



FIRST RECORD OF DRYOMYZA PAKISTANA KURAHASHI, 1989 (DIPTERA: DRYOMYZIDAE) FROM POONCH DISTRICT, AZAD KASHMIR, PAKISTAN

Muhammad Asghar Hassan¹, Imran Bodlah¹, Mehmood Ali², Ammara Gull e Fareen¹

¹ Department of Entomology, Faculty of Food and Crop Sciences, PMAS-Arid Agriculture University Rawalpindi, Pakistan.

² Department of Horticulture, Faculty of Food and Crop Sciences, PMAS-Arid Agriculture University Rawalpindi, Pakistan.

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ABSTRACT

Based on the current study, family Dryomyzidae has been recorded for the first time from Poonch district, Azad Kashmir, Pakistan. Only a single species *Dryomyza pakistana* Kurahashi, 1989 under the genus *Dryomyza* Fallén, 1820 has been reported from Azad Kashmir, and can easily be differentiated from its closely related species (*D. formosa*) as: black shining mesopleuron, pteropleuron, sternopleuron and hypopleuron, abdomen entirely black, covered with black hairs, horaxic dorsum without median strip, mid and hind femora black except the subapical orange band. The photographs and geographical distributions of *D. pakistana* Kurahashi, 1989 are provided.

Corresponding Author: Imran Bodlah

Email: imranbodlah@gmail.com

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INTRODUCTION

The family Dryomyzidae belongs to superfamily Sciomyzoidea, comprising about 25 species under 8 genera in the world (Mathis and Sueyoshi, 2011). Adults are relatively large up to 18 mm in length, and most of them are generally yellowish brown or dark gray. The distribution of family Dryomyzidae is restricted to the northern hemisphere, and the family is noticeably lacking from the tropics or subtropics. Only 4 species are known from the Oriental Region (Mathis and Sueyoshi, 2011).

This group of flies usually preferred humid forest with low vegetations. The biology of this group of flies is little known, though it has been said that the larvae occur in fungi and humn excrement (Kurahashi, 1981). The genus *Dryomyza* Fallén, 1820 comprising about 10 extant and 2 fossil species, mainly distributed in the Palaearctic region with a few records from Nearctic and Oriental regions (Mathis and Sueyoshi, 2011). Kurahashi (1981) revised the genus

Dryomyza from Japan and reported 6 species. Two species of this genus are known from India and single species from Pakistan (Murree, Nathiagali, Dungagali, Ayubia) (Kurahashi, 1989; Wachkoo et al., 2017). This genus can easily be differentiated from the other genera by the presence of prescutellar acrostichal seta, vein R1 setose along length, distance between scapes as long as or longer than width of anterior ocellus, yellow to brown in ground color of body (Mathis and Sueyoshi, 2011).

The geographical distribution of this rare family has not been reported from Azad Kashmir. So, the current study recorded the family Dryomyzidae for the first time from Poonch district of Azad Kashmir, Pakistan.

MATERIALS AND METHODS

The adult specimens were collected from the forest area of Banjosa Lake by using common entomological net, while sweeping in the dense grasses under the shade of pine trees during 2016. The collected specimens were killed by placing

them in a killing jar having Potassium cyanide for 20–30 minutes. Later, the pinned specimens were identified by using the available literature (Kurahashi, 1989; Wachkoo et al., 2017). The photographs were prepared under a Nikon SMZ 1500 stereomicroscope. Later on, the photographs were cleared by using Adobe Photoshop CS6 software. The identified specimens are deposited at Biosystematics Laboratory, Department of Entomology, PMAS-Arid Agriculture University Rawalpindi, Pakistan.

RESULTS

Family: Dryomyzidae

Subfamily: Dryomyzinae

Genus: *Dryomyza* Fallén, 1820

Specie: *Dryomyza pakistana* Kurahashi, 1989

Diagnostic characters: *Dryomyza pakistana* Kurahashi, 1989 can easily be differentiated from its closely related species (*D. formosa*) as: Mesopleuron, pteropleuron, sternopleuron and hypopleuron shining black (Figure 1A). Abdomen entirely black, covered with black hairs. Thoracic dorsum without median strip. Mid and hind femora black except the subapical orange band (Figure 1B).

Material examined: 6 Ex.: Banjosa, 6000 ft, 33°48'37.05" N 73°49'04.21" E, 2♂, 2♀, 16.iv.2016, 2♂, 2♀, 22.v.2016, leg. Mehmood Ali.

Distribution: Pakistan (Murree, Nathiagali, Dungagali, Ayubia), India (Srinagar) (Kurahashi, 1989; Mathis and Sueyoshi, 2011; Wachkoo et al., 2017).



Figure 1A. Mesopleuron, pteropleuron, sternopleuron and hypopleuron shining black, B. Thoracic dorsum without median strip, Mid and hind femora black except the subapical orange band.

Remarks: The adult specimens were collected from the dense vegetation under the pine trees (*Pinus wallichiana*) at Banjosa Lake, Azad Kashmir.

CONCLUSION

Kurahashi (1989) first time reported the family Dryomyzidae from Pakistan with the description of *Dryomyza pakistana* Kurahashi, 1989 as new species at an elevation of 2000-2500m. Recently, Wachkoo et al. (2017) reported this species for the first time from India at an elevation of 1600-1640m. No distributional records of family Dryomyzidae are known from Azad Kashmir. This is the first record of family Dryomyzidae from Azad Kashmir at an elevation of 1829m.

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