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## Two new species of *Euphranta* Loew (Diptera: Tephritidae: Trypetiane) and an updated key for the species from India

K. J. DAVID<sup>1,3</sup> & SHAKTI KUMAR SINGH<sup>2</sup>

<sup>1</sup>National Bureau of Agricultural Insect Resources, Bangalore-560024, Karnataka, India

<sup>2</sup>Division of Entomology, Indian Agricultural Research Institute, New Delhi-110011, India

<sup>3</sup>Corresponding author. E-mail: [davidento@gmail.com](mailto:davidento@gmail.com)

### Abstract

Two new species of genus *Euphranta* Loew, namely *E. wrightiae* **sp. nov.** and *E. pseudocassiae* **sp. nov.** are described from India. An updated key to Indian species of *Euphranta* is also provided.

**Key words:** Adramini, Apocynaceae, *Wrightia tinctoria*

### Introduction

Fruit flies of genus *Euphranta* Loew, with more than 100 described species, are primarily Indo-Australian except for a few species represented in North America and Europe. They are predominantly monophagous and primarily breed in fruit (Hancock and Drew, 2004; David *et al.*, 2013). They are characterised by the absence of presutural setae, presence of fine long hairs on anatergite, dorsocentral setae, postpronotal and katapisternal setae, long surstyli and proctiger and fused phallopodeme vanes (Hardy, 1983; Korneyev, 1999; Permkam and Hancock, 1995). Bezzi (1913), Kapoor (1993), Hancock and Drew (1994), Hancock and Drew (2004), David & Ramani (2011) and David *et al.*, 2013 studied the Indian fauna of *Euphranta*. David *et al.* (2013) described seven species from southeast Asia, of which five were from India. Presently twelve species are known from India. Two new species are described here, namely *E. wrightiae* **sp. nov.** and *E. pseudocassiae* **sp. nov.** An updated key to Indian species of *Euphranta* is also provided.

### Material and methods

Specimens deposited in the following museums were examined for this study:

National Bureau of Agricultural Insect Resources, Bangalore, India (NBAIR)

National Pusa Collection, IARI, New Delhi, India (NPC)

Specimens were collected by rearing infested fruits, sweep netting and from light traps in south India. Third instar larvae of the species were processed as per White and Elson-Harris (1992) and Frias *et al.* (2006). Images of the specimens were taken using a Leica DFC 420 camera mounted on a Leica M205A stereozoom microscope; images of genitalia were acquired using Leica DFC 425 mounted on Leica DMLB 100S; the images were stacked and combined to a single image using Combine ZP (Hadley, 2011). Terminology adopted here follows White *et al.* (1999).

- Face wholly black, black towards oral margin, or with spots along antennal grooves . . . . . 10
- 7. Wing predominantly hyaline with one or two transverse bands . . . . . 8
- Wing not predominantly hyaline, with three to four crossbands or apical three-fourths dark brown to black with hyaline indentations . . . . . 9
- 8. All femora yellow, wing predominantly hyaline, discal band narrowed to end before or at crossvein r-m . . . *E. cassiae* (Munro)
- Forefemur with apical one-third black, wing with discal band reaching cell dm . . . . . *E. pseudocassiae* sp. nov.
- 9. Wing hyaline with four discontinuous transverse bands. . . . . *E. crux* (Bezzi)
- Wing hyaline only in basal quarter; apical three fourths dark brown to black except hyaline indentations in cell r<sub>1</sub> that end at vein R<sub>4+5</sub>, in cell cu<sub>1</sub> that extend into cell dm and at apex of cell r<sub>4+5</sub> . . . . . *E. notabilis* (van der Wulp)
- 10. Face wholly black; scutum and abdomen shiny black; wing with four discontinuous, transverse bands . . . *E. nigripeda* (Bezzi)
- Face not wholly black, at least fulvous basally or with two separate black markings . . . . . 11
- 11. Face black towards oral margin. . . . . 12
- Face with two separate black spots . . . . . 13
- 12. Wing with three transverse bands, subapical band fused with preapical band medially . . . . . *E. thandikudi* David
- Wing with two transverse bands, subapical band and preapical band not fused. . . . . *E. wrightiae* sp. nov.
- 13. Face with longitudinal marks along antennal foveae; dorsocentral seta vestigial or absent; apex of aculeus with preapical indentation. . . . . *E. dysoxylis* David
- Face with two subtriangular spots; dorsocentral seta well developed; apex of aculeus acute and without preapical indentation . . . . . *E. haldwanica* Hancock & Goodger

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