from two different geographical locations reveal the adaption of the species in both tropical climate (Central India) with temperature ranges up to 45 °C and in the temperate climate (Kashmir) with temperature ranges up to 30 °C. The well-structured body plan and chewing mouthparts instead of piercing ones helps the species to withstand and feed across the prickles of its host plant where it completes its life cycle.

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References

1. Arzanov YG, Grebennikov VV. Cleonini (Coleoptera: Curculionidae: Lixinae) are monophyletic and flightless: tribe overview, rampant adult homoplasy and illustrated global diversity. *Zootaxa* 2017;4329:1-63.
2. Anderson RS. *Purealus beckelorum*, A new genus and species of cleonine weevil from western Texas and eastern New Mexico (Coleoptera, Curculionidae, Lixinae, Cleonini). *ZooKeys* 2018;785:1-10.
3. Alonso-Zarazaga MA, Lyal CHC. A World Catalogue of Families and Genera of Curculionoidea (Insecta Coleoptera) (excepting Scolytidae and Platypodidae); *Entomopraxis*: Barcelona, Spain 1999, 315.
4. Merregalli M. World catalogue of the Curculionidae: Lixinae: Cleonini 2017. Available online: <http://weevil.info/content/world-catalogue-curculionidae-lixinae-cleonini#> 15 March, 2021.
5. Skuhrovec J, Volovnik S, Gosik R, Stejskal R, Trnka F. *Cleonis pigra* Scopoli, 1763. (Coleoptera: Curculionidae: Lixinae): Morphological re-description of the immature

- stages, keys, tribal comparisons and biology. *Insects* 2019;10(10):325.
6. Sanwal N, Kumar T, Kumar A, Sharma V. Diversity, distribution and host plants of Cleonini (Curculionidae: Lixinae) in India. In: Ramamurthy, V.V. & Subramanin, S. (eds.): National Symposium on Entomology as a Science and IPM as a Technology - The Way Forward. Pasig hat, Arunachal Pradesh: Entomological Society of India: New Delhi, India 2014, 1-25, 17-18.