Tuft moths (Lepidoptera, Nolidae) of Trinidad & Tobago

Matthew J.W. Cock

CABI, Bakeham Lane, Egham, Surrey TW20 9TY, UK.
m.cock@cabi.org / mjwcock@btinternet.com

ABSTRACT

Information and illustrations are provided regarding the 37 species of Nolidae moths now known from Trinidad, and eight known from Tobago (22% of Trinidad total). Eleven genera and five subfamilies are known from Trinidad & Tobago: Afridinae (1 species), Diphtherinae (2 species), Collomeninae (12 species), Eligminae (7 species), Nolinae (15 species). Before 2017, only five species of Nolidae had been recorded from Trinidad & Tobago, seven have been recorded since then, and 25 species are here recorded from the country for the first time

Key words: biology, checklist, DNA barcodes, identification, Afridinae, Diphtherinae, Collomeninae, Eligminae, Nolinae

INTRODUCTION

Trinidad and Tobago are two small islands off the northeast coast of South America with a combined land area of about 5100 km2 and maximum elevation slightly below 1000 m. Together with some smaller associated islands, they make up the country Trinidad & Tobago. As continental islands, they have a biota that is a subset of that of the nearby South American mainland. The fauna of Trinidad is the better known of the two, and Tobago being further offshore has a biota that is largely a subset of that of Trinidad.

The family name tuft moths used here, is based on only two of the nine subfamilies of Nolidae (Nolinae and Collomeninae) and refers to the tufts of scales found on the wings of many of their species (best seen in Figs. 58 and 73). Despite the restricted relevance of the common name, it appears to be coming into common use in the absence of any alternatives.

Nolidae is one of the four families of quadrifid Noctuoidea (families in which forewing vein M2 arises closer to the origin of M3 than to the origin of M1 in the lower part of the discal cell so that the cubital vein appears to be four-branched), the others being Euteliidae, Erebidae and Noctuidae (Zahiri *et al.* 2013). The nine subfamilies of Nolidae contain what appear to be disparate elements (Fig. 1) that were previously considered to belong to Noctuidae or Arctiidae but are united by their molecular genetics, by constructing a ridged boat-shaped cocoon that bears a vertical exit slit at one end, and two morphological characters (Zahiri *et al.* 2013).

The current family concept and subfamily composition of Nolidae was developed by Holloway (1998) and Kitching and Rawlins (1998) and refined and confirmed by the molecular phylogenetics of Zahiri *et al.* (2013). However, Zahiri *et al.*'s (2013) analysis did not include Afridinae, whose placement in Nolidae is based on Kitching and Rawlins (1998) and Lafontaine and Schmidt (2010) and is yet to be confirmed based on multi-gene molecular phylogenetics (Palting and Moore 2022).

Nolidae contains an estimated 1740 described species, placed in 186 genera (Nieukerken *et al.* 2011) in seven subfamilies (Zahiri *et al.* 2013), of which five are found in Trinidad & Tobago. The group occurs worldwide but shows a primarily Palaeotropical distribution (Kitching and Rawlins 1998). Here we treat 37 species in 11 genera from Trinidad &Tobago (Table 1). Of these, eight species (22% of the Trinidad total, a ratio of 4.6:1) in six genera occur in both Trinidad and Tobago. Inasmuch as Trinidad is 16 times the size of Tobago, according to the species-area relationship it is estimated to have about 2.3 times as many species in any given taxon or group, given similar topography and climate, and this relationship holds up well for the well-studied land and fresh-water biota of the islands as a whole (Starr and Hardy 2022), suggesting that the Tobago fauna in this family is less thoroughly known than the Trinidad

Table 1. Overview of the Nolidae of Trinidad and Tobago

Subfamily	Trinidad		Tobago		
	Genera	species	Genera	species	Genera
Afridinae	1	1	1	1	*Afrida*
Diphtherinae	2	2		0	*Diphthera, Lepidodes*
Collomeninae	4	12	2	2	*Collomena, Motya, Neostictoptera, Rhabdotina*
Eligminae	2	7	1	1	*Elaeognatha, Iscadia*[1]
Nolinae	2	15	2	4	*Meganola, Nola*
Total	11	37	6	8	

[1] This genus will probably need to be split as it appears to comprise very different species.

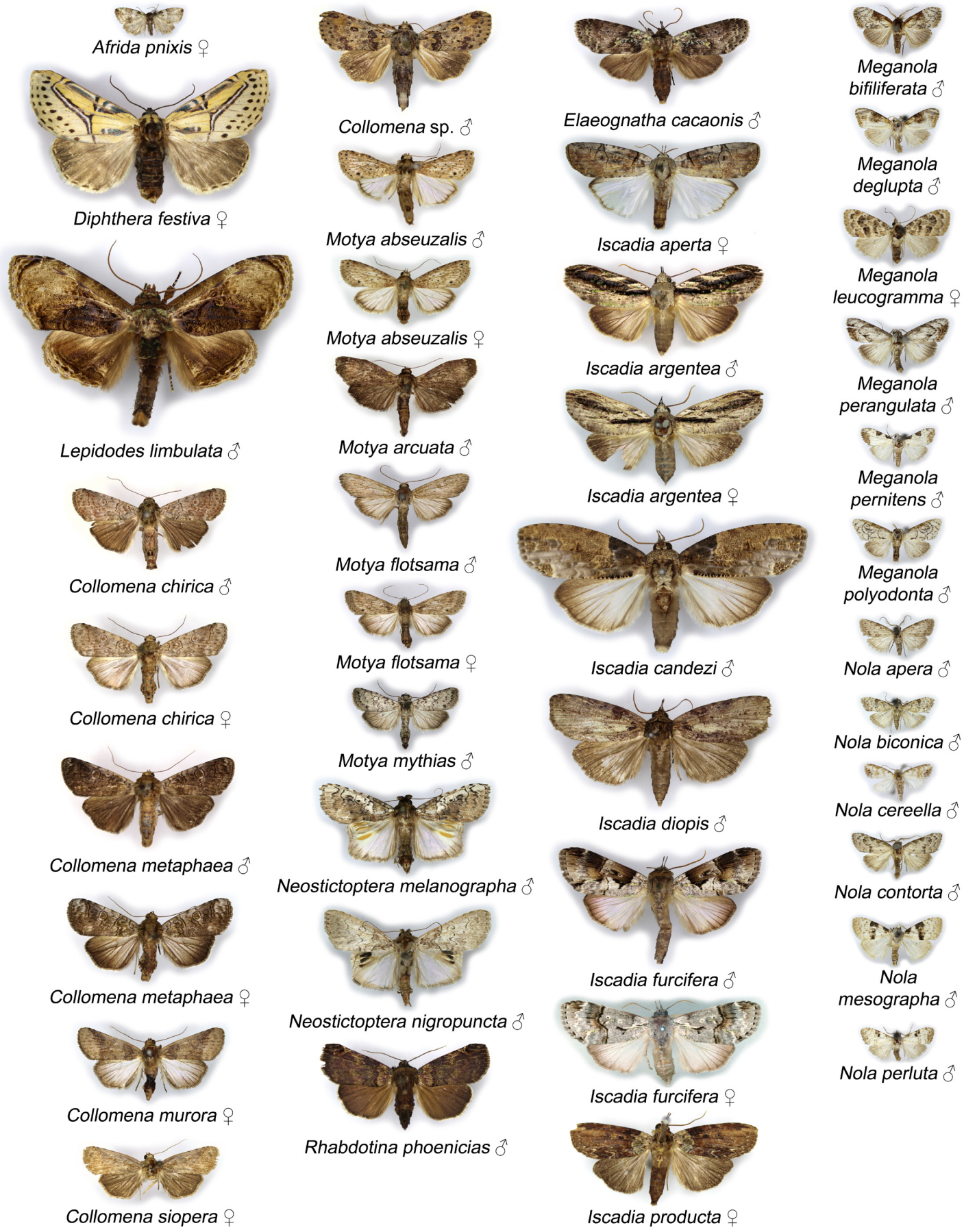

Fig. 1. Nolidae of Trinidad and Tobago. Life size; see enlarged species figures for details.

fauna. Kaye and Lamont (1927) listed just two species of Eligminae and one of Nolinae, although two other species of Eligminae had also been recorded from Trinidad (Druce 1910, Hampson 1912). Since 2017, seven more have been recorded from both Trinidad and Tobago (Cock 2017, Cock and Kelly 2020, Cock et al. 2022, Cock et al. 2023), and so remarkably, 25 species (68%) reported here are new records for Trinidad.

The reader is referred to the lengthy introductions in Cock (2021a, 2022) regarding the approach and layout used here. Images of living moths were collated from the many shared by the photographers either directly, or through iNaturalist (iNaturalist.org). In preparing this work, I consulted the following collections:

MJWC	the private research collection of M.J.W. Cock, UK;
NHMUK	The Natural History Museum, London, UK;
NMS	National Museums of Scotland, Edinburgh, UK;
OUMNH	Oxford University Museum of Natural History, UK;
USNM	National Museum of Natural History (formerly United States National Museum), Washington DC, USA;
UWIZM	University of the West Indies Zoology Museum, St. Augustine, Trinidad & Tobago.

FAMILY NOLIDAE BRUAND, 1846

Subfamily Afridinae Kitching & Rawlings, 1998

Type and only genus *Afrida* Möschler, 1886. Hampson (1900) treated *Afrida* as a genus in Lithosiidae (now Erebidae, Arctiinae, Lithosiini). Dyar (1913) reviewed and expanded the genus, commenting that he did not believe it belonged in Lithosiidae, rather in Noctuidae (which at that time included the subfamilies that comprise Nolidae today). Draudt (1919) maintained it as a genus of Lithosiinae of the Arctiidae. Franclemont (1983) introduced the tribe Afridini Franclemont as part of Lithosiinae, but this was a *nomen nudum* (Speidel and Naumann 2004). Kitching and Rawlings (1998) validated the use of subfamily Afridinae for *Afrida*, and suggested they may be nolids of uncertain affinity. Zahiri *et al*. (2013) continued to treat Afridinae as belonging in Nolidae, but did not have material to include in their genetic analysis.

Afrida Möschler, 1886

Type species: *Afrida tortriciformis* Möschler, 1886, TL Jamaica.

Afrida pnixis Dyar, 1913

Figs. 2–4.
OD: Dyar (1913): *Afrida pnixis*, TL Panama.
TT: *Afrida pnixis* Dyar: Cock *et al*. (2022)
Historical notes. Cock *et al*. (2022) reported this species from Tobago, stating that it is also found in Trinidad. Trinidad specimens were identified by comparison with the type (USNM, ♂ Panama) and the NHMUK series.
Taxonomic issues. There are no public DNA barcodes in BOLD. The living adult in a photo from Tobago (Fig. 4) is distinctly pinker than the pinned specimens from Trinidad (Figs. 2–3), but until specimens are available for critical examination, it is assumed to be the same as the species identified as *A. pnixis* from Trinidad.
Identification. This small species is obscurely marked in shades of grey (Figs. 2-4). The sexes are similar, except the male is slightly smaller and has pectinate antennae.
Biology in Trinidad & Tobago. According to Wagner *et al*. (2011), in eastern North America the caterpillars of *Afrida ydatodes* Dyar feed on lichens and tree algae, so this is probably also the case for *A. pnixis*.
Status in Trinidad & Tobago. Apparently, this is an uncommon species, although easily overlooked. It may be associated with disturbed habitats.
Centeno: ?♀ (no abdomen) resting on citrus, 24.vii.1968 (E.J. Rankin) [UWIZM ex CABI]
Curepe, MVL: ♀ 4.ix.1978 (M.J.W. Cock) [MJWC] (Fig. 3); ♂ 9.ix.1978 (M.J.W. Cock) [MJWC] (Fig. 2)
TOBAGO, Englishman's Bay, 11.28 -60.68: ? 9.i.2022 (A. Deacon photo) [iNaturalist 104684168]

Fig. 2. Male *Afrida pnixis*, Curepe, MVL, 9.ix.1978

Fig. 3. Female *Afrida pnixis*, Curepe, MVL, 4.ix.1978.

Fig. 4. *Afrida pnixis*, Englishman's Bay, 9 January 2022, A. Deacon [iNaturalist 104684168]; ©, under CC-BY-NC (after Cock *et al*. 2023).

Subfamily Diphtherinae Fibiger & Lafontaine, 2005

Formerly the monotypic genus *Diphthera* was placed in Noctuidae, but Fibiger and Lafontaine (2005) established the Subfamily Diphtherinae for this genus alone. Zahiri *et al*. (2013) added the Neotropical genus *Lepidodes* and redefined the subfamily. This subfamily has not previously been reported from Trinidad, although both genera are present on the island. Neither genus is known from Tobago.

***Diphthera* Hübner 1809**

Type species: *Diphthera elegans* Hübner, 1809 a synonym of *D. festiva* Fabricius, 1775.

***Diphthera festiva* (Fabricius, 1775)**

Figs. 5–7.

OD: Fabricius (1775): *Bombyx festiva*, TL America.

Historical notes. Perhaps surprisingly, this distinctive species has not previously been reported from Trinidad. Trinidad material was identified by comparison with the NHMUK series.

Taxonomic issues. This species seems to be BOLD:AAA3373 which includes sequences from USA, Mexico, Costa Rica, Honduras, Colombia, Cuba, and the Dominican Republic.

Identification. This pale yellow species with dark spots and lines is distinctive. The sexes are similar.

Biology in Trinidad. The food plants in Costa Rica are Malvaceae, especially species of *Waltheria* (Janzen and Hallwachs 2022). However, in Puerto Rico, in addition to *W. indica* (= *W. americana*), it has been reared on *Mimosa quadrivalvis* (= *Morongia leptoclada*, Fabaceae) (Van Zwaluwenburg 1918). Also, Crumb (1956) examined caterpillars collected 'on rice' in Texas, and reported moths labelled 'larva on pecan' from Alabama and 'feeding on sweet potato' from Louisiana. Given the consistent use of Malvaceae found by Janzen and Hallwachs (2022), it is not obvious how to interpret these divergent records. The caterpillars are gregarious and drop to the ground if disturbed. The oval pupal case is formed on the stem of the food-plant and covered by grass and bits of leaves (Van Zwaluwenburg 1918). Janzen and Hallwachs (2022) include images of the caterpillars, based on which I identified those in Fig. 7 on an unknown plant near Kernahan as this species.

Status in Trinidad. An uncommon species with no obvious habitat association.

Curepe, MVL: ♂ undated (F.D. Bennett) (det. *Noropsis hieroglyphica* Cramer by R.E. Cruttwell, a synonym) [UWIZM CABI.3535]; ♀ 9.viii.1978 (M.J.W. Cock) [MJWC]

Forest Reserve, 10.16 -61.58: ? 8.xii.2020 (I. Kalliecharan photo) [iNaturalist 66313461]

Guayaguayare, Vespry, 10.16 -61.03: ? 4.viii.2023 (R. Deo photo) [iNaturalist 176996456]

Kernahan: caterpillars on unidentified host 3.xi.2018 (S. Stewart photo) [iNaturalist 18295404], (N. Solomon photo) [iNaturalist 18064070] (Fig. 7)

Parrylands Oilfield, MVL: ♀ 25.vii.1981 (M.J.W. Cock) [MJWC] (Fig. 5)

Penal: ? 28.vii.2010 (K. Sookdeo photo, moths 07) (Fig. 6)

St. Augustine: ? 24.xi.2020 (stefairy photo) [iNaturalist 65542405]

North Trinidad: ? 21.xi.2020 (avinhardeo photo) [iNaturalist 65375958]

Fig. 5. Female *Diphthera festiva*, Parrylands Oilfield, MVL, 25.vii.1981.

Fig. 6. *Diphthera festiva*, Penal: 28.vii.2010, K. Sookdeo photo; ©, with permission.

Fig. 7. Caterpillars of *Diphthera festiva* on unidentified food plant, Kernahan, 3.xi.2018, N. Solomon [iNaturalist 18064070]; ©, under CC-BY-NC.

***Lepidodes* Guenée**

Type species: *Lepidodes limbulata* Guenée, 1852, TL Colombia.

***Lepidodes limbulata* Guenée, 1852**

Figs. 8–10.

OD: Guenée (1852): *Lepidodes limbulata*, TL Colombia.

Historical notes. This species was identified by comparison with the NHMUK series.

Taxonomic issues. This appears to be BIN BOLD:AAJ9324 from French Guiana.

Identification. The relatively large size is perhaps the most obvious distinguishing feature of this otherwise obscurely marked species. The female has more rounded forewings.

Biology in Trinidad. No information from Trinidad, but in Costa Rica, Janzen and Hallwachs (2022) reared this species from Malpighiaceae, especially *Bunchosia* spp.

Status in Trinidad. An uncommon species, found in forested areas.

Cumaca Road, 4.6 miles, MVL: ♂ 18.vii.1981 (M.J.W. Cock) [UWIZM CABI.3791]

Fig. 8. Male *Lepidodes limbulata*, Morne Bleu, Textel Installation, at light, 20.ix.1978.

Fig. 9. Female *Lepidodes limbulata*, Parrylands Oilfield, MVL, 25.vii.1981.

Fig. 10. *Lepidodes limbulata*, Upper Guanapo Valley, 10.72 -61.26, by night, 31.xii.2022, R. Deo photo, [iNaturalist 145666425]; ©, with permission.

Upper Guanapo Valley, 10.72 -61.26, by night: ♂ 31.xii.2022 (R. Deo photo) [iNaturalist 145666425] (Fig. 10)
Inniss Field, MVL: ♂ 17.v.1999 (M.J.W. Cock) [MJWC]
Matura, 10.67 -61.06: ♂ 21.xi.2020 (C. McMayo photo) [iNaturalist 65409519]
Morne Bleu, Textel Installation, at light: ♂ 20.ix.1978 (M.J.W. Cock) [MJWC, TL-974] (Fig. 8)
Parrylands Oilfield, MVL: ♀, ? 25.vii.1981 (M.J.W. Cock) [♀ MJWC; ? NHMUK, TL-974] (Fig. 9)
Upper Guanapo Valley, 10.72 -61.26, by night: ♂ 31.xii.2022 (R. Deo photo) [iNaturalist 145666425] (Fig. 10).

Subfamily Collomeninae Zahiri, Lafontaine, & Schmidt,2013

Hampson (1912) treated this subfamily as part of Sarrothripinae (Noctuidae).

***Collomena* Möschler 1890**

Type species: *Collomena elota* Möschler, a synonym of *C. filifera* Walker, a Caribbean species, similar to *C. chirica* with a plain white hindwing. Janzen and Hallwachs (2022) include a small number of *Collomena* spp. reared

from Combretaceae (*Combretum*, *Terminalia*), Myrtaceae (*Eugenia*) and Ulmaceae (*Celtis*). Adults rest with the wings held at an angle over the substrate, and the abdomen elevated above them (Fig. 16), although not as upright as in *Motya* spp. (Fig. 23). *Collomena filifera* (Walker, 1857) occurs throughout the Antilles to French Guiana and Brazil (Zagatti *et al*. 1995–2001, Becker and Miller 2002), so it might also be found in Trinidad and Tobago. It is similar to *C. chirica*, but the hindwing is plain white in the male and only slightly marked at the margin in the female (Becker and Miller 2002).

***Collomena chirica* (Schaus, 1906)**

Figs. 11–12.

OD: Schaus (1906): *Casandria chirica*, TL Mexico.

TT: *Collomena chirica* (Schaus): Cock (2017)

Historical notes. Cock (2017) reported this species from Tobago, indicating it also occurred in Trinidad. It was identified by comparison with NHMUK series, a paratype (USNM, ♀ Mexico) and USNM series.

Taxonomic issues. There are no DNA barcode sequences in BOLD. Trinidad is a long way from the type locality, Mexico, so this identification may be regarded as provisional.

Identification. This species is similar in size and markings to *C. metaphaea*, but consistently paler. There seem to be various small characters of the forewing markings which will separate the two, e.g. the discal spot is larger in *C. metaphaea*, the costal portion of the outer margin of the basal band is indent in *C. chirica*, but much less so in *C. metaphaea*, etc. The forewings of the male are darker than those of females, and males have a uniformly dark hindwing, whereas in the female the hindwing is pale basally and discally. The forewing of male *C. chirica* is comparable in shade to that of the female of C. *metaphaea*.

Status in Trinidad & Tobago. An uncommon species with no obvious habitat association.

Curepe: ♂ 5-6.ix.1969 (F.D. Bennett) [NHMUK]

Curepe, MVL: ♀ 13.ix.1978 (M.J.W. Cock) [MJWC]; ♂ 27.viii.1980 (M.J.W. Cock) [MJWC]; ♂ 2.ix.1980 (M.J.W. Cock) [UWIZM CABI.7289]; ♂ 8.ix.1980 (M.J.W. Cock) [MJWC] (Fig. 11); 2♂ 23-28.ix.1980 (M.J.W. Cock) [MJWC; UWIZM CABI.7288]; ♀ 29.ix-2.x.1980 (M.J.W. Cock) [MJWC]

Morne Bleu, Textel Installation, at light: ♀ 3.vii.1978 (M.J.W. Cock) [MJWC]; ♂ 2.iii.1981 (M.J.W. Cock) [UWIZM CABI.7287]

St Benedict's, MVL: ♀ 26.v.1981 (M.J.W. Cock) [MJWC] (Fig. 12)

TOBAGO, Scarborough, Marden House, MVL: ♀ 9.i.1982 (M.J.W. Cock) [MJWC]

TOBAGO, Nr. Speyside, MVL: ♀ 14-17.v.1982 (M.J.W. Cock) [MJWC]

Fig. 11. Male *Collomena chirica*, Curepe, MVL, 8.ix.1980.

Fig. 12. Female *Collomena chirica*, St Benedict's, MVL, 26.v.1981.

***Collomena metaphaea* (Hampson, 1912)**
Figs. 13–16.
OD: Hampson (1912): *Casandria metaphaea*, TL Panama.
Historical notes. Identified by comparison with type (NHMUK, ♂ Panama) and NHMUK series.
Taxonomic issues. No public DNA barcodes in BOLD.
Identification. See notes under *C. chirica* above.
Status in Trinidad. An occasional species in forested habitats.
Aripo Savannah, at light: ♀ 26.iii.2016 (K. Sookdeo photo moths 87) (Fig. 16)
Brasso Seco, 10.747 -61.265, at light: ?♂ 10.iv.2021 (R. Deo photo) [iNaturalist 73657740] (Fig. 15)
Caparo: ♂ xi.1905 (S.M. Klages) [NHMUK]; ♂ (S.M. Klages) [NHMUK]
Cumaca Road, 0.5 miles, MVL: 2♀ 27.x.1980 (M.J.W. Cock) [MJWC; UWIZM CABI.7290] (Fig. 14)
Cumaca Road, 4.6 miles, MVL: ♂, ♀ 18.vii.1981 (M.J.W. Cock) [MJWC] (Fig. 13)
Morne Bleu, Textel Installation, at light: ♂ 5.ix.1978 (M.J.W. Cock) [MJWC]
Valencia Forest, MVL: ♀ 5.viii.1981 (M.J.W. Cock) [MJWC]

Fig. 13. Male *Collomena metaphaea*, Cumaca Road, 4.6 miles, MVL, 18.vii.1981.

Fig. 14. Female *Collomena metaphaea*, Cumaca Road, 4.6 miles, MVL, 18.vii.1981.

Fig. 15. Male *Collomena metaphaea*, Brasso Seco, at light, 10.iv.2021, R. Deo (iNaturalist observation 73657740); ©, with permission.

Fig. 16. Female *Collomena metaphaea*, Aripo Savannah, at light, 26.iii.2016, K. Sookdeo; ©, with permission.

***Collomena murora* (Dyar, 1914)**
Figs. 17–18.
OD: Dyar (1914): *Casandria murora*, TL Panama.
Historical notes. Identified by comparison with the types (USNM, 2♂, ♀ Panama). I had identified this as *Motya steniptera* Schaus by comparison with NHMUK series, but it is not that species (type USNM, ♂ French Guyana).
Taxonomic issues. No public DNA barcode sequences in BOLD.
Identification. I have not seen the male from Trinidad, but Rainer Deo's photograph (Fig. 18) may be one. The female dorsal forewing is two shades of brown, the base and medial band being darker.
Status in Trinidad. A rare species.
Curepe, MVL: ♀ 23.viii.1980 (M.J.W. Cock) [MJWC] (Fig. 17)
Nariva Swamp, Manzanilla-Mayaro Road, milestone 46.5, MVL: ♀ 19.i.1988 (M.J.W. Cock) [MJWC]
Provisional identification: Caroni Swamp Visitor Centre: ? 15.xii.2022 (R. Deo photo) [iNaturalist 144474236] (Fig. 18)

Fig. 17. Female *Collomena murora*, Curepe, MVL, 23.viii.1980.

Fig. 18. A possible male of *Collomena murora*, Caroni Swamp Visitor Centre, 15.xii.2022, R. Deo [iNaturalist 144474236]; ©, with permission.

***Collomena siopera* (Dyar, 1914) complex**
Fig. 19.
OD: Dyar (1914): *Casandria siopera*, TL Panama and Mexico.
Historical notes. Identified by comparison with paratypes (Panama, USNM) and USNM series (none from Trinidad), and NHMUK series. My female specimen differs in that hindwing is uniformly dark brown, with paler brown cilia, so I refer to this as *Collomena siopera* complex.
Taxonomic issues. BOLD:AAA8669 from Costa Rica contains material identified as *C. siopera*. Given that this species was described from Panama and Mexico, a lectotype needs to be designated.
Identification. A predominantly grey species, with the distal area tinged with brown. The hindwing is uniformly brown

Fig. 19. Female *Collomena siopera* complex, Curepe, MVL, 20.viii.1978.

with darker veins and paler cilia, and there is a black patch on the ventral forewing near the base.

Status in Trinidad. A rare species.

Curepe, MVL: ♀ (abdomen detached in gelatin capsule) 20.viii.1978 (M.J.W. Cock) [MJWC, TL-442] (Fig. 19)

Curepe, MVL: ♀ 1.ix.1978 (M.J.W. Cock) [NHMUK, TL-442] (this record merits rechecking).

***Collomena* sp. A**

Fig. 20.

Historical notes. Not previously recorded from Trinidad.

Taxonomic issues. This appears to be an undescribed species. I have found un-named material to match this in NHMUK from French Guyana and in USNM from Venezuela, El Salvador and French Guyana.

Identification. The female is not known from Trinidad. This is a grey species with distinct dark markings and the submarginal area with a chestnut tint. The hindwings are paler basally, unlike those of other *Collomena* spp. from Trinidad, which are uniformly dark brown in the male.

Status in Trinidad. Only one Trinidad record, from Morne Bleu.

Morne Bleu, Textel Installation, at light: ♂ 20.ix.1978 (M.J.W. Cock) [MJWC] (Fig. 20)

***Motya* Walker, 1859**

Type species: *Motya abseuzalis* Walker. Janzen and Hallwachs (2022) include a few records of *Motya* spp. reared from Combretaceae. Like *Collomena* spp. the wings are held at an angle over the substrate, with the abdomen lifted above them, but unlike *Collomena* (Fig. 16), the abdomen is usually at a right angle to the substrate (Fig. 23). The Trinidad *Motya* spp. are consistently smaller than the Trinidad *Collomena* spp.

***Motya abseuzalis* Walker, 1859**

Figs. 21–24.

OD: Walker (1859): *Motya abseuzalis*, TL Brazil.

Historical notes. Identified by comparison with the type (OUMNH, ♀ Brazil (OUMNH 2023a)).

Taxonomic issues. There are three public DNA barcodes of this species from Florida that are identified as *M. abseuzalis* and form BOLD:ACM4438. If this identification is correct, this is a widespread species occurring from Brazil to Florida, and *M. abseuzalis* should be the correct name for Trinidad as well.

Identification. The sexes are similar, apart from the longer abdomen and more pointed wings of the male. This small grey species has rows of marginal and submarginal spots

Fig. 20. Male *Collomena* sp. A, Morne Bleu, Textel Installation, at light, 20.ix.1978.

Fig. 21. Male *Motya abseuzalis*, Curepe, MVL, 12.x.1980.

Fig. 22. Female *Motya abseuzalis*, Curepe, MVL, 26.viii.1978.

Fig. 23. Male *Motya abseuzalis*, South Oropouche, Mon Desir, 24.xii.2021, T.P. Maharaj [iNaturalist 103627958]; ©, under CC-BY-NC.

Fig. 24. Male *Motya abseuzalis*, Chacachacare Island, at light, 24.i.2015, K. Sookdeo; ©, with permission.

on the dorsal forewing, the latter including a large spot near the tornus and two large spots near the apex. The irregular postmedial line is more obvious in some individuals (Fig. 23) than in others. The hindwing is pearly white, with only the distal veins, and narrowly the margin dark brown. The veins of the ventral forewing are dark in contrast to the ground colour. The female of *M. flotsama* is similar, but the submarginal row of spots is reduced and the larger apical submarginal spots are missing, the margin of the dorsal and ventral hindwing is broadly diffuse dark brown, and the veins of the ventral forewing are not dark.

Biology in Trinidad. No information from Trinidad. Heppner (2003) gives a food plant in Florida as button mangrove, *Conocarpus erectus* (Combretaceae), which also occurs in Trinidad.

Status in Trinidad. An occasional species in Trinidad with no obvious habitat association. Also recorded from Chacachacare Island.

Arima Valley, Simla, MVL: ♂ 15.ii.1981 (M.J.W. Cock) [MJWC]

Curepe, MVL: ♀ 26.viii.1978 (M.J.W. Cock) [MJWC, TL-430] (Fig. 22); ? 3.xi.1978 (M.J.W. Cock) [NHMUK, TL-430]; ♀ 23-28.ix.1980 (M.J.W. Cock) [MJWC]; ♀ 29.ix-2.x.1980 (M.J.W. Cock) [MJWC]; ♂ 12.x.1980 (M.J.W. Cock) [MJWC] (Fig. 21)

Guayaguayare, Rushville: ?♀ 18.iii.2023 (R. Deo photo) [iNaturalist 152893346]

Morne Bleu, Textel Installation, at light: ♀ 10.viii.1979 (M.J.W. Cock) [MJWC]

South Oropouche, Mon Desir: ♂ 24.xii.2021 (T.P. Maharaj photo) [iNaturalist 103627958] (Fig. 23)

CHACACHACARE ISLAND, at light: ♂ 24.i.2015 (K. Sookdeo photo moths 57) (Fig. 24); ♀ 19.ii.2023 (R. Deo photo) [iNaturalist 149321938]

***Motya arcuata* (Schaus, 1910)**

Fig. 25.

OD: Schaus (1910): *Casandria arcuata*, TL Costa Rica.

Historical notes. Trinidad material was identified by comparison with the type (USNM, ♂ Costa Rica) and NHMUK series.

Taxonomic issues. Material identified as this species from Costa Rica forms BOLD:AAD4948, but barcodes from South America need to be obtained and compared to assess the wider distribution.

Identification. The male is dark grey-brown on both wings

Fig. 25. Male *Motya arcuata* or near, Cumaca Road, 4.6 miles, MVL, 18.vii.1981.

and surfaces, with a strongly convex costal margin to the forewing, in the male slightly angled at about two-thirds. The female is not known from Trinidad, but judging from the specimens illustrated in BOLD:AAD4948, it is similar to the male, but with a smoothly convex forewing costa.

Biology in Trinidad. No information from Trinidad, but Janzen and Hallwachs (2022) reared a specimen from *Terminalia amazonia* (Combretaceae).

Status in Trinidad. A rare species in Trinidad, only collected on the Cumana Road.

Cumaca Road, 0.5 miles, MVL: ♂ 27.x.1980 (M.J.W. Cock) [MJWC]

Cumaca Road, 4.6 miles, MVL: ♂ 18.vii.1981 (M.J.W. Cock) [MJWC] (Fig. 25); ♂ 21.x.1982 (M.J.W. Cock) [MJWC].

***Motya flotsama* (Dyar, 1914)**

Figs. 26–27.

OD: Dyar (1914): *Casandria flotsama*, TL Panama.

Historical notes. I have not examined the type material, but

Fig. 26. Male *Motya flotsama*, Arima Valley, Simla, MVL, 15.ii.1981.

Fig. 27. Female *Motya flotsama*, Curepe, MVL, 25.viii.1978.

identified this species by comparison with the illustration in 'Lepidoptera of the French Antilles' website (Zagatti *et al*. 1995–2001). Unfortunately, this website is currently unavailable on line, and the archive copy cited does not include this illustration. I have also examined the types of *M. insignis* Dyar (USNM ♂, ♀ French Guyana), which are close, but not an exact match.

Taxonomic issues. Poole (1989) listed this species in '*Cassandria* of authors', but Zagatti *et al*. (1995–2001) placed it in *Motya* based on the male genitalia.

Identification. The male is almost unmarked grey, with more pointed wings and a longer abdomen than the female. The female is similar to *M. abseuzalis*, but see under that species for differences.

Status in Trinidad. An uncommon species, recorded from Curepe and the Arima Valley.

Arima Valley, Simla, MVL: ♂ 15.ii.1981 (M.J.W. Cock) [MJWC] (Fig. 26)

Curepe, MVL: ♀ 25.viii.1978 (M.J.W. Cock) [MJWC] (Fig. 27); ♀ 22.ix.1980 (M.J.W. Cock) [MJWC]; ♀ 12.x.1980 (M.J.W. Cock) [MJWC]; 2♀ 23-28.ix.1980 (M.J.W. Cock) [MJWC]

***Motya mythias* (Schaus, 1921)**

Figs. 28–29.

OD: Schaus (1921): *Casandria mythias*, TL Guatemala.

Historical notes. Identified by comparison with the paratype (USNM, Guatemala) and USNM series (none from Trinidad).

Taxonomic issues. Material from Costa Rica identified as this species forms BOLD:AAE6482. Despite the Central American type locality, Trinidad material seems a good match.

Identification. This species is smaller than the other *Motya* spp. known from Trinidad. It is silvery grey, with crisp black markings including a circular discal spot, a jagged postmedial line and rows of marginal and submarginal spots. The sexes are similar apart from the longer male abdomen.

Status in Trinidad. Rare, only recorded from Valencia Forest on the 'Long Stretch'.

Valencia Forest, MVL: ♀ 31.vii.1981 (M.J.W. Cock) [NHMUK]; ♂ 5.viii.1981 (M.J.W. Cock) [MJWC, TL-968] (Fig. 28); ♀, ? iv.1980 (M.J.W. Cock) [♀ MJWC; ? NHMUK, TL-968] (Fig. 29)

Fig. 28. Male *Motya mythias*, Valencia Forest, MVL, 5.viii.1981.

Fig. 29. Female *Motya mythias*, Valencia Forest, MVL, iv.1980.

***Neostictoptera* Druce 1900**
Type species: *Neostictoptera nigropuncta* Druce. Males have a distorted hindwing, almost square in shape, with three parallel androconia brands near the apex. Janzen and Hallwachs (2022) include a *Neostictoptera* sp. reared on Myrtaceae with a plain green caterpillar with yellow speckles.

***Neostictoptera melanographa* (Hampson, 1912)**
Fig. 30.
OD: Hampson (1912): *Casandria melanographa*, TL Guyana.
Historical notes. Identified by comparison with type (NHMUK ♀, Guyana) and NHMUK series.
Taxonomic issues. No public DNA barcodes are available in BOLD.
Identification. Spread male specimens with three parallel orange-brown androconia brands near the apex of the hindwing are easy to ecognizes. I have not seen the female from Trinidad, but it only lacks the androconia brands (Hampson 1912). Live individuals with the hindwing hidden can be recognized by the size, pattern of black lines, and extensive white areas on the costal area. In contrast, the dorsal forewings of *N. nigropuncta* are uniformly grey with less obvious black line markings (Figs. 31-32).
Status in Trinidad. Rare, only one record from Morne Bleu.
Morne Bleu, Textel Installation, at light: ♂ 11.x.1978 (M.J.W. Cock) [MJWC] (Fig. 30)

***Neostictoptera nigropuncta* Druce, 1900**
Figs. 31–32.
OD: Druce (1900): *Neostictoptera nigropuncta*, TL Colombia.
TT: *Neostictoptera nigropuncta* Druce: Cock *et al*. (2023)
Historical notes. Cock *et al*. (2023) reported this species from Trinidad and Tobago for the first time. The Trinidad specimen was identified by comparison with the type (NMHUK ♀, Colombia) and NHMUK series.
Taxonomic issues. In BOLD, this species appears as BOLD:AAD0397 from Costa Rica.
Identification. As for the last, the black hindwing androconia brands make pinned males (Fig. 31) easy to recognise. Druce (1900) describes the female as similar but without the androconia brands. Living moths are not so obvious (Fig. 32), but the size, uniform grey ground colour, and black line markings will distinguish this species from the last.
Status in Trinidad and Tobago. One record from Trinidad (Fig. 31) and several photographic records from Tobago (e.g. Fig. 32).
Morne Bleu, Textel Installation, at light: ♂ 29.iii.1979

Fig. 30. Male *Neostictoptera melanographa*, Morne Bleu, Textel Installation, at light, 11.x.1978.

Fig. 31. Male *Neostictoptera nigropuncta*, Morne Bleu, Textel Installation, at light, 29.iii.1979.

Fig. 32. Male *Neostictoptera nigropuncta*, nr. Mason Hall, 23.vii.2023, C. Mejias [iNaturalist 174609667]; ©, under CC-BY-NC.

(M.J.W. Cock) [MJWC] (Fig. 31)
TOBAGO, Cuffie River Nature Resort: ? 29.viii.2023 (R. Deo photo) [iNaturalist 180896852]
TOBAGO, Englishman's Bay, at light: ? 3.vii.2022 (M. Gibson photo) [iNaturalist 124669073]
TOBAGO, nr. Mason Hall, 11.23 –60.70, at light: ?♂ 23.vii.2023 (C. Mejias photo) [iNaturalist 174609667] (Fig. 32); ? 25.vii.2023 (C. Meijias photo) [iNaturalist 174960885]; ? 16.viii.2023 (C. Mejias photo) [iNaturalist 178774140]

***Rhabdotina* Hampson 1926**

Type species: *Rhabdotina vittifera* Hampson, 1926, a synonym of *R. phoenicias* (Hampson, 1918). The family and subfamily placement of this genus does not seem to have been addressed since Zahiri *et al*. (2011) restructured the Noctuoidea. There are no public DNA barcode sequences of this genus in BOLD. Hampson (1918) originally described *R. phoenicias* in the genus *Casandria*. Poole (1989) transferred most members of this genus to *Collomena*. Accordingly, pending formal investigation, I treat this genus as belonging in Collomeninae. I have located no food plant records for this genus.

***Rhabdotina phoenicias* Hampson, 1918**

Fig. 33.
OD: Hampson 1918: *Cassandria* [sic] *phoenicias*, TL Panama
Historical notes. Identified by comparison with type (NHMUK, ♀ Panama) and type of *vittifera* Hampson (NHMUK, ♂ Venezuela, a synonym) and NHMUK series.
Taxonomic issues. There are no public DNA barcodes in BOLD.
Identification. I have seen no females from Trinidad. Within the Nolidae of Trinidad, this is a distinctive species, with relatively short, dark, broad wings. However, there are superficially similar species of Noctuidae and Erebidae which can be distinguished by comparing the detailed markings: dark colouring and obscure markings of the dorsal forewing, including the paler basal area and postmedial areas, paler line on dorsum just distal to basal area, white triangle on the costa before apex; uniformly brown dorsal hindwing with paler cilia; ventral forewing uniformly brown apart from a pale arc on costa at the apex and two pale notches basal to this, ventral hindwing with costa and cilia pale.
Status in Trinidad. A rare species with three scattered records.
Caparo: ?♂ xii.1905 (S.M. Klages) [NHMUK]
Curepe, BLT: ♂ 23.1-10.ii.1982 (F.D. Bennett) [MJWC]
St Benedict's, MVL: ♂ 26.v.1981 (M.J.W. Cock) [MJWC] (Fig. 33)

Subfamily Eligminae Mell, 1943

Hampson (1912) treated this subfamily as part of Sarrothripinae (Noctuidae). The long, thin, forward-directed labial palps are characteristic of this subfamily and should provide a useful pointer for its recognition. At rest, the wings are held more or less flat against the substrate, but covering the abdomen (Figs. 36, 41, 43, 46).

Fig. 33. Male *Rhabdotina phoenicias*, St Benedict's, MVL, 26.v.1981.

***Elaeognatha* Hampson**
Type species: *Elaeognatha argyritis* Hampson, TL Panama. Janzen and Hallwachs (2022) include food plant records for this genus from Clusiaceae and Ericaceae.

***Elaeognatha cacaonis* Druce, 1910**
Fig. 34.
OD: Druce (1910): *Elaeognatha cacaonis*, TL Trinidad.
TT: *Elaeognatha cacaonis* Druce: Druce (1910)
Historical notes. Although this species was described from Trinidad, it was not included in Kaye and Lamont's (1927) catalogue. Identified by comparison with type (NHMUK ♀, Trinidad), which is the only specimen seen in NHMUK.
Taxonomic issues. No public DNA barcodes in BOLD.
Identification. This is a mottled and lined dark species, with patches of yellowish green basally and at about midway in space 1B (Cu_2-2A). *Iscadia producta* (Fig5. 47–48) is similar, but there is a pale basal patch, a pale < on the dorsum at about three-quarters and an irregular pale subterminal line. The sexes are similar.
Status in Trinidad. Rare, only in forested areas.
Arima Valley, Simla, MVL: ♂ 6.viii.1982 (M.J.W. Cock) [MJWC, genitalia 1172]
Caparo: ♀ (type) (F. Birch) [NHMUK]
Morne Bleu, Textel Installation, at light: ♂ 3.vii.1978 (M.J.W. Cock) [MJWC] (Fig. 34)

***Iscadia* Walker 1857**
Type species: *Iscadia aperta* Walker, TL Dominican Republic. As set out by Poole (1989) this genus now includes disparate elements, such that the genus will almost certainly need to be split up. *Gadirtha* Walker, 1858 and *Sebagena* Walker, 1865, amongst others are currently synonyms that appear in the Trinidad literature, which may merit revalidation.

***Iscadia aperta* Walker, 1857 complex**
Figs. 35–36.
Walker (1857): *Iscadia aperta*, TL Dominican Republic.
Historical notes. Identified by comparison with NHMUK series.
Taxonomic issues. There are several BINs in BOLD identified as, or resembling *I. aperta*: BOLD:AAE1952 (USA, Texas), BOLD:AAH5623 (USA, Arizona), BOLD:AAE1951 (Costa Rica) and as *Iscadia* sp. BOLD:AAI2783 (Costa Rica), and BOLD:ACY7495 (French Guiana, unspread). More work is needed to clarify these and establish which if any is the true *I. aperta* from the Dominican Republic.
Identification. The forewing of this species somewhat resembles those of *Collomena chirica* (Figs. 11–12) and *C. metaphaea* (Figs. 13–16), but this is a larger species, with narrower wings and the hindwing is pearly white apart from the dark margin. I have not seen the male from Trinidad for

Fig. 34. Male *Elaeognatha cacaonis*, Morne Bleu, Textel Installation, at light, 3.vii.1978.

Fig. 35. Female *Iscadia aperta* complex, Curepe, MVL, 22–31.v.1982.

Fig. 36. Male(?) *Iscadia aperta* complex, South Oropouche, 23.xi.2022, T.P. Maharaj [iNaturalist 142711371]; ©, under CC-BY-NC.

certain, but judging from photos in BOLD it is darker, but still with the pearly hindwing, thus suggesting that Tarran Maharaj's photo (Fig. 36) is of a male.

Status in Trinidad. Rare – just four records from Curepe, and one from South Oropouche.

Curepe, MVL: ? 17.ix.1978 (M.J.W. Cock) [NHMUK, TL-799]; ♀ 20.i.1980 (M.J.W. Cock) [MJWC]; ♀ 5.ii.1980 (M.J.W. Cock) [UWIZM CABI.3477]; ♀ 22-31.v.1982 (M.J.W. Cock) [MJWC, TL-799] (Fig. 35)

South Oropouche, Mon Desir, at light: ?♂ 23.xi.2022 (T.P. Maharaj) [iNaturalist 142711371, 142737917] (Fig. 36)

***Iscadia argentea* (Walker, 1869)**

Figs. 37–38.

OD: Walker (1869): *Libunca argentea*, TL Honduras.

TT: *Sebagena argentea* (Walker): Kaye and Lamont (1927).

Historical notes. Kaye and Lamont (1927) recorded this species from Trinidad as *Sebagena argentea*, based on a specimen collected by F.W. Jackson. This specimen was examined in NHMUK. My identification is based on a comparison with the type (NHMUK ♀, Honduras) and NHMUK series.

Taxonomic issues. Material identified as *I. argentea* appears in two BINs in BOLD: BOLD:AAI2764 from Costa Rica and French Guiana and BOLD:ABZ0458 from French Guiana. The former probably represents the true *I. argentea* given the Honduras type locality. Trinidad material may belong to either BIN (or both), so is provisionally referred to as *I. argentea*, pending the availability of DNA barcodes from Trinidad and further research.

Identification. This is a distinctive species, grey-brown with green tints on the dorsum half of the forewing and variably dark brown on the costa half. The most distinctive feature is the heavy black streak from the base of the costa to midway in space 1B (Cu_2-2A). The sexes are similar.

Biology in Trinidad. No information for Trinidad, but Janzen and Hallwachs (2022) reared this species (BOLD:AAI2764) from Clusiaceae (*Clusia*).

Status in Trinidad. An occasional species in forested areas.

Arima Blanchisseuse Road, milestone 9.75, MVL: ♂ 21.ix.1982 (M.J.W. Cock) [MJWC] (Fig. 37)

Fig. 37. Male *Iscadia argentea*, Arima Blanchisseuse Road, milestone 9.75, MVL, 21.ix.1982.

Fig. 38. Female *Iscadia argentea*, Arima Valley, Simla, MVL, 28.i.1981.

Arima Blanchisseuse Road, milestone 10.5, MVL: ♂ 6.ix.1982 (M.J.W. Cock) [MJWC]
Arima Valley, Simla, MVL: ♀ 28.i.1981 (M.J.W. Cock) [MJWC] (Fig. 38); 2♂ 18.x.1982 (M.J.W. Cock) [UWIZM CABI.7283, 7284]
Caparo: ♂ xii.1905 (S.M. Klages) [NHMUK]
Trinidad: ♀ (F.W. Jackson) [NHMUK]

***Iscadia candezei* (Druce, 1898)**
Figs. 39–41.
OD: Druce (1898): *Gadirtha candezei*, TL Guatemala.
Historical notes. Identified by comparison with the NHMUK series.
Taxonomic issues. Druce (1881–1900) described this species in *Gadirtha*, which is currently a synonym of *Iscadia*, but likely to be a valid genus. This species seems to be BOLD:ABZ6209 with sequences from Costa Rica and French Guiana.
Identification. This is the largest member of the subfamily in Trinidad. It is striated ochreous brown with a dark basal patch and variably overlaid with light grey. The sexes are similar, although the female is larger.
Status in Trinidad. An uncommon species from both forested and suburban habitats.
Arima Valley, Simla, MVL: ♀ 6.viii.1982 (M.J.W. Cock) [MJWC] (Fig. 40)
Curepe, at light: ♂ 15.i.1980 (M.J.W. Cock) [MJWC] (Fig. 39)
Curepe, MVL: ?♂ 11.viii.1978 (M.J.W. Cock) [NHMUK, TL-797]; ♂ 19.x.1979 (M.J.W. Cock) [MJWC, TL-797]
Guayaguayare, Rushville: ? 21.iii.2023 (R. Deo photo)

Fig. 41. *Iscadia candezei*, Penal, at light, 31.x.2010, K. Sookdeo; ©, with permission.

[iNaturalist 152122547]
Penal: ? 31.x.2010 (K. Sookdeo photo, moths 18) (Fig. 41)

***Iscadia diopis* Hampson, 1905**
Figs. 42–43.
OD: Hampson (1905): *Iscadia diopis*, TL Costa Rica.
TT: *Iscadia diopis* Hampson: Hampson (1912)
Historical notes. Hampson (1912) listed a specimen from Caparo (=Cuparo) in NHMUK. I identified my specimen by comparison with type (NHMUK, ♀ Costa Rica) and NHMUK series.

Fig. 39. Male *Iscadia candezei*, Curepe, at light, 15.i.1980.

Fig. 40. Female *Iscadia candezei*, Arima Valley, Simla, MVL, 6.viii.1982.

Fig. 42. Male *Iscadia diopis*, Cumaca Road, 4.6 miles, MVL, 21 x. 1982.

Fig. 43. *Iscadia diopis*, Asa Wright Nature Centre, 22.iii.2015, S. Nanz; ©, with permission.

Taxonomic issues. This species is BOLD:AAI2767, based on material from Costa Rica (the type locality) and Panama. A DNA barcode from Trinidad would be useful to compare.
Identification. The markings in my only specimen are difficult to make out (Fig. 42), but those of a photograph by Steve Nanz (Fig. 43) are much clearer. Judging by the material in BOLD:AAI2767, this is a variable species, but note the angled grey basal area, dark submedial spot, undulating double postmedial line, submarginal streaks, etc. Sexes are similar.
Biology in Trinidad. There are no records from Trinidad, but Janzen and Hallwachs (2022) reared this species from Myristaceae (*Virola*).
Status in Trinidad. A rare species in forested areas.
Asa Wright Nature Centre: ? 22.iii.2015 (S. Nanz, photo 3223) (Fig. 43)
Caparo: ♀ xii.1905 (S.M. Klages) [NHMUK]; (S.M. Klages) [NHMUK]
Cumaca Road, 4.6 miles, MVL: ♂ 21 x. 1982 (M.J.W. Cock) [MJWC] (Fig. 42)

***Iscadia furcifera* (Walker, 1865)**
Figs. 44–46.
OD: Walker (1865): *Sebagena furcifera*, TL Colombia.
TT: *Iscadia variegata* Druce: Druce (1910) TL Trinidad, Hampson (1912) [synonym]
Sebagena furcifera Walker: Kaye and Lamont (1927)
Historical notes. Druce (1910) described *Iscadia variegata* from Trinidad (Caparo), Colombia and Peru, but the specimen treated as 'type' in NHMUK is the first of these, and should be designated as the lectotype. Poole (1989) made *I. variegata* a synonym of *I. furcifera*. Kaye and Lamont (1927) did not include *I. variegata* in their catalogue, but they did include a female specimen collected by F.W. Jackson as *I. furcifera*; this specimen is now in NHMUK. Trinidad specimens were identified by comparison with the type of *I. furcifera* (NHMUK ♀, Colombia), type of *I. variegata* Druce (NHMUK ♂, Trinidad) and NHMUK series. The first records from Tobago are reported here.
Taxonomic issues. Material identified as *I. variegata* appears in three BINs in BOLD: BOLD:ACE4375 (Costa Rica), BOLD:AAB3432 (Costa Rica, Panama), BOLD:ACE4374 (French Guiana, Venezuela). It is not clear which of these is likely to be the true *I. furcifera* described from Colombia. None of this material is a very close match to my Trinidad male specimens (Fig. 44), so it is possible that *I. variegata* may prove to be a valid name for the Trinidad population. A DNA barcode from Trinidad or Tobago would be helpful to clarify the situation.
Identification. This species is sexually dimorphic. The contrasting dark and pale markings of the dorsal forewing of the male are distinctive (Fig. 44). The details of the

Fig. 44. Male *Iscadia furcifera*, Morne Bleu, Textel Installation, at light, 20.ix.1978.

Fig. 45. Female *Iscadia furcifera*, Trinidad (F.W. Jackson) [NHMUK]; ©, The Trustees of the Natural History Museum, London, made available under Creative Commons License 4.0 https://creativecommons.org/licenses/by/4.0/.

Fig. 46. Female *Iscadia furcifera*, Grand Riviere, at light, 7.ii.2016, K. Sookdeo; ©, with permission.

female markings are similar, but they lack the extensive dark areas (Fig. 45).

Biology in Trinidad. In Costa Rica, Janzen and Hallwachs (2022) have reared members of this complex from Clusiaceae (*Clusia*, *Chrysochlamys*, *Garcinia*).

Status in Trinidad & Tobago. An uncommon species in Trinidad found principally in forested areas, but newly recorded from Tobago, based on several photographic records.

Caparo: ♂ (type) [NHMUK]

Curepe, MVL: ♂ 24.x.1978 (M.J.W. Cock) [NHMUK, TL-297]

Grand Riviere, at light: ♀ 7.ii.2016 (K. Sookdeo photo, moths 84) (Fig. 45)

Morne Bleu, Textel Installation, at light: ♂ 20.ix.1978 (M.J.W. Cock) [MJWC, genitalia 1173] (Fig. 44); ♂ 20.xii.1978 (M.J.W. Cock) [MJWC, TL-297]

Trinidad: ♀ (F.W. Jackson) [NHMUK]

TOBAGO, Cuffie River Nature Resort: ♂ 29.viii.2023 (R. Deo photo) [iNaturalist 180896697]

TOBAGO, Englishman's Bay, at light: ♀ 8.xii.2023 (M. Kelly photo 4535)

TOBAGO, nr. Mason Hall, 11.23 –60.70, at light: ♂ 25.vii.2023 (C. Meijias photo) [iNaturalist 174974410]; ♂ 1.viii.2023 (C. Meijias photo) [iNaturalist 176215510]; ♀ 13.viii.2023 (C. Meijias photo) [iNaturalist 178288845]; ♂ 14.viii.2023 (C. Mejias photo) [iNaturalist 178479259]; ♂ 9.ix.2023 (C. Mejias photo) [iNaturalist 182578600]; ♂ 16.xii.2023 (C. Mejias photo) [iNaturalist 194158201]

***Iscadia producta* (Dognin, 1900) complex**

Figs. 47–48.

OD: Dognin (1900): ?*Simplicia producta*, TL Colombia.

Historical notes. I initially identified this species as *I. producta* by comparison with the NHMUK series. Examination of a photo of the type (USNM, ♂ Colombia, Popayan) shows this is a species with the basal area of the hindwing extensively pale, unlike Trinidad specimens.

Taxonomic issues. This seems to be a complex of species. BOLD:AAA8510 from Costa Rica, Venezuela, and French Guiana comprises mostly unidentified material, although two are identified as *I. producta*, but it does closely resemble this species. Further, the BIN comprises two very distinct clusters, one with sequences from Costa Rica, Venezuela

Fig. 47. Male *Iscadia producta* complex, Parrylands Oilfield, MVL, 13.xi.1980.

Fig. 48. Female *Iscadia producta* complex, Parrylands Oilfield, MVL, 25.vii.1981.

and French Guiana (*Iscadia* Poole02DHJ02), and the other with many sequences from Costa Rica only (*Iscadia* Poole02DHJ03). The Trinidad population is likely to belong to the first cluster, and DNA barcodes from Trinidad would be useful to test this. Both clusters of BOLD:AAA8510 and the nearest neighbour (*Iscadia* Poole01, BOLD:AAD4393, Costa Rica only) are similar, and have uniformly dark hindwings, as opposed to the type of *I. producta* which as noted has the basal area of the hindwing pale, a character also seen in other species of this group (H. Thony pers. comm.). Hence, for now, I refer to this species as *I. producta* complex.

Biology in Trinidad. Janzen and Hallwachs (2022) reared '*I. producta*' more than 100 times from Hypericaceae (*Vismia* spp.), although I am not clear how this identification relates to the two clusters in BOLD:AAA8510. This is a likely food plant in Trinidad.

Status in Trinidad. An uncommon species from forested areas.

Cumaca Road, 0.5 miles, MVL: ♂ 27.x.1980 (M.J.W. Cock) [MJWC, TL-955, genitalia 1171]

Parrylands Oilfield, MVL: ♂ 13.xi.1980 (M.J.W. Cock) [MJWC] (Fig. 47); 2♀, ? 25.vii.1981 (M.J.W. Cock) [2♀ MJWC, ? NHMUK, TL-955] (Fig. 48)

Subfamily Nolinae Bruand, 1846

In UK usage, species of Nolinae are mostly referred to as different types of 'black arches', but this is not ideal since the 'black arches' moth itself is *Lymantria monacha* L. (Erebidae, Lymantriinae). Accordingly, the North American term tuft moths is more appropriate as indeed Trinidad species do have scale tufts on their forewings.

Hampson (1900), in his global treatment, and Draudt (1918–1919), in his treatment of the America fauna, included Nolinae as a subfamily of Arctiinae, but neither included any records from Trinidad. Kaye and Lamont (1927) included one misidentified species of Nolinae from Trinidad (see *Nola mesographa*). Cock and Kelly (2020), Cock *et al*. (2022) and Cock *et al*. (2023) added four species from both Trinidad and Tobago, but the remaining seven species treated here are all new records for Trinidad.

The Trinidad species of Nolinae are currently treated in two genera *Meganola* and *Nola*. Hampson (1900) divided the genera of Nolinae mostly based on forewing venation. Thus, *Nola* was in a group with forewing vein 9 absent, and 10 stalked with 7 and 8, whereas *Meganola* (Hampson's *Roeselia*) has veins 9 and 10 present. For our purposes, the division is perhaps not useful. All Trinidad Nolinae are small and predominantly white and/or grey with dark markings. They rest with their wings flat and the dorsum of the forewings adjacent to each other so as to form a triangular shape (Figs. 51, 58, 63, 66, 73, 74). There is little sexual dimorphism, but females are slightly larger and have simple antennae, while those of males are pectinate, sometimes with very long pectens (plumose), apart from *N. cereella* which has simple ciliated antennae.

***Meganola* Dyar, 1898**
Type species: *Meganola conspicua* Dyar, TL USA. Although most species placed in *Meganola* here were formerly placed in *Roeselia*, the generic placement follows Poole (1989).

***Meganola bifiliferata* (Walker, 1862)**
Figs. 49–51.
OD: Walker 1862: *Lobophora bifiliferata*, TL Brazil.
TT: *Meganola bifiliferata* (Walker): Cock *et al*. (2022)

Historical notes. Cock *et al*. (2022) recorded this species from Tobago, indicating that it also occurs in Trinidad.
Taxonomic issues. Walker (1862) described this species from Brazil 'In Mr. Saunders' collection', which usually means in NHMUK. However, Hampson (1900) indicated that the type is in OUMNH (2023b). Material from French Guiana identified as this species comprises BIN BOLD:AAA0848.
Identification. This whitish species has dark lines and

Fig. 49. Male *Meganola bifiliferata*, Arima Valley, Simla, MVL, 9.x.1982.

Fig. 50. Female *Meganola bifiliferata*, Arima Valley, Simla, MVL, 6.viii.1982.

Fig. 51. *Meganola bifiliferata*, Grand Riviere, 16.v.2015 , K. Sookdeo; ©, with permission.

is distinctive due to a broad, irregular dark brown border on the forewing costa from the base to about three-fifths, widest distally. The male has strongly pectinate antennae.
Biology in Trinidad. There are several food plant records from *Solanum hayesii* (Solanaceae) in Costa Rica (Janzen and Hallwachs 2022), but no information from Trinidad.
Status in Trinidad & Tobago. An occasional and widespread species, almost entirely recorded from forested areas.
Arima Blanchisseuse Road, milestone 9.75, MVL: ♂ 21.ix.1982 (M.J.W. Cock) [MJWC]
Arima Valley, Simla, MVL: ♀ 6.viii.1982 (M.J.W. Cock) [MJWC] (Fig. 50); ♂ 9.x.1982 (M.J.W. Cock) [MJWC] (Fig. 49)
Brigand Hill, lighthouse security MVL lights: ♀ 17.i.2004 (M.J.W. Cock) [MJWC

Caparo: ♀ xii.1905 (S.M. Klages) [NHMUK]
Curepe, MVL: ♂ 23-28.ix.1989 (M.J.W. Cock) [MJWC]
Grand Riviere: ? 16.v.2015 (K. Sookdeo photo, moths 81) (Fig. 51)
Morne Bleu Ridge, 10.73 -61.26: ? 13.v.2023 (R. Deo photo) [iNaturalist 161716588]
Rio Claro-Guayaguayare Road, milestone 6.5, MVL: ♀ 30.ix.1978 (M.J.W. Cock) [MJWC]
TOBAGO, above Englishman's Bay, at light: ? 14.i.2022 (M. Kelly photo 0960)
TOBAGO, nr. Mason Hall, 11.23 –60.70, at light: ? 22.vii.2023 (C. Mejias photo) [iNaturalist 174385715]; ? 3.xii.2023 (C. Mejias photo) [iNaturalist 192996907]

***Meganola deglupta* (Draudt, 1918)**
Fig. 52.
OD: Draudt 1918: *Roeselia deglupta*, TL Bolivia.
Historical notes. Identified by comparison with the unique type (♀ Bolivia) in NHMUK.
Taxonomic issues. No public DNA barcodes in BOLD. Given that the type locality is Bolivia, this identification may be regarded as provisional.
Identification. This is a smaller species, with the forewing white in the dorsum third and brown in the costal two-thirds, a post medial curved white band and an oblique pale line before the apex. The male has pectinate antennae.
Status in Trinidad. Just one record from Lalaja Ridge.
Lalaja Ridge, MVL: ♂ 3.ix.1982 (M.J.W. Cock) [MJWC] (Fig. 52)

***Meganola leucogramma* (Dognin, 1912)**
Figs. 53–54.
OD: Dognin 1912: *Roeselia leucogramma*, TL French Guiana
Historical notes. Identified by comparison with the type (USNM, ♂ French Guiana) and allotype (USNM, ♀ French Guiana).
Taxonomic issues. No public DNA barcodes in BOLD.
Identification. This is one of the larger species, the forewing pale with irregular blackish and brown bands, unlike any other Trinidad Nolinae. Males have strongly pectinate antennae.
Status in Trinidad. A rare species with just three records, which suggest this species is more likely to be encountered in forested areas.
Cumaca Road, 4.6 miles, MVL: ♂ 18.x.1982 (M.J.W. Cock) [MJWC] Fig. 53)
Curepe, MVL: ♂ 22-25.i.1981 (M.J.W. Cock) [MJWC]
Valencia Forest, MVL: ♀ 5.viii.1981 (M.J.W. Cock) [MJWC] (Fig. 54)

Fig. 52. Male *Meganola deglupta*, Lalaja Ridge, MVL, 3.ix.1982.

Fig. 53. Male *Meganola leucogramma*, Cumaca Road, 4.6 miles, MVL, 18.x.1982.

Fig. 54. Female *Meganola leucogramma*, Valencia Forest, MVL, 5.viii.1981.

***Meganola perangulata* (Hampson, 1900)**
Figs. 55–56.
OD: Hampson 1900: *Roeselia perangulata*, TL Brazil, RJ.
Historical notes. Identified by comparison with the type (♀ Rio de Janeiro) and NHMUK series.
Taxonomic issues. No public DNA barcodes in BOLD. Given that the type locality is southern Brazil, this identification may be considered provisional.
Identification. This is a larger species, grey-white with a strongly angled post medial band, sharply defined distally, an irregular subterminal line and the termen with dark shading. The male antennae are pectinate.
Status in Trinidad. An uncommon species from forested areas.
Arima Valley, Simla, MVL: ♂ 29.i.1981 (M.J.W. Cock) [MJWC] (Fig. 55); ♀ 18.x.1982 (M.J.W. Cock) [UWIZM CABI.8040]
Cumaca Road, 4.6 miles, MVL: ♀ 21.x.1982 (M.J.W. Cock) [MJWC]
Lalaja Ridge, MVL: ♀ 3.ix.1982 (M.J.W. Cock) [MJWC]
Sangre Grande, Sans Souci Estate, MVL: ♀ 8.viii.1982 (M.J.W. Cock) [MJWC] (Fig. 56)

Fig. 55. Male *Meganola perangulata*, Arima Valley, Simla, MVL, 29.i.1981.

Fig. 56. Female *Meganola perangulata*, Sangre Grande, Sans Souci Estate, MVL, 8.viii.1982.

***Meganola pernitens* (Schaus, 1911)**
Figs. 57–58.
OD: Schaus 1911: *Roeselia pernitens*, TL Costa Rica.
TT: *Meganola pernitens* (Schaus): Cock and Kelly (2020)
Historical notes. Cock and Kelly (2020) reported this species from Tobago, stating that it also occurs in Trinidad. Identified by comparison with the type (USNM, ♂ Costa Rica).
Taxonomic issues. Material from Costa Rica identified as *M. pernitens* appears as BOLD:ADA3995. When available, DNA barcodes from Trinidad should be used to test this identification.
Identification. A smaller species, forewing white, with distinctive black spots on the costa at the base and at mid costa, and the termen shaded brown-grey. Male antennae pectinate.

Fig. 57. Male *Meganola pernitens*, Arima Valley, Simla, MVL, 7.viii.1981.

Fig. 58. *Meganola pernitens*, Inniss Field, at light, 21.v.2022, R. Deo (iNaturalist observation c); ©, with permission. The scale tufts on the wings are visible as slight bumps.

Status in Trinidad & Tobago. An occasional species in forested areas.
Arima Valley, Simla, MVL: ♂ 7.viii.1981 (M.J.W. Cock) [MJWC] (Fig. 57); ♂ 12.ii.1982 (M.J.W. Cock) [MJWC]; ♂ 6.viii.1982 (M.J.W. Cock) [UWIZM CABI.8040]
Arima Valley, Verdant Vale, at light: ? 21.ix.2022 (S. Tran photo) [iNaturalist 135999481]
Inniss Field, 10.1687 -61.264, at light: ? 21.v.2022 (R. Deo photo) [iNaturalist 118270624] (Fig. 58)
Morne Bleu, Textel Installation, at light: ♂ 5.ix.1978 (M.J.W. Cock) [MJWC]
TOBAGO, Englishman's Bay, 11.28 -60.68: ? 11.i.2022 (A. Deacon photo) [iNaturalist 104824781]
TOBAGO, Englishman's Bay, at light: ? 7.i.2020 (M. Kelly photo 0798); ? 22.vii.2022 (M. Gibson photo) [iNaturalist 127440706]; ? 17.xi.2022 (M. Kelly photo 5485)
TOBAGO, nr. Mason Hall, 11.23 –60.70, at light: ? 6.viii.2023 (C. Mejias photo) [iNaturalist 177106656]; ? 11.viii.2023 (C. Mejias photo) [iNaturalist 177915211

***Meganola polyodonta* Schaus, 1905**
Figs. 59–60.
OD: Schaus 1905: *Nola polyodonta*, TL. French Guiana, Mexico.
Historical notes. Identified by comparison with the type (USNM, ♂ French Guiana) and USNM series.
Taxonomic issues. No public barcodes in BOLD. As this species was described from French Guiana and Mexico, a lectotype should be designated.
Identification. A larger species, grey-white with black line markings, but unlike *M. bifiliferata*, no dark brown area on the costa. Male antennae are strongly pectinate.
Status in Trinidad. An occasional species in forested areas.
Arima Blanchisseuse Road, milestone 5, at light: ♂ 2.xi.1978 (M.J.W. Cock) [MJWC]
Arima Valley, Simla, MVL: 2♂, ♀ 30.vii.1981 (M.J.W. Cock) [♀ MJWC; 2♂ UWIZM CABI.8045, 8047] (Fig. 60); 5♂ 18.x.1982 (M.J.W. Cock) [2♂ MJWC; 3♂ UWIZM CABI.8046, 8048, 8049] (Fig. 59)
Parrylands Oilfield, MVL: ♀ 13.xi.1980 (M.J.W. Cock) [MJWC]
Rio Claro-Guayaguayare Road, milestone 6.5, MVL: ♂ 30.ix.1978 (M.J.W. Cock) [MJWC]

Fig. 59. Male *Meganola polyodonta*, Arima Valley, Simla, MVL, 18.x.1982.

Fig. 60. Female *Meganola polyodonta*, Arima Valley, Simla, MVL, 30.vii.1981.

***Nola* Leach, 1815**

Type species *palliola* Denis & Schiffermüller, TL Austria. *Roeselia* Hübner 1825 is a junior synonym, having the same type species. Poole (1989) transfers the species that had been placed in *Roeselia* to *Meganola*.

***Nola apera* Druce, 1897**

Figs. 61–63.

OD: Druce 1897: *Nola apera*, TL Mexico.

Historical notes. Identified by comparison with the type (♀ Jalapa) and NHMUK series.

Taxonomic issues. No public barcodes in BOLD. The type is not in very good condition and this identification is questionable, especially given the distance from the type locality, Mexico. However, Trinidad material is a good match with some of the NHMUK series, although this could prove to be a mixture of species. Given that the type locality is Mexico, confirmation based on genitalia and/or DNA barcodes is needed since this is a widely distributed species.

Identification. This is a small species, grey-white with premedial, postmedial and subterminal rows of dark dots. The costa is narrowly and irregularly darker in the basal two-thirds and there is a spot in the cell. A rather worn living specimen tentatively identified as this species is shown as Fig. 63. Male antennae with extremely long pectens (plumose).

Status in Trinidad. An occasional species in forested and suburban areas.

Arima Valley, Asa Wright Nature Centre, at light: ? 20.iii.2007 (S. Daniel photo) [iNaturalist 70125462]

Fig. 61. Male *Nola apera*, Curepe, MVL, 2-8.xi.1981.

Fig. 62. Female *Nola apera*, Morne Bleu, Textel Installation, at light, 7.i.1979.

Fig. 63. Male *Nola apera* (?), Asa Wright Nature Centre, 22.iii.2015, S. Nanz; © with permission).

Arima Valley, Simla, MVL: ♀ 6.viii.1982 (M.J.W. Cock) [UWIZM CABI.8044]
Curepe, MVL: ♀ 2.i.1979 (M.J.W. Cock) [UWIZM CABI.8043]; ♂ 2-8.xi.1981 (M.J.W. Cock) [MJWC] (Fig. 61)
Morne Bleu, Textel Installation, at light: 2♀ 7.i.1979 (M.J.W. Cock) [MJWC] (Fig. 62); 2♀ 2.iii.1981 (M.J.W. Cock) [MJWC]
Provisionally: Arima Valley, Asa Wright Nature Centre: ? 22.iii.2015 (S. Nanz photo 3442) (Fig. 63)

***Nola biconica* Hampson, 1907**
Fig. 64.
OD: Hampson 1907: *Nola biconica*, TL Brazil (Organ Mts, Tijuca)
Historical notes. Identified by comparison with the type (♀ Rio de Janeiro) and NHMUK series.
Taxonomic issues. No public barcodes in BOLD. Hampson (1907) described this species from Panama, Guyana and Brazil, but designated a female from near Rio de Janeiro as the type.
Identification. This species is similar to *N. apera*, but distinguished by a strong triangular mark on the forewing costa just over midway. Male antennae strongly pectinate, but less obviously so than *N. apera*.
Status in Trinidad. An occasional species in forested areas.
Arima Valley, Verdant Vale, at light: ? 1.v.2022 (S. Tran photo) [iNaturalist 114521939]
Brigand Hill, lighthouse security MVL lights: ♂ 28.iii.2003 (M.J.W. Cock) [MJWC]
Morne Bleu, Textel Installation, at light: ♂ 5.ix.1978 (M.J.W. Cock) [MJWC]
South Oropouche, Mon Desir, at light: ? 1.ii.2023 (T.P. Maharaj photo) [iNaturalist 147878403]
Valencia Forest, MVL: ♂ 5.viii.1981 (M.J.W. Cock) [MJWC] (Fig. 64)

Fig. 64. Male *Nola biconica*, Valencia Forest, MVL, 5.viii.1981.

***Nola cereella* (Bosc, [1800])**
Figs. 65–66.
OD: Bosc [1800]: *Alucita cereella*, TL USA, 'Caroline'
Riley 1882: *Nola sorghiella*, TL USA, Alabama and Florida [synonym]
TT: *Nola cereella* (Bosc): Cock *et al*. (2023)
Historical notes. This species was recorded from Trinidad and Tobago by Cock *et al* (2023). My Trinidad specimen was identified as *Celama sorghiella* by comparison with the NHMUK series. Miller and Becker (1989) made *sorghiella* a synonym of *cereella*, and transferred *cereella* to *Nola*.
Taxonomic issues. BOLD:AAA0295 contains material identified as this species from USA and Costa Rica.
Identification. A small species, whitish with the costa irregularly brown, three irregular medial bands, the termen irregularly brown and three dark subterminal spots in spaces 2-4 (Cu_1-Cu_2– M_2-M_3). Male antennae simple, ciliate.
Biology in Trinidad. This species is a known pest of sorghum and other grasses (Reinhard 1937, Hobbs *et al*. 1979) but there is no information on its biology in Trinidad.
Status in Trinidad. Just one record each from Trinidad and Tobago.
Curepe, MVL: ♂ 2.ix.1978 (M.J.W. Cock) [MJWC]
TOBAGO, Englishman's Bay, at light: ? 3.xii.2022 (A. Deacon photo) [iNaturalist 143615149]
Provisional identification: South Oropouche, Mon Desir, at light: ? 1.i..2023 (T.P. Maharaj photo) [iNaturalist 145570508]

***Nola contorta* Dyar, 1914**
Figs. 67–68.
OD: Dyar 1914: *Nola contorta*, TL Panama, Trinidad River.
Historical notes. Identified by comparison with the type (USNM, ♀ Panama).
Taxonomic issues. No public barcodes in BOLD
Identification. This medium-sized species is grey-white with a strong post-medial band marked distally with black dots. The costa has a dark border in the basal quarter, followed by two dark triangular marks mid-costa, which will separate this species from others. Male antennae strongly pectinate.
Status in Trinidad. An uncommon species in forested areas.
Arima Valley, Simla, MVL: ♂ 18.x.1982 (M.J.W. Cock) [MJWC] (Fig. 67)
Cumaca Road, 4.6 miles, MVL: 2♀ 21.x.1982 (M.J.W. Cock) [MJWC] (Fig. 68)

Fig. 65. Male *Nola cereella*, Curepe, MVL, 2.ix.1978.

Fig. 66. *Nola cereella*, Tobago, Englishman's Bay, at light, 3.xii.2022, A. Deacon (iNaturalist observation 143615149); ©, under CC-BY-NC.

***Nola mesographa* Schaus, 1905**
Figs. 69–70.
OD: Schaus 1905: *Nola mesographa*, TL French Guiana.
TT: *Roeselia medioscripta* Schaus: Kaye and Lamont (1927) [misidentification]
Historical notes. Kaye and Lamont (1927) recorded *Meganola medioscruipta* (Schaus) (= *Roeselia medioscripta*) from Trinidad based on a specimen collected at Palmiste by Sir N. Lamont, 27 January 1921. This specimen is a female in NMS, which I have reidentified as *Nola mesographa*. My identification was based on a comparison with the type (USNM, ♂ French Guiana), USNM series and NHMUK series.
Taxonomic issues. There are two BINs in BOLD containing material from French Guiana identified as this species:

Fig. 67. Male *Nola contorta*, Arima Valley, Simla, MVL, 18.x.1982.

Fig. 68. Female *Nola contorta*, Cumaca Road, 4.6 miles, MVL, 21.x.1982.

Fig. 69. Male *Nola mesographa*, Curepe, MVL, 18–22.i.1981.

Fig. 70. Female *Nola mesographa*, Curepe, MVL, 30.viii.1978.

BOLD:AAM8822 and BOLD:ABZ8148. However, the second contains only one unspread specimen which does not appear to match the species treated here as *N. mesographa*, so provisionally this species is expected to align with BOLD:AAM8822.

Identification. A medium sized species, whitish with a dark mark at the base of the costa and a dark medial band, wider on the costa than the dorsum. Male antennae are strongly pectinate.

Status in Trinidad. There have been several records from Curepe, in addition to the original capture at Palmiste.

Curepe, MVL: ♂ 27.viii.1978 (M.J.W. Cock) [UWIZM CABI.8042]; ♀ 30.viii.1978 (M.J.W. Cock) [MJWC] (Fig. 70); ♂ 26.xii.1978 (M.J.W. Cock) [MJWC]; ♂ 20.xii.1979 (M.J.W. Cock) [MJWC]; ♂ 18-22.i.1981 (M.J.W. Cock) [MJWC] (Fig. 69)

Palmiste: ♀ 27.i.1921 [N. Lamont] [NMS, originally curated as *Roeselia medioscripta*]

***Nola perluta* Draudt, 1918**

Figs. 71–73

OD: Draudt 1918: *Nola perluta*, TL Colombia.

TT: *Nola perluta* Draudt: Cock *et al*. (2023).

Historical notes. Cock *et al*. (2023) recorded this species from Trinidad and Tobago. Trinidad specimens were identified by comparison with the type (NHMUK ♂, Colombia) and NHMUK series.

Taxonomic issues. No public DNA barcodes in BOLD.

Fig. 73. Female *Nola perluta*, Tobago, Englishman's Bay, at light, 2.vii.2022, M. Gibson (iNaturalist observation 124491350); ©, after Cock *et al*. (2023). The scale tufts on the wings are visible as slight bumps.

The type lacks the distinctive F spot present in most of the NHMUK series and Trinidad & Tobago material, so it may be that more than one species is involved.

Identification. A small species, whitish, with a dark triangular mark on the costa at about three-fifths, and an adjacent black spot in the cell. This black spot is present in all Trinidad specimens seen, but not in the type, as noted in the last paragraph. Male antennae pectinate.

Status in Trinidad. An uncommon species in forested areas.

Arima Valley, Simla, MVL: ♀ 15.ii.1981 (M.J.W. Cock)

Fig. 71. Male *Nola perluta*, Lalaja Ridge, MVL, 3.ix.1982.

Fig. 72. Female *Nola perluta*, Arima Valley, Simla, MVL, 15.ii.1981.

[MJWC] (Fig. 72); ♀ 7.viii.1981 (M.J.W. Cock) [MJWC] Lalaja Ridge, MVL: ♂ 3.ix.1982 (M.J.W. Cock) [MJWC] (Fig. 71)
TOBAGO, Englishman's Bay, at light: ♀ 2.vii.2022 (M. Gibson photo) [iNaturalist 124491350] (Fig. 72)

***Nola* or *Meganola* sp.**
Fig. 74.
A photograph by Tarran P. Maharaj at South Oropouche shows a Nolinae species, that doesn't match any of those treated above, having three black notches on the forewing costa and a diffuse brown postmedial line (Fig. 74). Draudt (1918–1919) does not appear to treat this species, and at this time I have not been able to compare this photo with a major collection.

Fig. 74. Unidentified Nolinae, South Oropouche, Mon Desir, at light, 2.i.2022, T.P. Maharaj (iNaturalist observation 104238876); ©, under CC-BY-NC.

Subfamily Chloephorinae Stainton, 1859
There are no published records of Chloephorinae from Trinidad or Tobago, but *Garella nilotica* (Rogenhofer) (Tribe Sarrothripini Hampson, 1894) may occur.

***Garella nilotica* (Rogenhofer, 1881)**
OD: Rogenhofer (1881): *Sarothripa nilotica*, TL Egypt.
Historical Notes. The highly variable *Garella nilotica* (= *Characoma nilotica*) is now reported to be pantropical (Becker and Miller 2002), and its range extends across much of North America to the Lesser Antilles, south to Brazil (NAMPG 2022, Zagatti *et al*. 1995–2001). Furthermore, reviewing the old CABI files of insect identifications, I found that in 1962 a specimen stated to be from Trinidad was identified under reference code B367 from ICTA (The Imperial College of Tropical Agriculture) (CABI Collection No. 18144, List No. 1081 (America)). However, although this specimen appears to have been sent back to Trinidad, I have not located it (or two other Lepidoptera identified in the same list) in the ICTA collection now in UWIZM. The implication is that either the material failed to arrive safely in Trinidad, or that the scientist or student who submitted this material retained it rather than deposited it in the ICTA collection. Thus, there is a strong indication that this species occurs in Trinidad, but this needs confirmation with specimens. Figures of the adult moth can be seen in Becker and Miller (2002), NAMPG (2022), and Zagatti *et al*. (1995–2001).

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