

## Correspondence

hppt/ urn:lsid:zoobank.org:pub: 945BE867-61B7-49F7-A147-5467A9E86F94

**M. Bharti. NEW RECORD OF *STOMORHINA SIAMENSIS* KURAHASHI ET TUMRASVIN, 1992 FROM INDIA, WITH REVISED KEY TO INDIAN SPECIES OF THE GENUS *STOMORHINA* (DIPTERA: CALLIPHORIDAE). – Far Eastern Entomologist. 2014. N 281: 7-11.**

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**Summary.** *Stomorhina siamensis* Kurahashi et Tumrasvin, 1992 has been recorded for the first time from India (Western Ghats). A key to eight species of the genus *Stomorhina* Rondani, 1861 recorded so far from India is provided.

**Key words:** Diptera, Calliphoridae, Rhiniinae, *Stomorhina*, faunistic, key, India.

**М. Бхарти. Первое указание *Stomorhina siamensis* Kurahashi et Tumrasvin, 1992 из Индии с оригинальной определительной таблицей индийских видов рода *Stomorhina* (Diptera: Calliphoridae) // Дальневосточный энтомолог. 2014. N 281. С. 7-11.**

**Резюме.** Впервые для Индии с Западного хребта указан *Stomorhina siamensis* Kurahashi et Tumrasvin, 1992. Приведена определительная таблица восьми известных из Индии видов рода *Stomorhina* Rondani, 1861.

## INTRODUCTION

Since Senior White *et al.* (1940) monumental work on the family Calliphoridae from the Oriental region a lot has changed. New generic concepts have come to the fore, many synonymies and new species have added to the list making fresh revision of the group imperative. Genus *Stomorhina* Rondani, 1861 belonging to subfamily Rhiniinae is one such group which has undergone major changes with reference to synonymies, shifting of taxa and addition of new species. Senior White *et al.* (1940) recognized 15 species of genus *Stomorhina* from the Oriental region of which *S. mandarina* (Wiedemann, 1830), *S. euidiellodes* Senior-White, 1923 and *S. sternalis* (Malloch, 1926) were shifted under genus *Idiella* Brauer et Bergemstamm, 1889; *S. mallochi* (Senior-White *et al.*, 1940) under genus *Rhinia* Robineau-Desvoidy, 1830; and *S. fulvohumera* (Senior-White *et al.*, 1940) under genus *Sumatria* Malloch, 1926; *S. quadrinotata* Bigot, 1874 and *S. nila* (Senior-White, 1923) were synonymized under *S. procula* (Walker, 1849) (Peris, 1952; Verves, 2005). *Rhinia sauteri* (Peris, 1951) and *Rhinia cribata* (Bigot, 1874) were shifted under genus *Stomorhina* (Verves, 2005). Over the years, Kurahashi & Tumrasvin (1992) and Kurahashi & Magpayo (2000) added *S. siamensis* and *S. neali* to the group. At present, a total of 16 species are known from the Oriental region, out of which eight species including newly recorded *S. siamensis* represent diversity of genus *Stomorhina* from India.

## MATERIALS AND METHODS

The specimens were collected by sweeping nets from the secondary forests falling in the state of Kerala, India. Additional material was examined housed in the lab of Dr. Viraktamath,

GKVK, Bangalore, Karnataka. The material was examined under Nikon SMZ 1500 stereozoom microscope. Digital images of *Stomorhina siamensis* 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

##### *Stomorhina siamensis* Kurahashi et Tumrasvin, 1992

Figs 1, 2

**MATERIAL EXAMINED.** **India:** 2 females, Thottilpalam, Kerala; 11°68' N, 75°80' E, altitude 50 m, 19.II 2014, M. Bharti; 1 female, Balehonnur, Karnataka, 13°21' N, 75°28' E, altitude 867 m, collected from light source, 5.VII 2007, K.J. David.

**DISTRIBUTION.** Thailand, Vietnam, India (Kerala, Karnataka). Herein this species is firstly recorded from India.

**REMARKS.** *Stomorhina* can be distinguished from other Rhiniinae by bare proplueron, presence of an outer post-humeral seta and R5 open or closed in the margin, R5 is petiolate only in case of *xanthogaster* (Dear, 1977). The species, *S. siamensis* is closely related to *S. townsendi* but differs from other species of the group due to closed R5 vein at the wing margin. It could be separated from closely related *S. townsendi* by the characters given in the key.

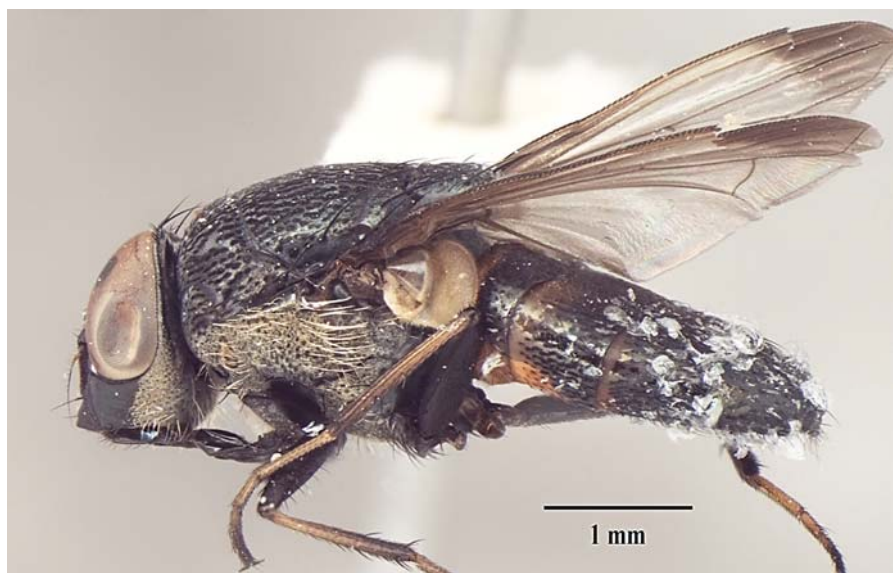


Fig. 1. *Stomorhina siamensis*, female, lateral view.

**ECOLOGY.** *Stomorhina siamensis* has been recorded from the Thottilpalam and Balehonnur areas falling in the state of Kerala and Karnataka. A fresh water stream passes through the town of Thottilpalam. Lagoons and backwaters characterize the state of Kerala,

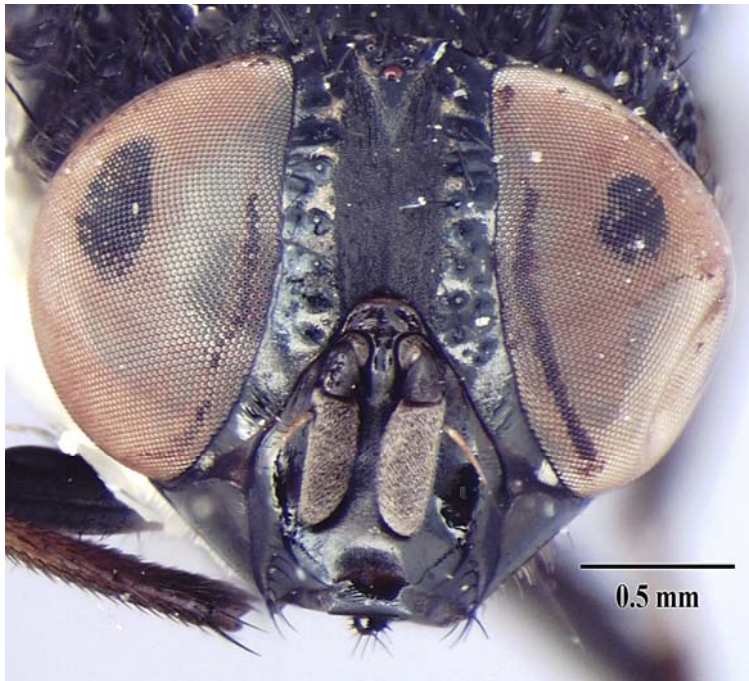


Fig. 2. Female head of *Stomorhina siamensis*, frontal view.

which receives run-off from the rivers. The place features a highly humid tropical climate with highest temperatures recorded in the month of June (40°C) and lowest in the month of December (17.5°C). The vegetation of the place is of varied type which includes west-coast tropical evergreen, semi-evergreen, Southern moist mixed deciduous, grasslands and marshy grasslands. Balehonnur on the other hand is a small city located on the banks of river Bhadra with an average rainfall of 80 inches a year and is dominated by coffee estates, arecanut, paddy fields, pepper, vanilla and other spices.

**KEY TO INDIAN SPECIES OF GENUS *STOMORHINA***

- 1. Mesopleuron with 1-2 bristles on the upper corner of the posterior margin ..... 2
- Mesopleuron with a complete row of black bristles on posterior margin. – Oriental region [Nepal, India (Indian Himalayas and Nilgiri Hills), Myanmar and Malaysia] ..... *S. procula* (Walker)
- 2. Mesopleuron without distinct piliferous spots ..... 3
- Mesopleuron with distinct piliferous spots ..... 4
- 3. Sternopleuron densely yellow pruinose as the mesopleuron; thoracic squama with lobulated inner border; R<sub>5</sub> closed, petiolate. – Oriental [China, Nepal, India, Srilanka, Malaysia, Indonesia] Australasian/Oceanian and Palaeartic regions ..... *S. xanthogaster* (Wiedemann)

- Sternopleuron and hypopleuron glossy black, not pruinose; R<sub>5</sub> open; abdomen dark violet.
  - Oriental region [Nepal, India (Himachal Pradesh, Kerala, Tamil Nadu), Sri Lanka, Sri Lanka, Indonesia China], Australasian/Oceanian region ..... *S. melastoma* (Wiedemann)
- 4. R<sub>5</sub> open ..... 5
- R<sub>5</sub> closed ..... 7
- 5. Abdomen luteous, hind margins of first and second abdominal segments black banded; antennae brown, thickly grey dusted, second antennal segment reddish; coxae of foreleg yellow. – Widely distributed in the Oriental, Palaearctic, Australasian and Oceanian regions ..... *S. discolor* (Fabricius)
- Abdomen with yellow and black pattern ..... 6
- 6. First abdominal segment black, second and third bright yellow with hind margins narrowly black; wings clear; legs brown appearing greyish in certain lights. – Palaearctic, Afrotropical and Madagascan, Nearctic regions, Oriental region [Baluchistan, China, Malaysia, Nepal, Pakistan, India (Indian Himalayas and Nilgiri Hills, West Bengal)] ..... *S. lunata* (Fabricius)
- Abdomen blackish, segment second and third with their anterior margins and laterally yellow banded, interrupted medianly, but continued on to venter on each side, giving the appearance of black median stripe and black transverse bands; segment four brilliant green; wings greyish-hyaline with a darkened spot apically; legs black except tibiae and tarsi reddish. – Oriental [China, India (Assam), Indonesia, Malaysia, Indonesia] ..... *S. unicolor* (Macquart)
- 7. Abdomen dark green, elongate; parafrontals grey with black spots; pleura with thin ashy pile-stripe. – Oriental region [India (Kerala, Assam), Malaysia and Indonesia] ..... *S. townsendi* Kurahashi
- Abdomen bronze with bluish tinge laterally; parafrontals black, subshining with black spots, pleura yellowish grey dusted, with yellow hairs. – Oriental region [known only from India (Kerala, Karnataka), Thailand and Vietnam] ..... *S. siamensis* Kurahashi

#### ACKNOWLEDGEMENTS

Financial assistance rendered by Department of Science and Technology, Ministry of Science and Technology, New Delhi, vide Project No. SR/WOS-A/LS-275/2012 (G) is gratefully acknowledged. Sincere thanks to Dr. C.A. Viraktamath, Professor Emeritus, Division of Entomology, GKVK, Bangalore for allowing me to study the additional material of this species housed in his lab.

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