

# ***Polleniopsis annamensis* Kurahashi, 1972 (Diptera: Calliphoridae) a new record from India, with a revised key to the known Indian species**

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## **Abstract**

*Polleniopsis annamensis* Kurahashi, 1972 has been recorded for the first time from India (Western Ghats). A key to the four species of the genus *Polleniopsis* Townsend, 1917 recorded so far from India is provided.

**Key words:** *Diptera, Calliphoridae, Calliphorinae, Polleniopsis, new record, Western Ghats, India.*

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## **Introduction**

Genus *Polleniopsis* Townsend, 1917 belongs to *Onesia*-group of tribe Calliphorini. It includes 43 species from East Asia, Australia and Oceania (Verves, 2005). Two species are earlier known from India: *P. pilosa* Townsend, 1917, *P. kashmirensis* Kurahashi and Okadome, 1976 (Bharti, 2011) and an undescribed species Bharti and Verves, 2015 (in press). The present species *Polleniopsis annamensis* Kurahashi, 1972 has been recorded from Nandi hills falling in the state of Karnataka. A key to the species of Indian *Polleniopsis* has been provided.

The ecology of these flies is poorly known. Majority of the species prefer mountainous regions and have been collected from up to an altitude of 4650m above mean sea level. The adults of few species (*P. chosenensis*, *P. dandoensis*, *P. hokurikuensis*, *P. horii* and *P. mongolica*) have been reported to frequent flowers of the mountains (Kurahashi, 1964; Kurahashi, 1972).

## **Materials and Methods**

The fly was collected with an entomological net from an altitude of 1500m from Nandi Hills falling in the state of Karnataka. The material was examined under Nikon SMZ 1500 stereozoom microscope. Digital images were captured with the help of an MP evolution digital camera mounted on Nikon SMZ 1500 using Auto-Montage (Syncroscopy, Division of Synoptics, Ltd) software. The images were processed and

cleaned with Adobe Photoshop CS5.

## **New Record**

***Polleniopsis annamensis* Kurahashi, 1972**  
(Figs. 1, 2, & 3)

[urn:lsid:zoobank.org:act:F62239D6-C4D6-4185-937C-EC4CE48E1DEB](https://zoobank.org/urn:lsid:zoobank.org:act:F62239D6-C4D6-4185-937C-EC4CE48E1DEB)

**Material Examined:** INDIA: 1♂, Nandi Hills, Karnataka; 13°38' N, 77°70' E, altitude 1500m, 30.IX.2014, M. Bharti.

**Distribution:** India (Karnataka) (New record), China: Hainan Islands, Viet Nam

**Remarks:** The genus *Polleniopsis* is characterized by reduced number of presutural acr (0-2); well-developed facial carina; densely dusted body and lack of presutural intra alar bristles. The species *P. annamensis* closely resembles *P. dalatensis* Kurahashi, 1972 but could be distinguished from the latter by the following combination of characters: facial carina well developed; post-jowls clothed with black hairs; sternopleurals 1+1; third antennal segment 3X as long as second.

**Ecology:** *P. annamensis* has been recorded from Nandi Hills falling in the state of Karnataka. The vegetation of the above mentioned place is typical of high hills. The evergreen forest patch on top of the hill is a

favoured wintering location for many migrant

species of warblers, flycatchers and thrushes.

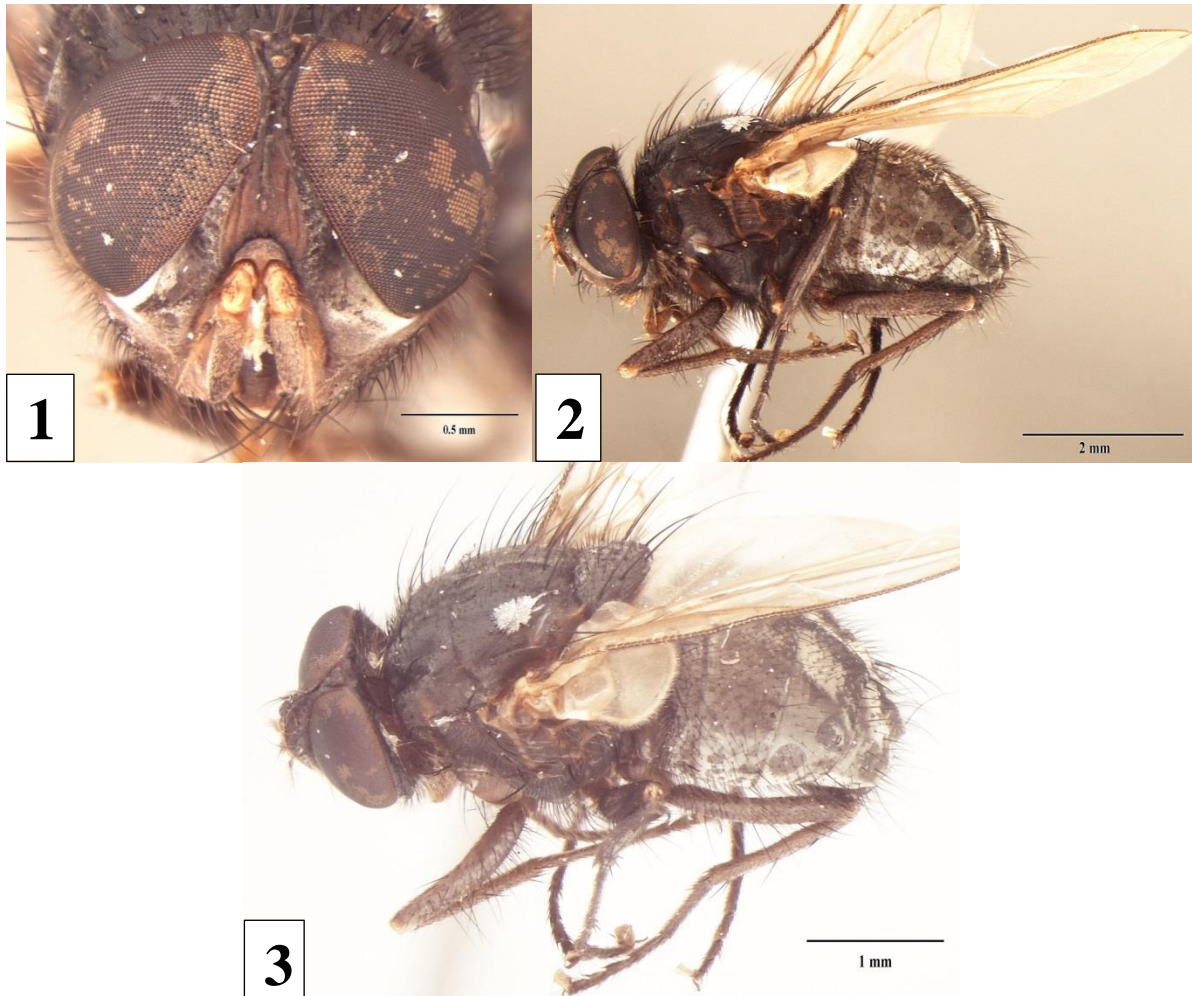


Fig.1-3: *Polleniopsis annamensis*, male, 1.head view; 2.profile view; 3. dorsal view

**Key to the species of *Polleniopsis* from India**

- 1. Abdomen entirely dark grey to black, silver-gray dusted.....2
- Abdomen metallic green or blue; legs entirely black .....3
- 2. Scutellum blackish, covered with brownish grey dusting, femora and tibiae light brown; basicosta orange; acr 0+1. 6-7 mm.....*P. pilosa* Townsend  
India (Bihar, Meghalaya, West Bengal), Thailand (Chiang Mai, Kanchana Buri)
- Scutellum lead grey with grey dusting; legs entirely fuscous to black, at most tibiae and knees sometimes brownish; basicosta light brown; acr 1+2. 6.5 mm.....*P. annamensis* Kurahashi  
(India, China, Viet Nam)

- 3. Abdomen entirely metallic green; basicosta orange; acr 1+3. 6.5-7.5 mm.....*P. kashmirensis* Kurahashi & Okadome  
India (Jammu & Kashmir)
- 1+2<sup>nd</sup> and 3<sup>rd</sup> abdominal tergites dark blue, 4<sup>th</sup> and 5<sup>th</sup> ones light blue; basicosta black; acr 0+2. 10 mm ....*P. undescribed species*  
India(Arunachal Pradesh)

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#### References

Bharti, M. 2011. An updated checklist of Blow flies (Diptera: Calliphoridae) from India. *Halteres* 3:34-37.

Kurahashi, H. 1964. Studies of the calyptrate muscoid flies from Japan. III. Revision of the genus *Polleniopsis* (Diptera, Calliphoridae). *Kontyû* 32 (4): 484-489.

Kurahashi, H. 1972. Tribe Calliphorini from Australian and Oriental Regions. IV. Onesia-group: genus *Polleniopsis* (Diptera: Calliphoridae). *Pacific Insects* 14 (4): 709-724.

Verves, Yu. G. 2005. A catalogue of Oriental Calliphoridae (Diptera). *An International Journal of Dipterological Research* 16 (4): 233-310.