



# ***Lucilia calviceps* Bezzi, new record from India (Diptera: Calliphoridae), with a revised key to Indian species**

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## **Abstract**

***Lucilia calviceps* Bezzi is newly recorded from India, a revised key is provided with all the Indian species.**

**Keywords:** *Lucilia calviceps*, New record, India, Revised key.

## **Introduction**

Flies of genus *Lucilia* are generally called the green bottles. According to Kurahashi (1966) the genus *Lucilia* has been divided into three groups based on its evolutionary trends; i.e. *richardsi* group, *cluvia* group and *fumicosta* group. Out of these, the *richardsi* group is the most primitive (with maximum plesiomorph characters) and the *fumicosta* group being the most advanced one. The Indian fauna comprises of all the three groups but is dominated by Oriental elements (62.5%) followed by Palaearctic (25%) and Neotropical Nearctic (12.5%).

In Fauna of British India Diptera vi (Calliphoridae) by Senior White *et.al.*, (1940) genus *Lucilia* was represented by six species from India. At present this genus is represented by 8 species, *Lucilia bazini* seguy (Nandi, 2004) and *Lucilia calviceps* Bezzi being the new records from this region. The previous key (Senior White *et. al.*, 1940) is modified in order to incorporate the newly recorded species from India.

## **Key to the Indian species of *Lucilia***

1. Basicostal Scale Yellow, post sutural acrostichial 3 ----- (2)  
-----Basicostal Scale brown or black; post sutural acrostichial 2 ----- (3)

2. Abdomen arched in profile; sternites with tuft of long hairs; hypopygium prominent; parafrontalia bare or almost bare except for frontals and fronts-orbitals in female -----  
----- *Lucilia cuprina* (Wiedemann)

-----Abdomen not arched in profile, sternites without tuft of long hairs, hypopygium inconspicuous; parafrontalia in female with short decumbent bristles among frontals and parafrontals -----  
----- *Lucilia sericata* (Meigen)

3. Alar squama always white or creamish in colour (never infuscated); lower squama may be white or infuscated ----- (4)

-----Alar squama and thoracic squama infuscated ----- (5)

4. Alar squama creamish with a tuft of yellowish white hairs at inner lower margin; thoracic squama pale, brownish on disc -----  
----- *Lucilia bazini* seguy

-----Alar and thoracic squama predominantly white ----- *Lucilia illustris* (Meigen)

-----Alar squama white; lower infuscated *Lucilia*  
-----*-ampullacea* Villeneuve

5. Anterior pair of post sutural acrostichial more advanced than 2<sup>nd</sup> pair of Post sutural dorsocentral- - - - - *Lucilia porphyrina* (Walker)

-----Anterior pair of Post sutural acrostichial on the level or slightly posterior than 2<sup>nd</sup> pair of post sutural dorsocentral - - - - - (6)

6. Male frons broader than the distance between two posterior ocelli; female parafacialia broader than the width of 3<sup>rd</sup> antennal segment - - - - - *Lucilia papuensis* Macquart

-----Male frons smaller than the distance between two posterior ocelli; parafacialia as broad as or narrower than the width of 3<sup>rd</sup> antennal segment in female - - - - - (7)

7. Eyes in male separated at narrowest point by less than the width of anterior ocellus; parafacialia yellow – grey dusted, narrower than the width of 3<sup>rd</sup> antennal segment in female. - - - - - *Lucilia hainanensis* Fan

-----Eyes in male separated at narrowest point more than the width of anterior ocellus; parafacialia silver-grey dusted; as broad as width of 3<sup>rd</sup> antennal segment in female. - - - - - *Lucilia calviceps* Bezzi

***Lucilia calviceps* Bezzi**  
*Lucilia calviceps* Bezzi, 1927:238. Type localities: Espiritu Santo and Epililand, New Hebrides [Vanuatu] Length: 8.0-9.0 mm

**Material Examined**

India: 1 female, Gugga, UNA, Himachal Pradesh, 600.mts, 6.X.2009; 3 males Dharampur, Himachal Pradesh, 450mts, 14.X.2009; 1 male, Bari, Himachal Pradesh, 450mts, 15.x.2009; 1 male, Kotla, Himachal Pradesh, 470mts, 7.x.2009; 1 female, Kotla, Himachal Pradesh, 470mts, 7.x.09.

**Distribution**

India (Himachal Pradesh), Philippines (Luzon), Malaysia (Malaya, Borneo), Papua New Guinea, (New Guinea, New Britain, New Ireland, Bougainville I.), Vanuatu Loyalty Islands and New Caledonia.

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