

The identity of *Itmaharela* NYE, 1975 (= *Harmatelia* MOORE, 1882) - a genus of the genus-group *Hypena* SCHRANK, 1802 (Lepidoptera, Noctuidae, Hypeninae)

M. Lödl & P. Paumkirchner

Abstract

The genus *Itmaharela* NYE, 1975 (= *Harmatelia* MOORE, 1882) is recognized as a member of the genus-group *Hypena* SCHRANK, 1802 and therefore transferred to the subfamily Hypeninae. The relationship within the true Hypeninae is discussed, the similarities to the *Ricla* WALKER, 1869 and *Harita* MOORE, 1882 genus-complex is pointed out. *Itmaharela* is found to be very closely related to the genus *Ricla* and is the only Indian representative of the *Ricla*-lineage.

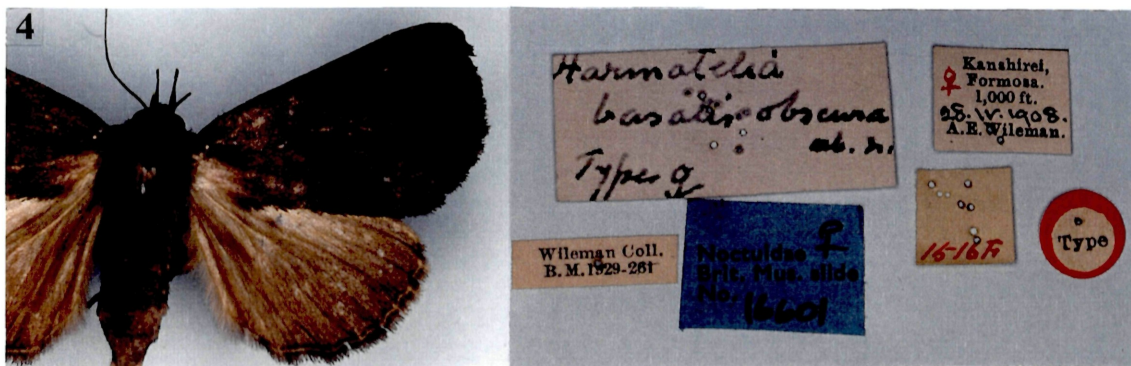
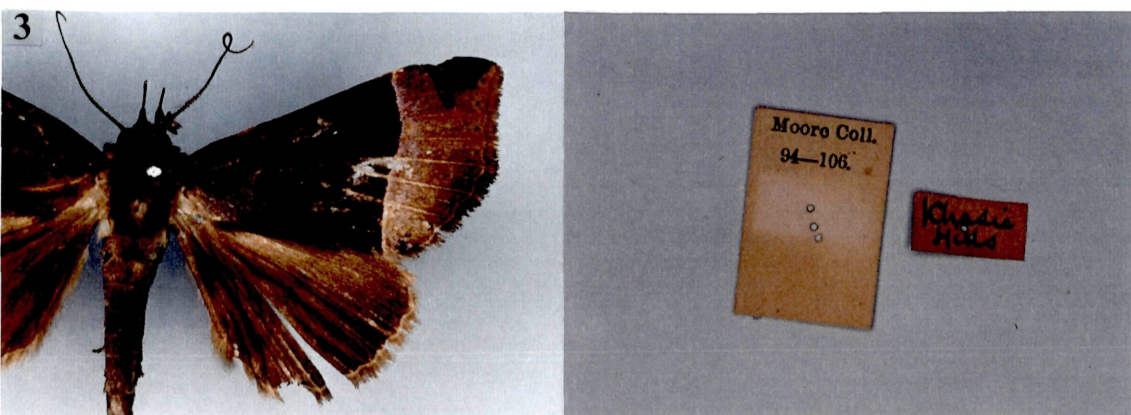
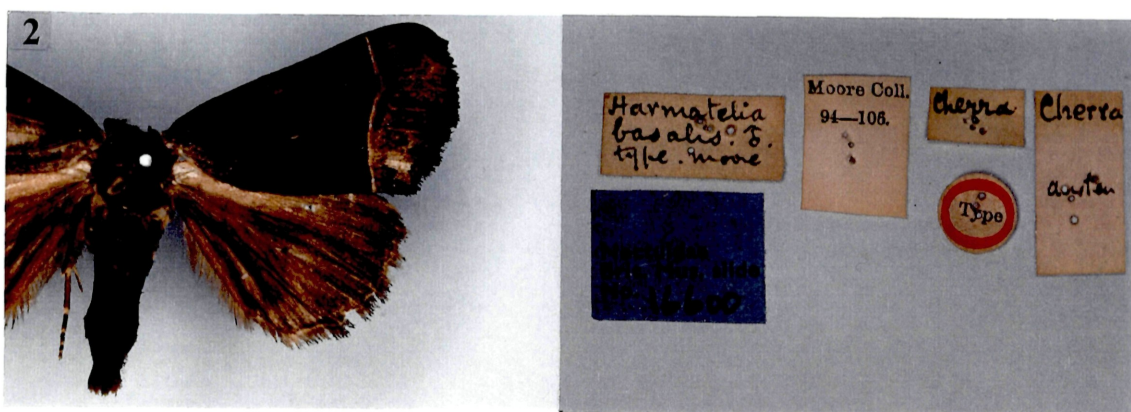
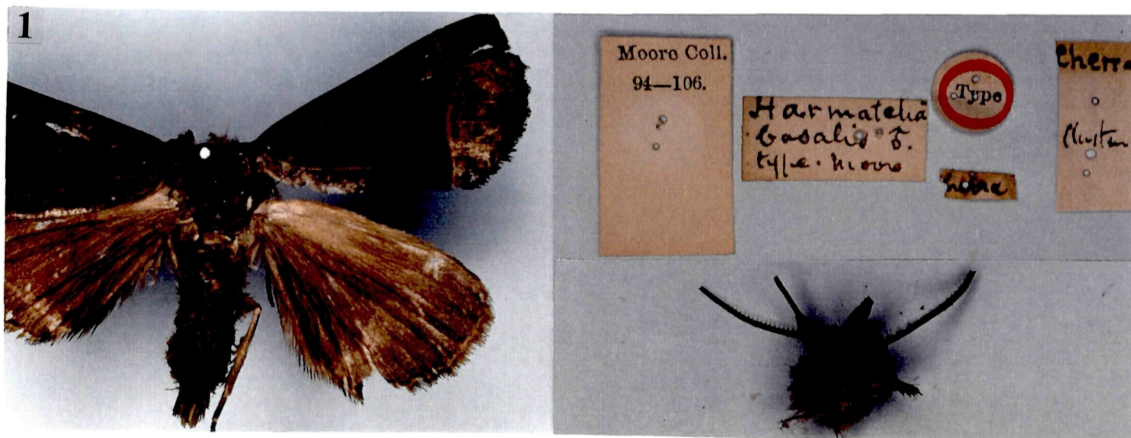
Zusammenfassung

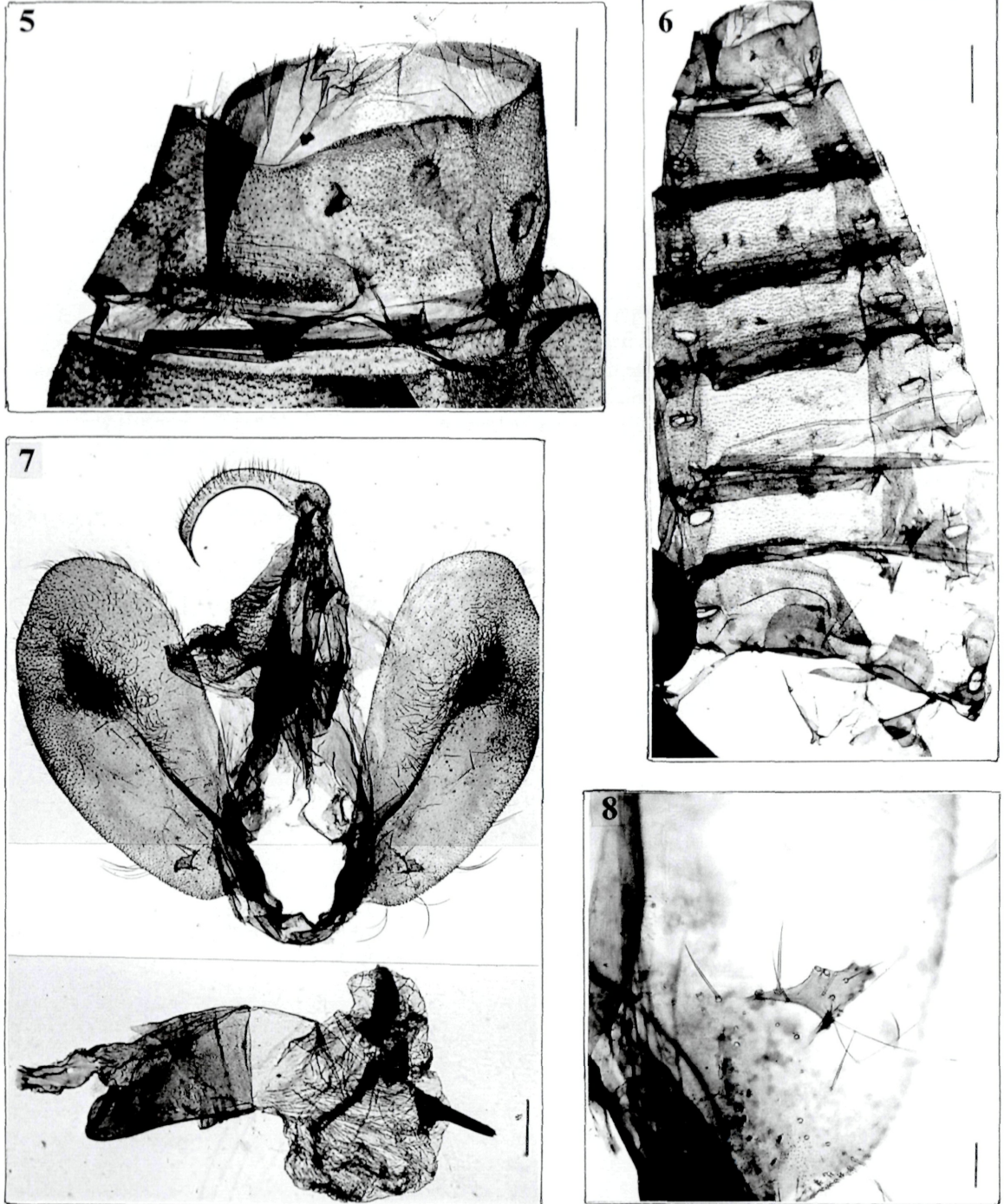
Die Gattung *Itmaharela* NYE, 1975 (= *Harmatelia* MOORE, 1882) wird als Mitglied der Gattungsgruppe *Hypena* SCHRANK, 1802 erkannt und daher in die Unterfamilie Hypeninae überführt. Die Verwandtschaft innerhalb der "echten" Hypeninae wird diskutiert, die Ähnlichkeiten mit dem Gattungskomplex *Ricla* WALKER, 1869 / *Harita* MOORE, 1882 wird herausgearbeitet. *Itmaharela* wird als nahe verwandt mit der Gattung *Ricla* erkannt und kann als einziger bisher bekannter Repräsentant der *Ricla*-Lineage in Indien gelten.

Key words: Calpinae, *Harmatelia*, *Hypena*, Hypeninae, India, *Itmaharela*, lectotype designation, redescription.

Introduction

The genus *Harmatelia* MOORE, 1882 was based on the species *Harmatelia basalis* MOORE, 1882. *Harmatelia* MOORE, 1882 (in HEWITSON & MOORE, 1882: 183) is a junior homonym of *Harmatelia* WALKER, 1858 (NYE, 1975: 262). The replacement name for *Harmatelia* MOORE, 1882 is *Itmaharela* NYE, 1975: 262 (*Itmarharela* nomen nudum in POOLE (1989: 487)). *Itmaharela* is placed in the subfamily Ophiderine (now Calpinae) by POOLE (1989). The second species of the genus, [*Harmatelia*] *bipartita* MOORE, 1882, was recognized to be a distinct taxon best placed near the genus complex *Ricla* WALKER, 1869 and *Sarmatia* GUENÉE, 1854 (LÖDL 1999: 143). For this taxon the erection of a new genus is in preparation. *Itmaharela basalis* was found to be very near the genus *Hypena* SCHRANK, 1802 and therefore is transferred to the subfamily





Figs. 5-8 *Itmaharela basalis* (MOORE, 1882), paralectotype ♂, Noctuidae Brit. Mus. slide No. 16600:

Fig. 5: 8th sternite with posterior abdominal brush. Scale = 0.5 mm.- **Fig. 6:** Abdomen.- Scale = 1 mm.- **Fig. 7:** Genitalia, total. Scale = 0.5 mm.- **Fig. 8:** Sacculus process. Scale = 0.1 mm.

Figs. 1-4 *Itmaharela basalis* (MOORE, 1882) (previous page / vorige Seite):

Fig. 1: Lectotype ♂, head broken off; enlarged .- **Fig. 2-3:** Paralectotypes ♂ ♂.- **Fig. 4:** *Harmatelia basalis* ab. *obscura* WILEMAN, 1914 (infrasubspecific), ♀.

Hyperinae. The genus *Itmaharela* is not synonymized with *Hypena* due to the aberrant, *Ricla*-like female genitalia. It still remains a monotypic genus and is placed nearest to the genus *Ricla*.

Genus *Itmaharela* NYE, 1975 (= *Harmatelia* MOORE, 1882)

Harmatelia MOORE in HEWITSON & MOORE, 1882: 182.

Itmaharela NYE, 1975: 262.

Type-species: *Harmatelia basalis* MOORE, 1882.

Diagnostic features:

- To our present knowledge a monotypic genus.
- Big and robust Hyperinae with a characteristic forewing pattern.
- Labial palps robust with a spatulate third joint resembling those of the genus complex *Ricla/Harita*.
- Antennae of the male with long bristles.
- 8th abdominal sternite with a posterior abdominal brush.
- Male genitalia very near the genus *Hypena* s.str., resembling those of the subgenus *Trichypena* JOANNIS, 1915 or *Ricla*.
- Female genitalia resembling those of the genus *Ricla*, ductus bursae with a frilly pad, the bursa densely covered with star-like spines.

Itmaharela basalis (MOORE, 1882) [*Harmatelia*]

(Figs. 1-15)

Harmatelia basalis MOORE in HEWITSON & MOORE, 1882: 182.

Harmatelia basalis ab. *obscura* WILEMAN, 1914: 222. Infrasubspecific.

Type material:

Lectotype: ♂, "[India] Cherra Austen \ *Harmatelia basalis* ♂. type. Moore \ herra [label partly destroyed] \ Moore Coll. 94-106. \ Type" (BMNH) (Fig. 1). The designation of the lectotype is according to the Rules of Zoological Nomenclature (ICZN), it is necessary to stabilize the nomenclature within the Noctuids and to enable the exact definition of the genus.

Paralectotypes: 1 ♂, "[India] Cherra Austen \ *Harmatelia Basalis* ♂. type. Moore \ Cherra \ Moore Coll. 94-106. \ Noctuidae Brit. Mus. slide No. 16600" [head missing] (Fig. 2); 4 ♂♂ "Khasia Hills \ Moore Coll. 94-106." (Fig. 3) (BMNH). Additional paralectotypes should be found in MNHU (Berlin) from [India] Darjiling (Atkinson).

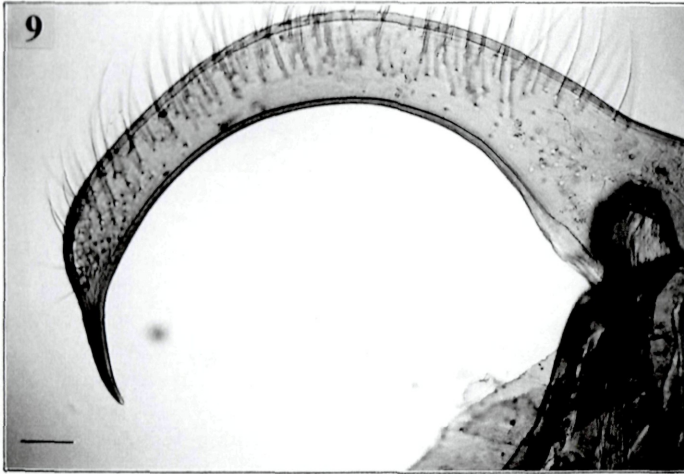
Additional material: 1 ♂, [India] Khasia Hills, Hamilton, 2883, Moore Coll. 94-106.; 1 ♂, Sikkim 91.55; 1 ♂, Khasia Hills, Assam, Nissary; 1 ♀, [Taiwan] Kanshirci, Formosa, 1000 ft., 28.IV.1908, A.E. Wileman, 1516 Fr(?), *Harmatelia basalis obscura* ab.n., Type ♀, Wileman Coll. B.M. 1929-261, Type, Noctuidae Brit. Mus. slide No. 16601 (Fig. 4); 1 ♀, same data, no genitalia slide (BMNH).

Description

Head: Broad and robust, dark chocolate brown. labial palps similar to those of the genus *Ricla*, third joint spatulate. Antennae in the male with long bristles, bristles longer than the width of the antennal segments. Bristles in the female very short.

Thorax and abdomen (Fig. 5-6): 8th sternite of the male abdomen with a central, broad posterior abdominal brush (Fig. 5). Most sternites with bar-shaped folds on their edges (Fig. 6). 2nd sternite with two broad and big lobe-like apophyses.

Wings: Wingspan = 28-32 mm. The wing pattern is strikingly contrasted in the male and dull, dark chocolate brown in the female. Most dominating pattern is a light brownish postmedial band cutting the wing surface into an inner part and an outer part. The outer part is small, pale greyish brown and speckled with dark brown spots. Strong, black apical dashes are present. These are not identical with the prominent *Ricla*-dashes situated near the tornus (LÖDL 1997b). The subterminal line is marked with brown waves. The inner part of the wing is very broad, about 3/4 of the forewing length and of chocolate brown colour. The fringe is blackish brown. The hindwings are dark brown.



Figs. 9-11 *Itmaharela basalis* (MOORE, 1882), paralectotype ♂, Noctuidae Brit. Mus. slide No. 16600:

Fig. 9: Uncus. Scale = 0.1 mm.- **Fig. 10:** Scaphium pocket. Scale = 0.1 mm.- **Fig. 11:** Bundle of cornuti. Scale = 0.1 mm.

Male genitalia (Figs. 7-11): The male genital resembles very much the genitalia of the subgenus *Trichypena* or the genus *Ricla* (LÖDL 1997b). The valves are of typical *Trichypena-Ricla*-shape and are not long and slender as typical for members of the genus *Harita* MOORE, 1882 (LÖDL 1997a). The uncus (Fig. 9) is strongly curved and hook-shaped with a fine pointed tip. Therefore a well developed scaphial pocket (LÖDL 2000) is present (Fig. 10). The scaphium is coriaceous, the uncus base wears a knob. The valves are rounded and almost without processes, only a short, skinny lobe at the sacculus base is present (Fig. 8). A longitudinal fold, which is also a typical feature of the genus-group of *Hypena* s.l., is present and reaches the middle of the valve. The centre of the valve and the ventrodiscal portion is covered with small, hair-like scales which form a densely covered area. The tegumen is without any peculiarities, the vinculum is rounded. The aedeagus is stout and slightly kneed (opening angle = 160°). The aedeagus-cuff (LÖDL 1994) is present, it is skinny and not strikingly scobinate as in most members of *Hypena*. The vesica is voluminous, skinny and with areas of small spines. A cornutus divided into a crown of long, heavily sclerotized spines is dominating the vesica (Fig. 11). The length of the cornutus in relation to the length of the aedeagus is 0.28.

Female genitalia (Figs. 12-15): The female genital exhibits several striking features. It has normal papillae anales which are *Hypena*-like and are of regular size. The apophyses are quite long, the apophyses anteriores longer than the apophyses posteriores. The relation of the latter to the total length of the genitalis is 0.12. The total length of the female genitalia is 8.7 mm. The ostium is simple and does not wear any sterigma (Fig. 13). The first part of the ductus bursae is slender and simple, just covered with longitudinal folds. More cephally the ductus bursae is enlarged and wears a frilly pad (Fig. 14), at this location the ductus seminalis originates with a very broad base. The bursa is round and takes about 40% of the total length of the genitalia. It is totally covered with star-like sclerotizations (Fig. 15).

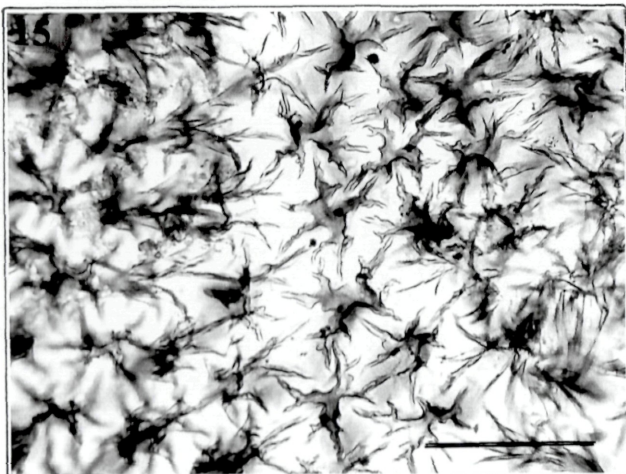
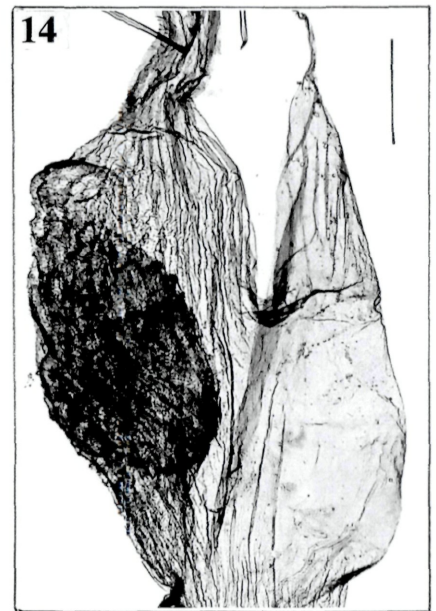
Distribution: Known from India and Taiwan.

Discussion

The investigation of the female genitalia is based on a female from Taiwan. This is far distant from the type-locality, so the interpretation has to be done with care. If the females from the type-locality match those investigated here we have a clearly distinct generic situation from *Hypena*. The female genitalia differ from those of *Hypena* significantly. Therefore *Itmaharela* repeats one of the "tendency features" within the allies of *Hypena*. We find a similar situation in the genus-complex *Harita/Ricla*. In *Harita* the male and female genitalia do not exhibit any striking feature, the males as well as the females have simple and skinny genitalia. In *Ricla*, the Ethiopian relatives of *Harita*, the simple situation of the males is perpetuated but the females have a much more complex shape and tend to have frilly pads on the ductus bursae and the bursa and folded bursae covered with spines and different sclerotizations. *Itmaharela* seems to have *Trichypena-Ricla*-like male genitalia and female genitalia with *Ricla* tendencies. In the wing pattern we miss the typical forewing-dash of *Ricla* (LÖDL 1997b). We place *Itmaharela* within the true Hypeninae near the genera *Ricla* and *Harita*, but in fact we believe that the closest relative is *Ricla*. Therefore we can treat *Itmaharela* as the Indian split off of the Ethiopian *Ricla*.

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Figs. 12-15 *Itmaharela basalis* (MOORE, 1882), ♀, Noctuidae Brit. Mus. slide No. 16601:

Fig. 12: Genitalia total. Scale = 0.5 mm.- **Fig. 13:** Ostium. Scale = 0.1 mm.- **Fig. 14:** Frilly pad of ductus bursae and ductus seminalis. Scale = 0.5 mm.- **Fig. 15:** Star-like signa. Scale = 0.1 mm.

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Author's addresses:

Mag. Dr. Martin Lödl, Naturhistorisches Museum Wien, Burgring 7, A-1014 Wien, Austria.- e-mail: martin.loedl@nhm-wien.ac.at
Mag. Petra Paumkirchner, Murlingengasse 7/25, A-1120 Wien.- e-mail: paumkirchner.petra@aon.at

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