

RESTORATION OF THE GENUS *GURNA* SWINHOE, 1892  
(LEPIDOPTERA, EREBIDAE, ARCTIINAE)

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The genus *Gurna* Swinhoe, 1892 is restored from synonymy with *Miltochrista* Hübner, [1819] basing on the study of the type-species of the genus. The diagnosis for the genus in comparison with related genera is given. Adults, male and female genitalia of the type species of all genera mentioned are illustrated.

**Key words:** *Lepidoptera*, *Erebidae*, *Lithosiini*, *Gurna*, revised status, *Asia*.

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**INTRODUCTION**

The genus *Gurna* Swinhoe, 1892 belongs to the subtribe *Nudariina* of the tribe *Lithosiini* (family *Erebidae*, subfamily *Arctiinae*), to the '*Miltochrista-Asura* generic complex'. It was erected by Swinhoe (1892) for the species *Dysauxes indica* Moore, 1879 described from West India, synonymised with *Miltochrista* Hübner, [1819] by Hampson (1900), and long time treated as a member of the genus *Miltochrista* (Strand, 1922; Singh & al., 2014). Holloway (2001) has assumed that *Gurna*, as well as some other synonyms of *Miltochrista* can represent a distinct genus, and following Holloway, *Gurna* was recently mentioned as a distinct genus by Volynkin (2016), but its status was not revise.

Examination of specimens of the type species of the genus, *G. indica* including the type confirmed a distinct status of the genus. Its redescription and diagnosis are given below.

**MATERIAL AND METHODS**

The paper is based on the materials of collections of the Natural History Museum, London (formerly British Museum of Natural History, NHM, London, Great Britain) and Anton Volynkin (CAV, Barnaul, Russia). The genitalia were dissected and mounted in euparal on glass slides. Photos of imago were taken using the camera Nikon D3100/AF-S Nikkor, 18–55 mm. Photos of the genitalia were taken by same camera attached to a microscope with an LM-scope adapter, and further processed by Adobe Photoshop CS4® software.

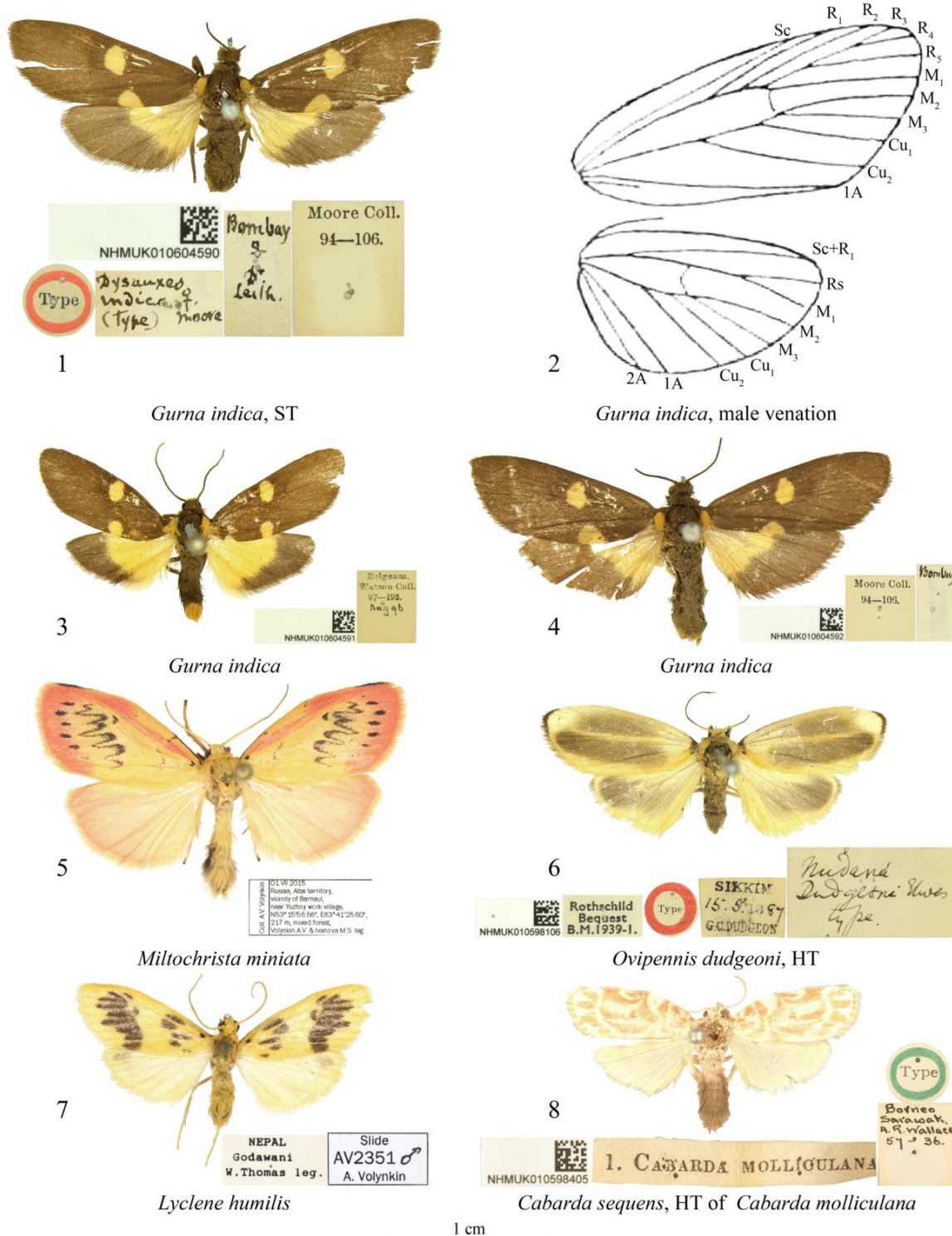
**RESULTS**

***Gurna* Swinhoe, 1892, stat. rev.**

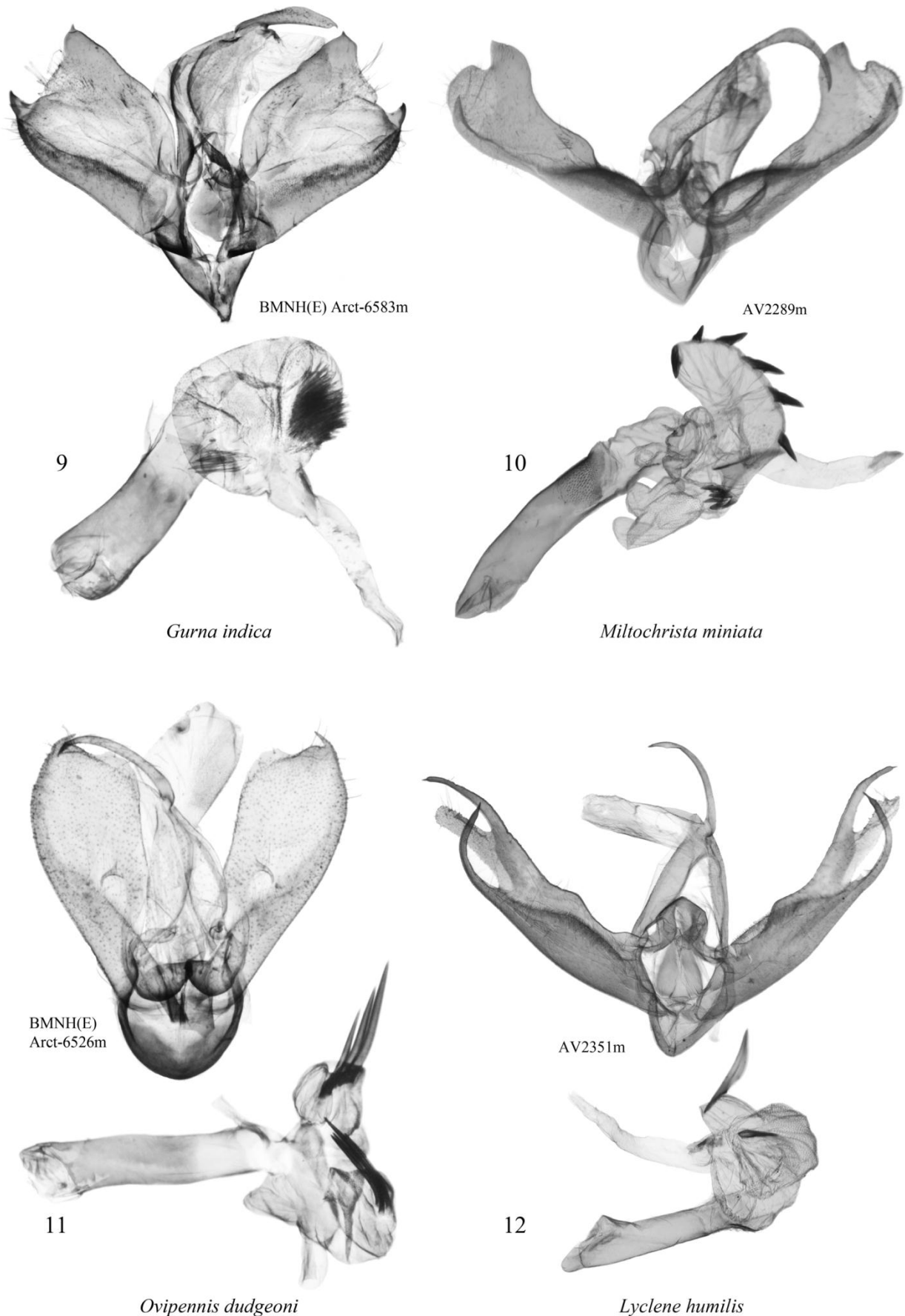
*Catalogue of eastern and Australian Lepidoptera Heterocera in the collection of the Oxford University Museum* 1: 123 (Type species *Dysauxes indica* Moore, 1879, by original designation).

**Diagnosis.** The genus is probably monobasic. Wing venation is typical for the *Miltochrista* lineage and very close to that of the genus *Miltochrista*, but the stalk  $R_3$ – $R_5$  originats very close to the upper angle of the cell, and  $M_2$  originats from the lower angle of the cell; in addition, the male forewing costa is not curved (Fig. 2). In the male clasping apparatus (Fig. 9), distal extensions of costa and sacculus are presented and a medial costal extension is absent like in *Miltochrista* (Figs 5, 10, 16) and some other genera of the *Miltochrista-Asura* generic complex, e.g., *Lyclene* Moore, [1860] (Figs 7, 12, 17) and *Cabarda* Walker, 1863 (Figs 8, 13, 18), but in *Gurna* the valva is very broad. The shape of valva in *Gurna* resembles that of the genus *Ovipennis* Hampson, 1900 (Figs 6,

11, 15), but the latter has a medial costal extension like in genera of the *Barsine* Walker, 1854 and *Asura* Walker, 1854 leages. The vesica sclerotization is characteristic: in *Gurna*, besides a bunch of cornuti, there is a large field of numerous narrow spinules, whereas in other related genera distinct cornuti, bunches of long and narrow cornuti, or rarefied fields of robust and small cornuti are presented only. In the female genitalia (Fig. 14), the very short membranous ductus bursae is characteristic; a presence of numerous very small spinules on the main part of corpus bursae occurs also in some representatives of the genera *Lyclene* and *Barsine*.

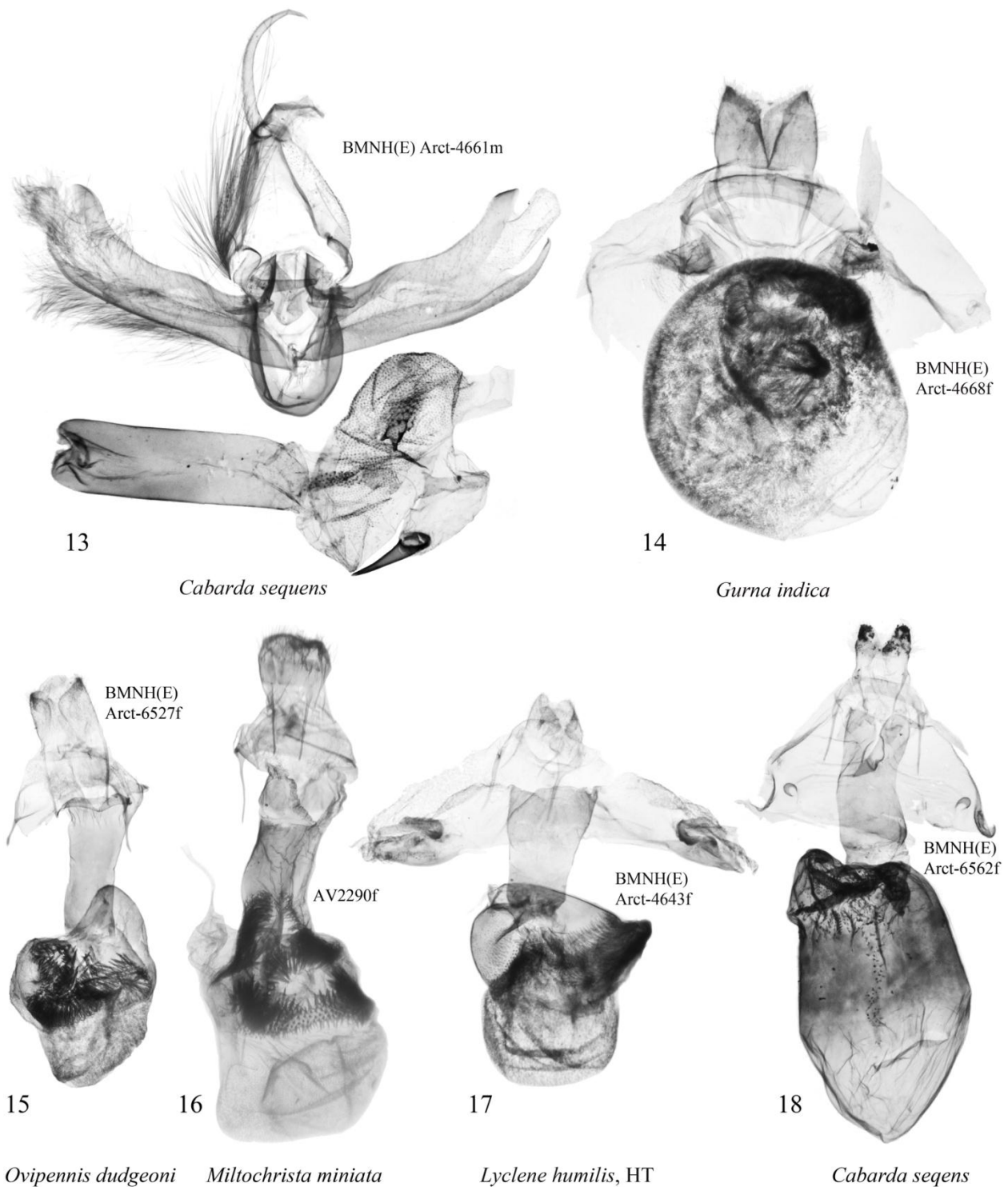


**Figures 1–8.** Type species of Nudariina genera, adults. 1 – *Gurna indica*, syntype female, India, Mumbai (©NHM); 2 – *Gurna indica*, wing venation (after Hampson, 1900); 3 – *Gurna indica*, male, India, Belgaum (©NHM); 4 – *Gurna indica*, female, India, Mumbai (©NHM); 5 – *Miltochrista miniata* (J.R. Forster, 1771), male, West Siberia, Altai Territory (CAV); 6 – *Ovipennis dudgeoni* (Elwes, 1890), holotype female, India, Sikkim (©NHM); 7 – *Lyclene humilis* (Walker, 1854), male, Nepal (CAV); 8 – *Cabarda sequens* (Walker, 1862), holotype of *C. molliculana* (Walker, 1863), Borneo (©NHM).



**Figures 9–12.** Type species of Nudariina genera, male genitalia. 9 – *Gurna indica*, India, Belgaum, slide BMNH(E) Arct-6583m Volynkin (©NHM); 10 – *Miltochrista miniata*, West Siberia, Altai Territory, slide AV2289m Volynkin; 11 – *Ovipennis dudgeoni*, India, Sikkim, Gopaldhara, slide BMNH(E) Arct-6526m Volynkin (©NHM); 12 – *Lyclene humilis*, Nepal, slide AV2351m Volynkin.





*Ovipennis dudgeoni*    *Miltochrista miniata*    *Lyclene humilis*, HT    *Cabarda sequens*

**Figures 13–18.** Type species of Nudariina genera, male (13) and female (14–18) genitalia. 13 – *Cabarda sequens*, Borneo, slide BMNH(E) Arct-4661m Holloway (©NHM); 14 – *Gurna indica*, India, Mumbai, slide BMNH(E) Arct-4668f Holloway (©NHM); 15 – *Ovipennis dudgeoni*, India, Sikkim, Gopaldhara, slide BMNH(E) Arct-6527f Volynkin (©NHM); 16 – *Miltochrista miniata*, West Siberia, Altai Territory, slide AV2290f Volynkin; 17 – *Lyclene humilis*, holotype female, [Myanmar, Mawlamyine] "E. Indies, Moulmein", slide BMNH(E) Arct-4643m Holloway (©NHM); 18 – *Cabarda sequens*, Borneo, slide BMNH(E) Arct-6562f Holloway (©NHM).

**Redescription. Adult** (Figs 1–4). Head dark brown, frons covered by yellow scales. Male antennae fasciculate, female antennae filiform. Palpi short and porrect. Thorax dark brown, patagia dark brown, tegulae dark brown at base and bright yellow distally. Abdomen dark brown, in male with brushes of bright yellow scales apically. Forewing elongated, with rounded apex. In forewing, vein Sc does not anastomose with R<sub>1</sub>, R<sub>2</sub> from cell; R<sub>3</sub>, R<sub>4</sub> and R<sub>5</sub> stalked; M<sub>1</sub> from upper angle of cell; M<sub>2</sub> and M<sub>3</sub> from lower angle of cell; Cu<sub>1</sub> and Cu<sub>2</sub> from cell. In hindwing, vein Sc+R<sub>1</sub> from cell; R<sub>s</sub> and M<sub>1</sub> stalked, M<sub>2</sub> and M<sub>3</sub> from lower angle of cell; Cu<sub>1</sub> and Cu<sub>2</sub> from cell.

Ground color of forewing dark brown, pattern consist of two bright yellow spots: upper one in medial area between Sc and M and lower one on hind margin. Hindwing bright yellow basally and dark brown outwards. **Male genitalia** (Fig. 9). Uncus long, narrow, laterally flattened, medially broadened dorso-ventrally, with pointed claw-like tip; scaphium and subscaphium narrow and weakly sclerotized. Tegumen broad and curved dorso-ventrally; juxta broad, shield-like; vinculum moderately large, V-shaped. Valva very broad, distally broadened, costal margin strongly curved; distal costal extension well expressed, large, triangular, with pointed tip; sacculus narrow, with strongly setose dorsal margin; distal saccular extension short, robust, thorn-like. Aedeagus large, elongated, slightly curved; vesica globular, with medio-dorsal bunch of five large spine-like cornuti and subapical round area of numerous long and narrow spines; basal plate of ductus ejaculatorius short and narrow. **Female genitalia** (Fig. 14). Ovipositor short and broad; apophyses anteriores and posteriores long and thin; ductus bursae membranous, very short and broad; corpus bursae globular, its anterior end membranous, but all other parts with numerous small spinules; appendix bursae short, narrow, conical, situated medially. 7th sternite with large lateral pockets.

**Distribution.** The only known species of the genus is distributed in India.

***Gurna indica*** (Moore, 1879)

(Figs 1–4, 9, 14)

*Dysauxes indica* Moore, 1879, *Proceedings of the Zoological Society of London* **1879**: 390 (Type locality: [W India, Mumbai] "Bombay").

**Type material examined:** syntype female (Fig. 1), yellowish printed label "Moore Coll. 94–106" / handwritten yellowish label "Bombay ♀ Dr. Leith" [upper side] | "*Dysauxes indica* ♀ Moore (Type)" (underside) / round whitish printed label with red circle "Type" / white printed label with QR-code "NHMUK010604590" (Coll. NHM).

**Note.** Moore (1879) did not mention a number of type specimens in the original description of *Dysauxes indica*, so, despite there is only one type specimen in the NHM collection, it is treated here as a syntype.

**Additional material examined:** 3 males, [India, Karnataka] Belgaum, Watson coll., 97–193, Aug. [18]96 (Coll. NHM); 6 females, Bombay / Moore Coll. 94–106 (Coll. NHM).

**Diagnosis.** See that of the genus.

**Distribution.** The species is known from western India (Maharashtra and Karnataka) (Swinhoe, 1892; Hampson, 1900; Strand, 1922).

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