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Annotated list of the Tortricidae (Lepidoptera) of Honduras

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Abstract

We present an annotated list of 109 Tortricidae from Honduras. Seventy of them represent described species whereas the remaining 39 were unidentified or undescribed specimens identified only to genus. All but 12 of these taxa are reported from Honduras for the first time. The list is based on personal collecting experiences, examination of institutional research collections, a review of relevant literature, and images posted on iNaturalist. Where known, we provide summaries of host plants and relevant geographic distributions.

Key words: Central America, Costa Rica, hostplants

Introduction

It should come as no surprise that our knowledge of the tortricid fauna of Central America has grown dramatically since Walsingham's (1913–1914) contributions to the *Biologia Centrali-Americana* over 100 years ago. The number of species recorded from Costa Rica alone has risen from about 15 to nearly 400 (Ziegler 2023), and Guatemala's recognized tortricid fauna has grown from 45 to nearly 100 (JWB, unpublished). However, few other countries in the region have received comparable attention. For example, in a list of the Lepidoptera of Honduras, Miller *et al.* (2012) recorded only 12 species of Tortricidae, probably less than 5% of the actual fauna. They did note that microlepidoptera were "relatively unsampled and unstudied" in that country. The same is true of Nicaragua, where Maes (1999) reported only eight species of Tortricidae.

To begin to remedy shortcomings in our understanding of the tortricid fauna of Central America, we focused on compiling an updated list of this family for Honduras based on personal collecting experiences, the examination of institutional research collections, a review of relevant literature, and a survey of images posted on iNaturalist.

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Material and Methods

Study area

The Republic of Honduras is in Central America, bordered on the north by the Caribbean Sea, the northwest by Guatemala, on the southwest by El Salvador, on the south by the Gulf of Fonseca, and on the east by Nicaragua (see maps in Monroe *et al.* 1967, Lehman, 1971). Carr (1950), Monroe *et al.* (1967), Lehman (1971), Passoa (1983), Ratcliffe and Cave (2006), Samayoa & Cave (2008), and Miller *et al.* (2012) all discussed the biotic features of the country or gave maps of collecting localities for Lepidoptera, many of which are cited in the list below. Carr (1950) divided Honduras into three bioregions: the Caribbean lowlands on the North Coast, the interior Serranía habitats, and the southern Pacific lowlands. Miller *et al.* (2012) provided a map with the various life zones and forest types corresponding to these divisions. Terrestrial habitat types are diverse and range from costal mangroves and lowland savannas, to middle elevation rain forests and mountain ranges with pine and oak trees, to high elevation cloud forests, some reaching 2500 m in elevation (Carr 1950, Miller *et al.* 2012).

Owing to its rich biota, Honduras, as part of Mesoamerica, is considered a biodiversity hotspot—it hosts more than 6,000 species of vascular plants, about 370 species of reptiles and amphibians, more than 700 species of birds, and over 150 species of mammals (over 110 species of bats alone) (https://dicf.unepgrid.ch/honduras/biodiversity). The Rio Platano Biosphere Reserve, located in the northeastern portion the country, was added to the UNESCO list of World Heritage Sites in 1982 (https://en.wikipedia.org/wiki/R%C3%ADo_Pl%C3%A1tano_Biosphere_Reserve).

Data sources of Tortricidae

In 1979–1981 the first author collected Lepidoptera during a project on insects associated with basic grains (Passoa 1983) and later during a project on pyraloid pests (Passoa 1985). Although tortricids were not the focus of either project, limited rearing and blacklight sampling for moths in general were conducted during these projects. Some specimens collected during this period were labelled either as "Comayagua" or "Comayagua Recursos Station" based on the availability of printed labels at the time. They were from a light trap set up at the Estación de Recursos Naturales (Natural Resources Station) outside the city of Comayagua. Similarly, collections were made on the campus of the Escuela Agrícola Panamericana at El Zamorano. Specimens from the latter were labeled as either EAP, El Zamorano, or both, depending on the availability of labels. Specimens collected by the first author and collaborators in the 1970s and 1980s will be deposited at the National Museum of Natural History, Smithsonian Institution (USNM) or Cornell University Insect Collection (CUIC).

Most recently, co-author Eric van den Berghe (EVDB) has been actively inventorying the Lepidoptera fauna of Honduras and Nicaragua, capturing hundreds of images and specimens of Lepidoptera from 1999–2021, resulting in over 700 museum specimens of Tortricidae. Over 500 of his images can be found on the web platform iNaturalist (https://www.inaturalist.org/lifelists/ericvandenberghe); this site includes images of 40 species of Tortricidae from Honduras. Specimens collected by EVDB will be deposited in the Centro Zamorano de Biodiversidad (CZB), Escuela Agrícola Panamericana, and are currently on indefinite loan to the USNM, except for Archipini loaned to CUIC. EVDB also checked the Escuela Agrícola Panamericana collection for additional records of Tortricidae.

John W. Brown (JWB) and James Young (JDY) examined the collection of the National Museum of Natural History, Smithsonian Institution (USNM). JWB reviewed relevant taxonomic literature for records of Tortricidae from Honduras. Public records on BOLD were examined for context in discussing species complexes.

Miller *et al.* (2012) provided the most comprehensive published list, with 12 species of tortricid recorded among the Lepidoptera of Honduras. Several taxonomic papers by Razowski and/or Razowski and Becker also describe or mention tortricids from Honduras (see References).

Some of the records included herein are based on a card file made by SCP in the 1980s. It included data from two Honduran collections. One was located at the United Fruit Company at La Lima. The other was in the Comayagua collection made by H. D. Koone and A. Banegas. The location of many of these specimens is unknown. They are either lost, retained by specialists outside Honduras, or are in a pro-tem holdings of an unknown collection. Unfortunately, no photographs were taken of any of these moths. However, nearly all identifications were made by specialists, often at the USNM. There is no doubt that more Honduran Tortricidae will be discovered in other

collections, both in and outside of Honduras. In particular, the Honduran collections at La Lima (United Fruit Company) and the Escuela Forestal at Siguatepeque are likely sources of additional data.

Data in square brackets were added to some locality information transcribed from specimen labels for clarity. Honduras is divided in Departments which we abbreviated as "Dept." in the list. We abbreviated Parque Nacional as P.N. in some cases. For some national parks, we abbreviated the visitor's center as centro de visit. (Centro de visitantes). The source of each record is included in the species accounts. When possible, distribution, host plants or identification characters are discussed based on literature, unpublished databases or personal experience of the authors (JWB, JJD). Unidentified specimens are included in the hope that these data will help focus collecting efforts in Honduras toward regions where tortricids are known to occur, as well as document hostplants associated with tortricids.

Images of adults of select taxa taken by JDY are provided to help in the identification of some of the most frequently encountered and/or conspicuous leafrollers of Honduras. Most of the illustrated specimens were not collected in Honduras, but represent specimens in better condition from other Central American localities. In the figure legends, specimens deposited in the USNM are accompanied by USNM Entomology Department barcode identifiers.

Identifications

Most specimens were identified by JWB, some with the assistance of Richard Brown, Mississippi State University. All Archipini were identified JJD. Where necessary, genitalia were dissected using standard procedures (i.e., Clarke 1941). Dissected genitalia were either slide mounted or placed in a vial beneath the specimen. Hostplants of moths reared in Honduras were kindly identified by A. Molina, a botanist at the Escuela Agricola Panamericana.

No new species or taxonomic changes are proposed in this work. The goal is to compile enough information on Tortricidae of Honduras to encourage further study and identification of the fauna.

To assist in identification, some specimens were sequenced for the ~658 bp mitochondrial gene cytochrome oxidase subunit I, commonly known as the "barcode," by Alicia Timm at Colorado State University. These sequence data were compared with the database (i.e., BOLD) maintained by the Biodiversity Institution of Ontario, Guelph University, Canada. DNA was extracted from a single leg of target specimens using standard procedures based on Sanger sequencing (Hebert *et al.*, 2003, 2013). Sequences were submitted to GenBank with accession numbers PV437171–PV43180.

Nomenclature and terminology

Taxonomic nomenclature, including authorship of species and dates of publication, follow Brown (2005) as updated by Gilligan *et al.* (2018). The species accounts are arranged by subfamilies and tribes in phylogenetic sequence following Regier *et al.* (2012), and genera and species are arranged alphabetically within each tribe. Terms for genitalia structures follow Horak (1984).

Abbreviations

The following institutional abbreviations are used throughout the text: CNC = Canadian National Collection of Insects, Arachnids and Nematodes, Ottawa, Ontario, Canada; CUIC = Cornell University Insect Collection, Ithaca, New York, U.S.A; EAP = Escuela Agrícola Panamericana, El Zamorano, Honduras; EME = Essig Museum of Entomology, University of California, Berkeley, U.S.A.; LACM = Natural History Museum of Los Angeles County, California, U.S.A.; MEM = Mississippi Entomological Museum, Starkville, Mississippi, U.S.A.; MGCL = McGuire Center for Lepidoptera and Biodiversity, Gainesville, Florida, U.S.A.; NHMUK = The Natural History Museum, London, U.K.; USNM = United States National Museum of Natural History, Washington D.C., U.S.A.; VBC = personal collection of Vitor Becker, Reserva Serra Bonita, Camacan, Bahia, Brazil. SCPC = personal collection of S. Passoa, Columbus, Ohio, U.S.A.

In some cases where a species identification was uncertain, we used the Latin abbreviation "aff.," indicating

that the specimen in question has an affinity to a known species but is not identical to it. The specimen may differ from other conspecifics, but falls within the potential range of variation of the species (Sigovini *et al.* 2016).

Results

We examined approximately 700 specimens representing 109 species, about 70 of which could be identified to species-level and about 39 of which could only be identified to genus; many additional specimens could not be identified to any level beyond the family, usually owing to their poor quality. Based on the specimens examined, we estimate that at least 25% of the tortricid fauna of Honduras is undescribed. All subfamilies of Tortricidae (i.e., Chlidanotinae, Tortricinae, and Olethreutinae) are presented in the fauna, represented by 13 tribes: Polyorthini, Chlidanotini, and Hilarographini (Chlidanotinae); Tortricini, Cochylini, Archipini, Sparganothini, and Atteriini (Tortricinae); and Microcorsiini, Olethreutini, Enarmoniini, Eucosmini, and Grapholitini (Olethreutinae). There is little doubt that continued collecting will result in many additional genera and species.

Chlidanotinae: Polyorthini

1. *Pseudatteria volcanica* (Butler, 1872) (Fig. 1). This brightly colored, diurnal species is recorded from Mexico to Peru (Obraztsov 1966). Localities cited by Obraztsov (1966) and Miller *et al.* (2012) included the north coast of Honduras. The larva feeds on three species of *Mollinedia* (Monimiceae) in Costa Rica (Brown *et al.* 2019). This species was photographed and collected by EVDB.

Specimens examined: Honduras: Dept Olancho, La Muralla Centro de visit., 1421 m, 8–10 Apr 2021 (1♂), 8–10 May 2021 (1♀), E. van den Berghe (EAP).

2. *Pseudatteria* species. Images of what appears to be a second species of *Pseudatteria* were posted on iNaturalist by EVDB. However, owing to variability in forewing markings among some species of *Pseudatteria*, we are uncertain whether the image represents a second species or merely variation in *P. volcanica* (see Obraztsov 1966).

Image examined: Honduras: [Dept. Francisco Morazán], San Antonio de Oriente, 23 Jul 2023, E. van den Berghe (EAP) (https://www.inaturalist.org/observations/75300173).

3. *Polyortha* species 1 (aff. *evestigana* Razowski, 1984). Our largest specimen of *Polyortha*, a female from Camp Quetzal, has genitalia very similar to those of *P. evestigmana*, described from a single female from El Salvador. This is the first record of this genus from Honduras.

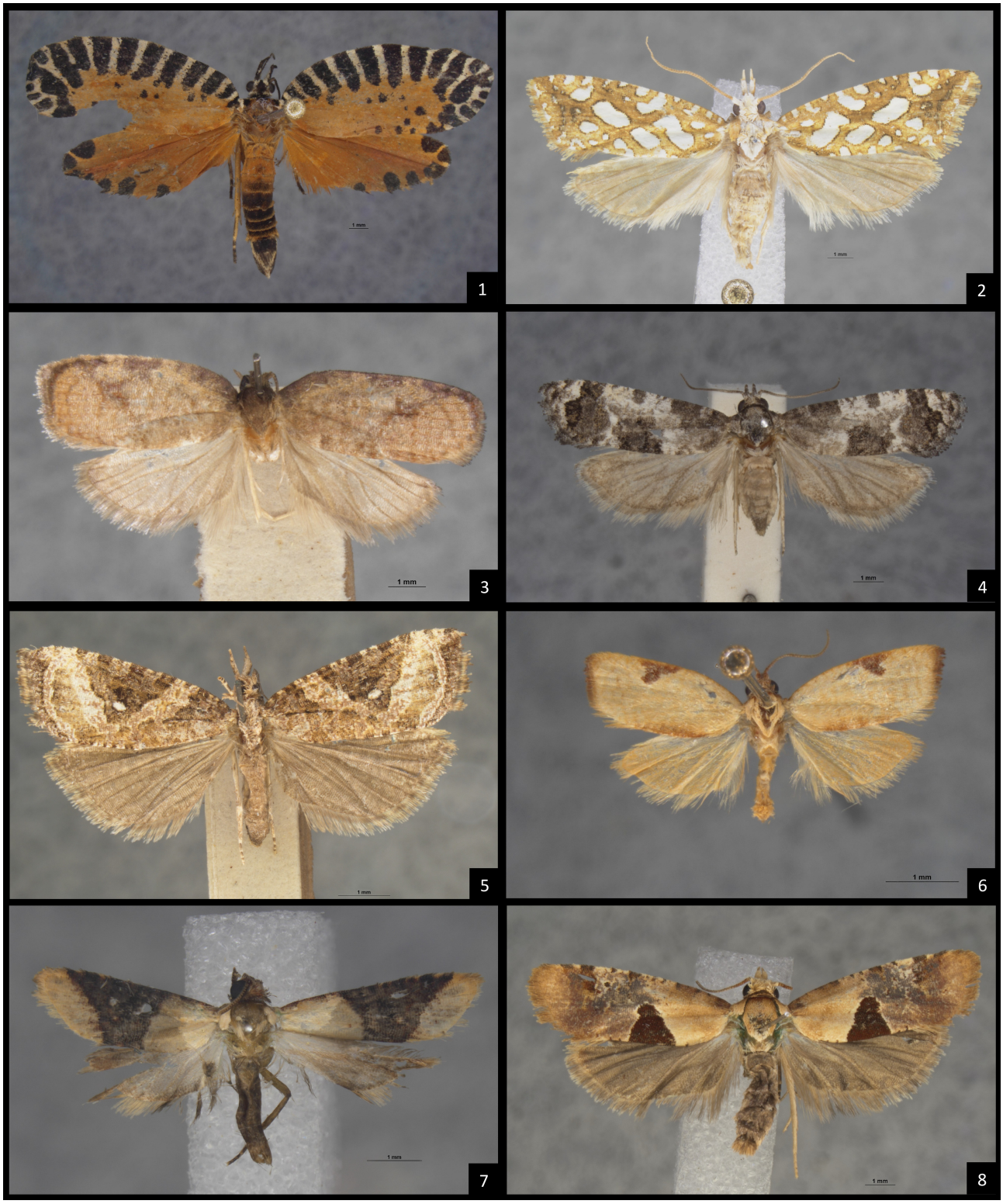
Specimen examined: Honduras: Dept. Lempira, P.N. Celaque, Camp Quetzal, 2600 m, 24 May 2021 (1♀), E, van den Berghe (EAP).

4. *Polyortha* species 2 (common brown). An undetermined species of *Polyortha* was collected often at Camp Quetzal in Parque Nacional Celaque by EVDB.

Specimens examined: Honduras: Dept. Lempira, P.N. Celaque, Camp Quetzal, 2600 m, 24 May 2021 (7♂, 2♀), 12–16 Jun 2021 (3♂, 4♀), E. van den Berghe (EAP). Dept. Olancho, La Muralla Centro de visit., 1421 m, 8–10 Apr 2021 (1♀), E. van den Berghe (EAP).

5. *Polyortha* species 3 (pale gray). A single specimen of a pale gray species of *Polyortha* was collected during the survey work.

Specimen examined: Honduras: Dept. Olancho, La Muralla Centro de visit., 1421 m, 8–10 May 2021 (1♂), E. van den Berge (EAP).



FIGURES 1–8. Tortricidae of Honduras. 1, *Pseudatteria volcanica*; 2. *Heppnerographa tricesimana* (USNMENT02007058); 3, *Apotoforma apatela* (USNMENT02007057); 4, *Rudenia leguminana* complex (USNMENT02007080); 5, *Anopinella triquetra* (USNMENT02007043); 6, *Cuproxena minimana* (USNMENT00489857); 7, *Icteralaria idiochroma* (USNMENT02007042); 8, *Netechma pyrrhodelta* (USNMENT02007083).

Chlidanotinae: Hilarographini

6. *Hilarographa* aff. *plectanodes* Meyrick, 1921. Specimens of this widespread neotropical species were photographed and one was collected by EVDB.

Specimen examined: Honduras: Dept. Cortés, P.N. Cerro Azul Meámbar, Panacam, 14°52'22"N, 87°54'17"W, 750 m, 5–7 Mar 2021 (1♀), E. van den Berghe (EAP).

Chlidanotinae: Chlidanotini

7. *Heppnerographa tricesimana* (Zeller, 1877) (Fig. 2). This widespread Central American species was recorded for the first time from Honduras. However, DNA barcodes (see BOLD -https://v4.boldsystems.org/index.php/MAS_Management_UserConsole) indicate that *H. tricesimana* likely represents a complex of closely related species.

Specimens examined: Honduras: Dept. Olancho, La Muralla Centro de visit., 1421 m, 8–10 May 2021 (5♀), E. van den Berge (EAP). Dept. Francisco Morazán, Reserva Biol. Uyuca, 1616 m, 6–8 Jun 2019 (1♂), B. Grant & E. van den Berghe (EAP).

Tortricinae: Tortricini

8. *Apotoforma apatela* (Walsingham, 1914) (Fig. 3). Described from Guatemala, two specimens of this Central American species were collected in Honduras.

Specimens examined: Honduras: Dept. Francisco Morazán, Escuela Agrícola Panamericana, [El] Zamorano, 10 Nov 1982 (1♂), R. Cabellero, ex larva on *Cassia cyanophylla* (Fabaceae) [now *Acacia cyanophylla* Lindl.], USNMENT02007240 (USNM). Reserva Biol. Uyuca, 14.0352, -87.0753, 4–5 Apr 2021, E. van den Berghe (EAP).

9. *Acleris* species. An undetermined and probably undescribed species of *Acleris* was collected during our survey efforts. *Acleris* is uncommon in the Neotropics, with only four described species known from south of the U.S. border.

Specimen examined: Honduras: Dept. Francisco Morazán, Uyuca Biological Station, 1700 m, 14°02´06.86"N, 87°4'32.16"W, 9 Mar 2019 (1♂), E. van den Berghe (EAP).

Tortricinae: Cochylini

10. *Aethesoides hondurasica* Razowski, 1986. This species was described based on the holotype from Siguatepeque, Dept. of Comayagua, and paratypes from near Peña Blanca, Dept. of Cortés (EME). Adults were collected in June and August in Malaise traps. Razowski (1986) illustrated the genitalia of both sexes and noted that the species is very close to *A. chalcospila* (Meyrick 1932) and *A. distigmatana* (Walsingham, 1897) but differs from both in lacking a cornutus in the vesica of the male genitalia (Razowski 1986). The female genitalia of *A. hondurasica* are most similar to those of *A. stellans* Razowski & Becker, 1994. Superficially, the last two species can be distinguished by the monochrome forewing and short sclerotized area of the ductus bursae of *A. stellans* (Razowski 2012). During investigations for biological control agents against weedy plants, McClay *et al.* (1995) reported rearing *Aethesoides* aff. *distigmatana* from the roots of parthenium weed (*Parthenium hysterophorus* L.; Asteraceae) in Mexico. In addition, there are specimens in the USNM reared from *Stachytarpheta* species (Verbenaceae) in Mexico. The host(s) of *A. hondurasica* are unknown.

Specimens examined. Honduras: Dept. Comayagua, Comayagua, 5 Jun 1979 (1♂), 12 Jun 1979 (1♀), 23 Jun 1979 (1♀), 28 Jan 1980 (1♀), S. Passoa (SCPC).

11. *Aethesoides* new species. There is a single specimen in the USNM from Honduras that represents an undescribed species of *Aethesoides*. Although the specimen lacks a collecting date, it may have been collected in February or March 1920 when W. M. Mann was collecting ants at the same locality in Honduras (Mann 1922).

Specimen examined: Honduras: Dept. Atlántida, Lombardia, [no date], W. M. Mann (USNM).

12. *Eugnosta emarcida* (Razowski & Becker, 1986). *Eugnosta emarcida* was described from Honduras by Razowski & Becker (1986) under the name *Carolella emarcida*. The type locality is La Venta, a municipality in the department of Francisco Morazán, and the specimen was captured in early September. The species was transferred to *Eugnosta* by Razowski (2012) who noted that "*E. emarcida* differs from all known New World congeners by its broad socii and median part of the transtilla, which are somewhat similar to the Palearctic *E. arrecta* Razowski, 1970. Broad socii also are present in *E. dives* (Butler, 1878) from the Old World." The immature stages are unknown, but most species of *Eugnosta* are gall-inducers in Asteraceae (e.g., Comstock 1940, Goeden & Ricker 1981, Heystek *et al.* 2011, Vargas *et al.* 2015).

13. *Eugnosta fraudulenta* Razowski & Becker, 2007. This species was described by Razowski & Becker (2007) from a male collected at Siguatepeque, Honduras in June from a Malaise trap. It is similar to *Eugnosta tenacia* Razowski & Becker 1994 from Brazil, but *E. fraudulenta* is distinguished by having a "small, apical portion of tegumen" and a broad ventral process of the phallus.

14. *Rudenia leguminana* (Busck, 1907) complex (Fig. 4). *Rudenia* ranges from Ontario, Canada to Venezuela, representing a complex of six or more extremely similar "species" that can be distinguished primarily by DNA barcodes (see BOLD—https://v4.boldsystems.org/index.php/MAS_Management_UserConsole). Based on specimen label data and one published record (i.e., Busck 1907), this complex has been reared from *Acacia farnesiana* (L.) Willd. (USNM), *A. glauca* (L.) Moench (USNM), *A. novernicosa* Isley (USNM), *Gleditsia japonica* Micq. (Busck 1907), *Leucaena pulverulenta* (Schltdl.) Benth. (USNM), *Mimosa aculeaticarpa* var. *biuncifera* (Benth.) Barneby (USNM), *Prosopis glandulosa* Torr. (USNM), and *Senna lindheimeriana* (Scheele) H. S. Irwin & Barneby (USNM) (all Fabaceae). Larvae are frequently intercepted at U.S. ports of entry on the fruit of *Pithecellobium dulce* (Roxb.) Benth. (Fabaceae) from Mexico (Gilligan 2014). Like most Cochylina, the larva has an expanded L-pinaculum on T1 that extends slightly posterad beneath the spiracle, and a bisetose L-group on A9.

Specimens examined: Honduras: Comayagua, Recursos Station, 15 Apr 1979 (1♀), S. Passoa (SCPC).

15. *Mimeugnosta particeps* Razowski, 1986. This species was described from a single male collected by Vitor Becker at Siguatepeque, Honduras. No additional records are known.

16. *Platphalonidia* aff. *subolivacea* (Walsingham, 1897). Two specimens of *Platphalonidia* that appear to be *P. subolivacea* were collected in Honduras, one as a larva on *Calea urticifolia* (Asteraceae). Based on barcode data (see BOLD—https://v4.boldsystems.org/index.php/MAS_Management_UserConsole), this species appears to be a complex of closely related species that ranges from New York to the Caribbean and southward into Central America.

Specimens examined: Honduras: Tegucigalpa, 19 Dec 1978 (1♂), larva on *Calea urticifolia* (Asteraceae), S. Passoa, larva # 68, genitalia slide # 198 S. Passoa coll. (SCPC). Comayagua, 12 Apr 1979 (1♀), at light (SCPC).

17. *Saphenista multistrigata* Walsingham, 1914. Based on the presence of a pair of small lobes on the venter of abdominal segment 7, each of which bears a laterally-directed hairpencil, a single specimen of *Saphenista* from Honduras is tentatively identified as *S. multistrigata*. This species was described from Veracruz, Mexico, and the male genitalia of the type specimen are illustrated by Razowski (1964). We have examined specimens from Mexico and southern Florida that appear to be conspecific.

Specimen examined: Honduras: Dept. Francisco Morazán, [El] Zamorano central, 14.0075, -87.4832, 23–30 Jan 2021 (1♂), USNM slide 154,043, E. van den Berghe (EAP).

18. *Spinipogon ialtris* Razowski, 1986. This species was described from Veracruz, Mexico, and we provide the first records from Honduras.

Specimens examined: Honduras: Dept. Francisco Morazán, [El] Zamorano, 18 Nov 1981 (1♂), 20 Nov 1981 (1♂), S. Passoa (SCPC); [El] Zamorano, 10 Dec 1978 (1♀), at light, USNMENT02007241 (USNM).

19. *Anopinella triquetra* (Walsingham, 1914) (Fig. 5). In their revision of *Anopinella*, Brown & Adamski (2003) list two females of this species from Honduras. They stated that while the genitalia are similar to those of *A. triquetra*, the forewing pattern is conspicuously darker in the Honduran specimens, without the broad, pale, subterminal area. Hence, it is possible that these two specimens represent an undescribed species near *A. triquetra*.

Specimens examined: Honduras: Dept. Francisco Morazán, Tegucigalpa, La Tigre, 1800 m, 24 Aug 2000 (2♀), V. Becker (VBC).

20. *Anopinella styraxivora* Brown & Adamski, 2003. This species was described from a pair of specimens reared from *Styrax* species (Styracaceae) in Heredia province, Costa Rica. This is the first recorded specimen since the original description of the species.

Specimens examined: Honduras: Dept. Francisco Morazán, Reserva Biol. Uyuca, 1700 m, 4–10 Dec 2001 (1♂), E. van den Berghe (EAP).

21. *Bidorpita* new species. A new species of the Neotropical genus *Bidorpitia* was discovered in Honduras, where it was collected commonly at Cerro Quetzal in Parque Nacional Celaque.

Specimens examined: Honduras: Dept. Lempira, P.N. Celaque, Cerro Quetzal, 2600 m, 24 May 2021 (1♂, 9♀), 12–16 Jun 2021 (1♂, 4♀), E. van den Berghe (EAP).

22. *Cuproxena minimana* Brown, 1991 (Fig. 6). This species is recorded from Mexico (Guerrero), El Salvador, and Costa Rica (Brown 2020); this is the first record from Honduras.

Specimen examined: Honduras: Dept. Francisco Morazán, [El] Zamorano, 20 Nov 1981 (1♂), S. Passoa (SCPC).

23. *Dorithia* aff. *pseudocrucifer* Brown, 1991. *Dorithia pseudocrucifer* is recorded from southern Mexico (Veracruz) to Guatemala and El Salvador. Four specimens collected by EVDB appear to represent this species, which are the first records from Honduras.

Specimens examined: Honduras: Dept. Francisco Morazán, Reserva Biol. Uyuca, 1700 m, 19 Feb 2021 (3♂), 4–5 Apr 2021 (1♂), E. van den Berghe (SCPC).

24. *Dorithia* new species. 1 (aff. *consacculuana* Brown). This new species is represented by a series of specimens from Cerro Quetzal in Parque Nacional Celaque and Reserva Biologica Uyuca.

Specimens examined: Honduras: Dept. Francisco Morazán, Reserva Biol. Uyuca, 1700 m, 21 Sep 2019 (1♀) (EAP). Dept. Lempira, P.N. Celaque, Cerro Quetzal, 2600 m, 24 May 2021 (1♂, 4♀), 12–16 Jun 2021 (4♂, 4♀), E. van den Berghe (EAP). P.N. Celaque, Centro de visit., 4–6 Jun 2021 (1♀), E. van den Berghe (EAP).

25. *Dorithia* new species. 2. A single male extremely similar to an undescribed species from Guatemala was collected by EVDB.

Specimen examined: Honduras: Dept. Lempira, P.N. Celaque, Cerro Quetzal, 2600 m, 24 May 2021 (1♂), E. van den Berghe (EAP).

26. *Durangularia* aff. *druana* (Walsingham, 1914). *Durangularia druana* ranges from southern Arizona, USA to Guatemala (Gilligan & Brown 2016); however, DNA barcode sequence data suggest that our specimen from Honduras almost certainly represents a different, undescribed species of *Durangularia* (i.e., 7.22% difference).

Specimen examined: Honduras: Dept. Lempira, P.N. Celaque, Camp Quetzal, 2600 m, 24 May 2021 (1♂), E. van den Berge (EAP).

27. *Icteralaria idiochroma* Razowski, 1992 (Fig. 7). Brown (1996) reported this species from the northern coast of Honduras (south of Tela); the specimen was collected in late May. The immature stages and hosts are unknown.

Specimen examined: Honduras: Dept. Yoro, 45 km S Tela, 800 m, 25–27 May 1978 (1♂), E. Giesbert (LACM).

28. *Netechma pyrrhodelta* (Meyrick, 1931). (Fig. 8) Three females of *Netechma* collected in Honduras appear to represent *H. pyrrhodelta*, described from Costa Rica and recorded from Guatemala (USNM). These are the first records of the genus from Honduras.

Specimens examined: Honduras: Dept. Francisco Morazán, Reserva Biol. Uyuca, 1700 m, 14.0352, -87.0753, 19 Feb 2021 (1♀), 11–12 Mar 2021 (1♀), 4–5 Apr 2021 (1♀), E. van den Berghe (EAP).

29. *Netechma technema* (Walsingham 1914) (Fig. 9). Two males and a female of this species were collected in Dept. Olancho, at 1421 m elevation. *Netechma technema* was described from Costa Rica where it is occasionally collected in blacklight traps. These are the first records of the species from Honduras.

Specimens examined: Honduras: Dept. Olancho, La Murralla Centro de visit. 1421 m, 15.0821, -86.7410, 8–10 May 2021 (2♂, 1♀), blacklight, E. van den Berghe (EAP).

30. *Orthocomotis nitida* Clarke, 1956. A specimen and an image of this species were captured by EVDB.

Specimen examined: Honduras: Dept. Francisco Morazán, Reserva Biol. Uyuca, 1700 m, 14.0352, -86.7334, 4–10 Oct. 2021 (1♀), E. van den Berghe (EAP).

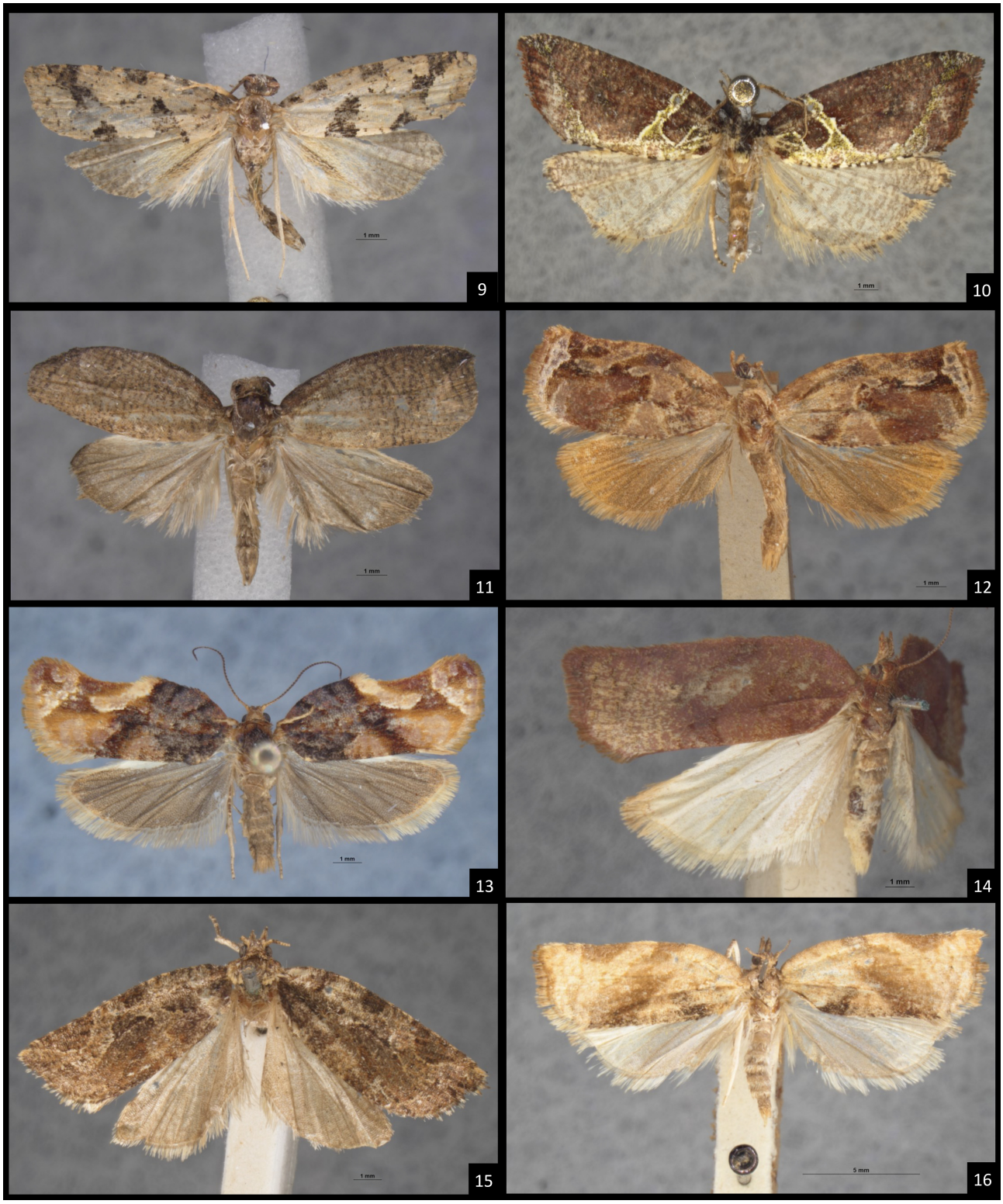
Image examined: Honduras: Dept. Cortés, P. N. Cerro Azul Meámbar, Panacam, 750 m, 14°52'22"N, 87°54'17W, 5–7 Mar 2021, E. van den Berghe (iNaturalist).

31. *Pseudomeritastis* new species. Three specimens of *Pseudomeritastis* collected in Honduras appear to represent an undescribed species. The male genitalia are unlike any of those illustrated by Obraztsov (1966) in his revision of the genus, or those of species subsequently described by Razowski (2004) and Razowski & Wojtusiak (2010). Costa Rica was the previously known northern distribution of the genus.

Specimens examined: Honduras: Dept. Lempira, P. N. Celaque, Camp Quetzal, 2000 m, 14.5261, -88.6831, 12–16 Jun 2021 (2♂, 1♀), E. van den Berghe (EAP).

32. *Seticosta rubicola* Brown & Nishida, 2003 (Fig. 10). This species was described from Costa Rica as a stem-borer in *Rubus* (Rosaceae). It also has been documented from Guatemala and intercepted at U.S. ports of entry on *Rubus*.

Specimens examined: Honduras, Dept. Francisco Morazán, Reserva Biol. Uyuca, 1700 m, 14.0352, -86.7334, 11–12 Mar 2021 (1♂), E. van den Berghe (EAP). [El] Zamorano Central, 14.009, -87.000, 7 Dec 2021 (1♂), E. van den Berghe (EAP).



FIGURES 9–16. Tortricidae of Honduras. 9, *Netechma technema*; 10, *Seticosta rubicola* (USNMENT02007082); 11, *Thalleulia bisexta*; 12, *Argyrotaenia atima* (USNMENT02007077); 13, *Argyrotaenia citharexylana* (USNMENT02007062); 14, *Argyrotaenia dichotoma*; 15, *Argyrotaenia dichroaca* (USNMENT02007076); 16, *Argyrotaenia montezumae* (USNMENT02007056).

33. *Thalleulia bisexta* Brown, 2022 (Fig. 11). This species was recently described from Costa Rica, where it has been collected primarily between 1000 and 1600 m elevation. Our specimen represents the first record from Honduras.

Specimens examined: Honduras: Dept Olancho, La Murralla centro de visit. 1421 m, 15.0821, -86.7410, 8–10 May 2021 (1♂), blacklight, E. van den Berghe (EAP).

Tortricinae: Archipini

34. *Argyrotaenia atima* (Walsingham, 1914) (Fig. 12). This species was described from Panama but most specimens are known from Costa Rica (USNM). Interestingly, there is a morphologically similar disjunct population in southern Brazil (VBC) which deserves closer attention to see if the two are conspecific. A single specimen from Parque Nacional Cerro Azul Meámbar extends the range north for this species.

Specimen examined: Honduras: Dept. Cortés, P. N. Cerro Azul Meámbar, Panacam, 14.9061, 87.9057 1900 m, 5–7 Mar 2021 (1 adult), E. van den Bergh, blacklight/mercury vapor trap (EAP).

35. *Argyrotaenia citharexylana* (Zeller, 1866) (Fig. 13). This charismatic and sometimes common species was described from Colombia but is also found in Honduras, Costa Rica, Panama, Venezuela, Ecuador, Peru, and Bolivia (NHMUK, USNM, VBC). The immature stages are unknown.

Specimen examined: Honduras: Dept. Francisco Morazán, Tegucigalpa, La Tigre, 1800 m, 24 Aug 2000 (1 adult), V. Becker (VBC). Another specimen of *Argyrotaenia* from Honduras appears to represent *A. citharexylana*. Unfortunately, the specimen is too worn for meaningful comparisons with photographs on iNaturalist, and identifications in this group on that website are suspect.

Specimen examined: Honduras, Dept. Francisco Morazán, [El] Zamorano, Escuela Agrícola Panamericana, 20 Sep 1981 (1 adult), S. Passoa (CUIC).

36. *Argyrotaenia confinis* Razowski & Becker, 2000. This is a relatively common high elevation species originally described from Chiapas, Mexico, but occurs as far north as Tamaulipas (VBC). These records show it is widespread and common in Honduras as well. Additional specimens (n = 37) are consistent with the wing pattern of the specimens below but were either not dissected or the genitalia differed enough to question their identity and were excluded. This species either exhibits considerable variation in genitalia, or more than one species is involved.

Specimens examined: Honduras, Dept. Cortés, Cusuco N. P., 1600 m, 15.4962, -88.2117, 13–15 May 2021 (1 adult), blacklight, E. van den Berghe (EAP). Dept. Lempira, P. N. Celaque Centro de visit., 1400 m 14.5603, -88.6421, 4–8 June 2021 (1 adult), blacklight, E. van den Berghe (EAP). Dept. Olancho, La Muralla Centro de visit., 1421 m, 15.0821, -86.7410, 8–10 May 2021 (2 adults), blacklight, E. van den Berghe (EAP). Dept. Francisco Morazán, Uyuca Biological Station, 1700 m, 14°02'06.86"N, 87°64'32.16"W, 21 Sep 2019 (1 adult), E. van den Berghe (EAP). Uyuca Biological Station, 21 Sept 2019 (1 adult), E. van den Berghe (EAP). Dept. Francisco Morazán, Reserva Biol. Uyuca, 14.0352, -87.0753, 1 May 2021 (2 adults), 1700 m, E. van den Berghe (EAP). Dept. Francisco Morazán, Reserva Biol. Uyuca, 14.0352, -87.0753, 19 Feb 2021 (2 adults), 1700 m, E. van den Berghe (EAP). Dept. Lempira, P. N. Celaque, Camp Quetzal, 2600 m, 14.526, -88.683, 24 May 2021 (1 adult), blacklight, E. van den Berghe (EAP). Dept. Lempira, P. N. Celaque, Camp Quetzal, 2600 m, 14.5261, -88.6831, 12–16 Jun 2021 (3 adults), blacklight/mercury vapor trap, E. van den Berghe (EAP).

37. *Argyrotaenia dichotoma* (Walsingham, 1914) (Fig. 14). Described from Guerrero, Mexico, this species is also known from Chiapas and Guatemala (USNM, VBC). The records given below extend its distribution into Honduras.

Specimens examined: Honduras: Dept. Lempira, P. N. Celaque, Camp Quetzal, 2600 m 14.526, -88.683, 24 May 2021 (2 adults), blacklight, E. van den Berghe (EAP). Dept. Lempira, P. N. Celaque, Camp Quetzal, 2600 m, 14.5261, -88.6831, 12–16 Jun 2021 (4 adults), blacklight/mercury vapor trap, E. van den Berghe (EAP).

38. *Argyrotaenia dichroaca* (Walsingham, 1914) (Fig. 15). The syntypes for this species are from Costa Rica and Guerrero, Mexico, and the species has subsequently been collected more widely in both countries (NHMUK, USNM, VBC). The specimens examined here more or less fit the forewing pattern and genitalia as illustrated by Obraztsov (1961), but there are enough differences in these and other specimens from Guatemala that it isn't clear if the genitalia are variable or if this is a species complex. These records tentatively add the species to the fauna of Honduras.

Specimens examined: Honduras: Dept. Olancho, La Muralla Centro de visit., 1421 m, 15.0821, -86.7410, 8–10 May 2021 (4 adults), blacklight, E. van den Berghe (EAP). Dept. Francisco Morazán, Reserva Biol. Uyuca, 14.0352, -87.0753, 11–12 Jul 2021 (1 adult), blacklight, E. van den Berghe (EAP). Dept. Olancho, La Muralla Centro de visit., 1421 m, 15.0821, -86.7410, 8–10 April 2021 (2 adults), blacklight, E. van den Berghe (EAP).

39. *Argyrotaenia glabra* Razowski & Becker, 2000. Previously only known from the type location in Chiapas, Mexico (VBC), the specimens listed below extend its known range south to Honduras, where it may be locally common.

Specimens examined: Honduras, Dept. Lempira, P. N. Celaque, Camp Quetzal, 2600 m, 14.5261, -88.6831, 12–16 Jun 2021 (12 adults), blacklight/mercury vapor trap, E. van den Berghe (EAP). Dept. Lempira, P. N. Celaque Camp Quetzal, 2600 m, 14.526, -88.683, 24 May 2021 (13 adults), E. van den Berghe (EAP).

40. *Argyrotaenia heureta* (Walsingham, 1914). Described from Guatemala, but also recorded from Querétaro, Mexico (CUIC), the single specimen listed below extends the distribution to Honduras.

Specimen examined: Honduras: Dept. Francisco Morazán, Reserva Biol. Uyuca, 14.0352, -87.0753, 1 May 2021 (1 adult), 1700 m, E. van den Berghe (EAP).

41. *Argyrotaenia montezumae* (Walsingham, 1914) (Fig. 16). *Tortrix impositana* Walsingham, 1914, a junior synonym of *A. montezumae*, was described from a female collected at Senahú, Department of Alta Verapaz, Guatemala (NHMUK), but this species is much more widespread and common in collections from the mountainous parts of the U.S. as far north as Colorado, south through Mexico, Guatemala, Honduras, and Costa Rica (NHMUK, CNC, USNM, VBC). Also, a single specimen of this species, apparently reared from orange (*Citrus*; Rutaceae), was cited from Honduras by Obraztsov (1961). Reported host plants include *Rubus* species (Rosaceae) (Lopez *et al.* 2014), *Parthenium hysterophorus* L. (Asteraceae) (McClay *et al.* 1995), *Pinus montezumae* Lamb. (Robinson *et al.* 2010), *Pinus hartwegii* Lindl. (=*Pinus rudis* Endl.) (Robinson *et al.* 2010), *Lilium longiflorum* var. *eximium* (Courtois) Baker (Liliaceae) (USNM), *Persea americana* Mill. (Lauraceae) (Gilligan *et al.* 2011, USNM), and *Eupatorium* species (Asteraceae) (USNM). This broadly polyphagous habit, including conifers and herbaceous monocots and dicots, is not unusual for species of Archipini.

Specimens examined: Honduras: Dept. Francisco Morazán, Reserva Biol. Uyuca, 14.0352, -87.0753, 1 May 2021 (3 adults), 1700 m, E. van den Berghe (EAP). Dept. Olancho, La Muralla Centro de visit., 1421 m, 15.0821, -86.7410, 8–10 May 2021 (2 adults), blacklight, E. van den Berghe (EAP). Dept. Francisco Morazán, Reserva Biol. Uyuca, 21 Sep 2019 (1 adult), E. van den Berghe (EAP). Dept. Cortés, Cerro Cusuco, Cusuco N. P., 1600 m, 15.4962, -88.2117, 13–15 May 2021 (1 adult), blacklight, E. van den Berghe (EAP).

42. *Argyrotaenia* aff. *artocopa* (Meyrick, 1932). Several specimens of *Argyrotaenia* from Honduras are somewhat similar to the type of *A. artocopa* illustrated by Razowski (1964) from Costa Rica. Brown *et al.* (2019) reported that larvae of *A. artocopa* feed on *Miconia dielsii* and *Tibouchina lepidota* (both Melastomataceae) in Ecuador, but neither plant occurs in Honduras. However, most species of *Argyrotaenia* are highly polyphagous. There is no morphological information on the immature stages.

Specimens examined: Honduras: Dept. Comayagua, Comayagua, 6 Mar 1979 (1 adult), S. Passoa (CUIC). Dept. Olancho, La Muralla Centro de visit., 1421 m, 15.0821, -86.7410, 8–10 May 2021 (1 adult), blacklight, E. van

den Berghe (EAP). Dept. Lempira, P. N. Celaque, Camp Quetzal, 2600 m, 14.5261, -88.6831, 12–16 Jun 2021 (2 adults), blacklight/mercury vapor trap, E. van den Berghe (EAP). Dept. Lempira, P. N. Celaque, Camp Quetzal, 2600 m, 14.526, -88.683, 24 May 2021 (1 adult), blacklight, E. van den Berghe (EAP).

43. *Argyrotaenia* n. spp. Many unidentified specimens of *Argyrotaenia* (n = 51) were examined, and there are at least three undescribed species among the material. However, the majority are in poor condition and are not yet dissected; hence, their identities remain unknown (CUIC).

Specimens dissected: Honduras: [no locality data] (1 adult, det. J. J. Dombroskie); Dept. Francisco Morazán, [El] Zamorano, Escuela Agrícola Panamericana, 14 Jun 1986 (2 adults), S. Passoa (CUIC).

44. *Clepsis abscisana* (Zeller, 1877) (Fig. 17). Originally described from Colombia, this species has been subsequently collected in Costa Rica and Veracruz, Mexico (VBC). A single specimen listed below adds it to the Honduras list.

Specimens examined: Honduras: Dept. Lempira, P. N. Celaque Centro de visit., 1400 m, 14.5603, -88.6421, 4–8 June 2021 (1 adult), blacklight, E. van den Berghe (EAP).

45. *Clepsis dubia* Razowski & Becker, 2003. Described from Chiapas, Mexico, this species is also recorded from Tamaulipas and Veracruz (VBC). We examined three specimens collected during recent survey work in Honduras.

Specimens examined: Honduras: Dept. Olancho, La Muralla Centro de visit., 1421 m, 15.0821, -86.7410, 8–10 May 2021 (2 adults), blacklight, E. van den Berghe (EAP). Dept. Francisco Morazán, Reserva Biol. Uyuca, 14.0352, -87.0753, 11–12 Jul 2021 (1 adult), blacklight, E. van den Berghe (EAP).

46. *Clepsis semanta* Razowski & Becker, 2003. Previously known only from the type locality in Costa Rica, two specimens were documented during our survey efforts.

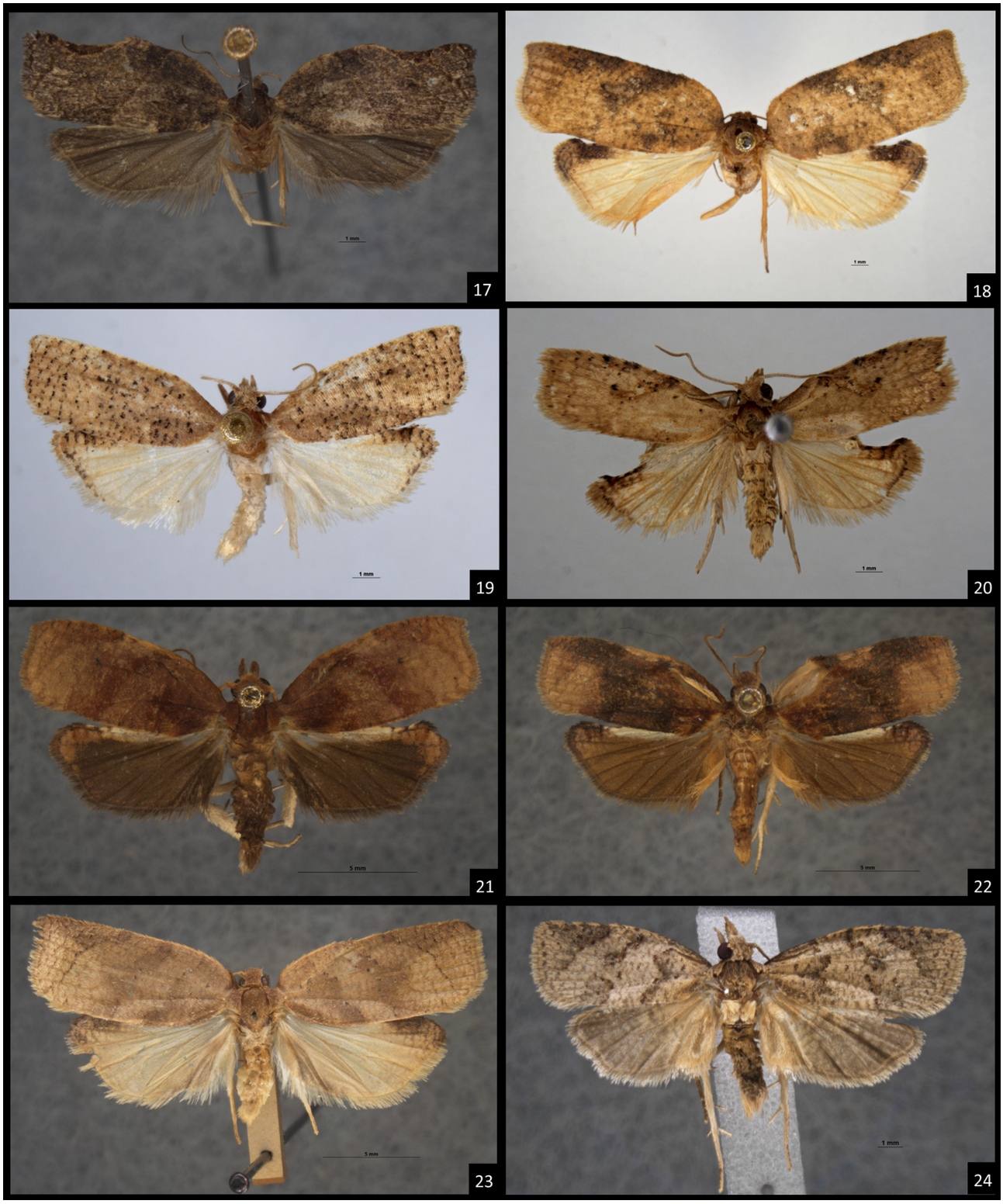
Specimens examined: Honduras: Dept. Olancho, La Muralla Centro de visit., 1421 m, 15.0821, -86.7410, 8–10 May 2021 (2 adults), blacklight, E. van den Berghe (EAP).

47. *Clepsis* species. Three specimens of an unidentified species of *Clepsis* were examined, in addition to 22 specimens not identified beyond the genus-level, all in the CUIC and MEM. *Clepsis* is a taxonomically challenging genus in Mesoamerica as there are many externally similar species, and genitalia are often not helpful in one of the sexes; a number of species are only known from only a single sex, and there are numerous undescribed species.

Specimens examined: Honduras: Dept. Intibucá, La Esperanza-Intibucá, 17 Mar 1980 (3 adults), at lights, S. Passoa (CUIC, SCPC). Dept. Francisco Morazán, Zamorano, Escuela Agrícola Panamericana, 8 Dec 1978 (1 adult), S. Passoa (CUIC). Dept. Comayagua, Comayagua, 15 Aug 1979 (2 adults), 28 Jun 1979 (2 adults), S. Passoa (CUIC). Comayagua Recursos Station, 15 Apr 1979 (2 adults), 15 Sep 1979 (2 adults), 16 Aug 1979 (2 adults), S. Passoa, (CUIC, MEM). Dept. Francisco Morazán, El Zamorano, 26 Feb 1979 (2 adults), S. Passoa (CUIC, MEM).

48. *Mictopsichia cubae* Razowski, 2009. Matthews *et al.* (2011) collected this species at Pico Bonito National Park, near La Ceiba, Honduras. They illustrated the genitalia of both sexes and noted a related species feeds on grape in Venezuela. Austin & Dombroskie (2020) reported that the female was correctly identified, but questioned whether the male was conspecific. We refer to the male in the following account, identified only to genus.

Specimen examined: Honduras: Dept. Atlántida, Parque Nacional Pico Bonito, vicinity Estación CURLA, N15°4 2'07.0"W86°51'16.0", 13 Sep 2009 (1♀), J. Y. Miller, D. Matthews, M. Lehnert, C. Salcedo (1♀, slide DM 1569) (MGCL).



FIGURES 17–24. Tortricidae of Honduras. 17, *Clepsis abscisana* (USNMENT02007074); 18. *Amorbia concavana* (USNMENT02007191); 19, *Amorbia concavana* (USNMENT02007192); 20, *Amorbia concavana* (USNMENT02007193); 21, *Amorbia productana* (USNMENT02007046); 22, *Amorbia revolutana* (USNMENT02007045); 23, *Amorbia santamaria* (USNMENT02007044); 24. *Sparganothoides ocrisana* (USNMENT02007081).

49. *Mictopsichia* species. This species was recorded from Honduras by Matthews *et al.* (2011) as *M. cubae*. However, that determination was questioned by Austin & Dombroskie (2020) based on genital morphology and DNA barcodes.

Specimen examined: Honduras: Dept. Atlántida, Pico Bonito Lodge, N15°41'48.00"W86°54'4.40", 28–29 Jun 2009 (1♂), D. Matthews, J. Y. Miller (1♂, slide DM 1556) (MGCL).

50. *Rubropsichia fuesiliniana* (Stoll, 1781). A single specimen of this colorful tortricid is present in the collection of the NHMUK.

Specimen examined: Honduras: Bay Islands [Department], Roatán Island (NHMUK).

Tortricinae: Sparganothini

51. *Aesiocopa* species. This Central America genus is represented in Honduras by what appears to be an undescribed species. DNA barcodes place a female from Honduras 6.45% different from the Costa Rican *A. necrofolia*, the most commonly collected species in the genus (Brown 2014).

Specimens examined: Honduras: Dept. Cortés, P.N. Cerro Azul Meámbar, Panacam, 1900 m, 14.8721, -87.9047, 5–7 Mar 2021 (1♂), E. van den Berghe (EAP). Dept. Lempira, Cerro Celaque centro de visit., 1400 m, 14.5625, -88.6425, 4–8 Jun 2021 (1♀), E. van den Berghe (EAP).

52. *Amorbia concavana* (Zeller, 1877) (Figs. 18–20). Phillips-Rodriguez & Powell (2007) recorded *A. concavana* from Mexico, Cuba, Guatemala, Honduras, Costa Rica, and Panama. The Honduran records were from Lago Yojoa and Lancetilla in June and July, respectively. Hayden (2012) and Heppner (2013a) illustrated the adult morphology including the head, variation in the forewing pattern, and genitalia of both sexes. Heppner (2013a) referred to this species as the "tropical garden leafroller" and noted captures in pheromone traps for *Spodoptera litura*, as did Hayden (2012).

Specimens examined: Honduras: Dept. Comayagua, Comayagua, 25 Jan 1980 (1♂), S. Passoa, black light trap; same location, 20 Mar 1980 (1♂), S. Passoa, black light trap (SCPC).

Specimens cited by Phillips-Rodriguez & Powell (2007): Honduras: Dept. Atlántida, Lancetilla, near Tela, 5 Jul 1968 (1♂), D. F. Veirs (USNM). Dept. Cortés, Peña Blanca, Lago Yojoa, 21 Jun 1979 (1♂), Chemsak, Michelbacher & Middlekauff (EME).

53. *Amorbia productana* (Walker, 1863) (Fig. 21). Walker (1863: 320) described *A. productana* from Honduras without a specific type locality. Phillips-Rodríguez & Powell (2007) gave the distribution as Mexico to Brazil. They placed *A. productana* in its own species group with males characterized by a large costal fold and a swollen Rs vein in the hindwing. The female genitalia lack lateral pockets of the sterigma, which are characteristic of other species in the genus. Adults fly throughout the year and appear to be restricted to elevations below 800 m. Phillips-Rodríguez & Powell (2007) listed *Sabicea panamensis* Wernham (Rubiaceae) and *Veronia* [now *Vernonanthura*] *patens* (Kunth) H. Rob. (Asteraceae) as hosts of *A. productana* in Costa Rica, both of which are widespread Neotropical plants. The immature stages of *A. productana* are undescribed.

54. *Amorbia revolutana* (Zeller, 1877) (Fig. 22). According to Phillips-Rodriguez & Powell (2007), this species is recorded from Bolivia, Costa Rica, Panama, Venezuela, Bolivia, and Cuba, and apparently flies throughout year. Our records represent a northern extension of the previously known Central American range.

Specimens examined: Honduras: Dept. Cortés, P.N. Azul Meámbar, Panacam, 1900 m, 5–7 Mar 2021 (2♂), E. van den Berghe (EAP).

55. *Amorbia santamaria* Phillips & Powell, 2007 (Fig. 23). This species, described from Guatemala (holotype) and Costa Rica, was among the more commonly collected tortricids in Honduras. Our specimens represent the first records of this species from Honduras.

Specimens examined: Honduras: Dept. Olancho, La Muralla Centro de visit., 1421 m, 8–10 Apr 2021 (2♂), E. van den Berghe (EAP). Dept Francisco Morazán, Reserva Biol. Uyuca, 1700 m, 19 Feb 2021 (2♂, 11♀), E. van den Berghe (EAP).

56. *Amorbia* aff. *cacao* Phillips-Rodriguez & Powell, 2007. A male collected in Honduras shares several features with *A. cacao*, including a similar unusual configuration of the scales on the vertex of the head (illustrated by Phillips-Rodriguez & Powell 2007), the presence of a patch of short sclerotized spines under the costal fold, and the general shape of the valvae. However, the pattern and shape of the forewing of the specimen from Honduras differs from those of *A. cacao*, and the scale tufts at the posterior edge of the metathorax are cream colored rather than dark brown.

Specimen examined: Honduras: Dept. Cortés, Cerro Cusuco, Cusuco N.P., 1600 m, 13–15 May 2021 (1♂), E. van den Berghe (EAP).

57. *Platynota* aff. *rostrana* (Walker, 1863). Miller *et al.* (2012) recorded *P. rostrana* from Honduras without locality data, probably based on the type locality of its junior synonym, *Platynota saturatana* (Walker, 1863). We examined two specimens in the USNM there are either *P. rostrana* or closely related members of a species complex. Powell & Brown (2012) gave the distribution as Virginia west to Arizona, then south throughout Central America and the Caribbean. Records from South America listed by MacKay (1962) were not mentioned, perhaps because they required confirmation.

Specimens examined: Honduras: Dept. Intibucá, La Esperanza-Intibucá, 17 Mar 1980 (1 adult), S. Passoa, at lights (SCPC); Dept. Cortés, Farm llano Sec. I115, 19 Nov 1955 (1 adult), R. Bullock, USNM slide 87,903, USNMENT02007211 (USNM); Dept. Cortés, Farm Guaruma TA Sec. 23, 19 Sep 1955 (1♂), R. Bullock, USNM slide 87,902, USNMENT02007212 (USNM).

Image examined: Honduras: Dept. Francisco Morazán, Escuela Agrícola Panamericana, El Zamorano, 8 Feb 2021 (1♀), E. van den Berghe (https://www.inaturalist.org/observations/69425187).

58. *Platynota helianthes* (Meyrick, 1932). It is likely that *P. helianthes*, described from a female, is synonymous with *P. subargentea* Walsingham, 1913, described from a male. Both have type localities in Costa Rica. The species is recorded from Mexico, Nicaragua, and Costa Rica. Based on specimens in the USNM, Brown *et al.* (2011) reported the following larval hosts plants for the species: *Jatropha gossypifolia* L. (Euphorbiaceae), *Casearia corymbosa* H. B. & K. (Flacourtiaceae), *Leucania leucocephala* (Lam.) De Wit (Fabaceae), *Mimosa pellita* Humb. & Bonpl. Ex Wild. (=*Mimosa pigra* L.) (Fabaceae), *Parkinsonia aculeata* L. (Fabaceae), and *Psidium guajava* L. (Myrtaceae).

Specimens examined: Honduras: Dept. Cortés, San Pedro Sula, 18 Dec 1980 (1♂), S. Passoa, reared, possibly on okra (SCPC). Dept. Comayagua, Comayagua, 1 Feb 1961 (1♀), reared from cacao leaves, 16 May 1980 (1♀), S. Passoa (SCPC). Dept. Cortés, Yojoa, 740 m, 16 Dec 2021 (1♀), blacklight, E. van den Berghe (EAP). Dept. Francisco Morazán, [El] Zamorano, Esc. Pan. [Escuela Agrícola Panamericana], 10 Dec 1978 (1♂), 29 May 1981 (1♀) Fajardo-Espinoza, pupa encontrada en hoja, genitalia slide # 261 S. Passoa coll. (SCPC). Same locality, 14 Sep 1981, em: 30 Sep 1981 (1♂), reared from cotton (SCPC). Dept. Francisco Morazán, Zamorano central, 30 Jan 2021 (1♀), E. van den Berghe (EAP). Dept. Francisco Morazán, Reserva Biol. Uyuca, 1700 m, 21 Sep 2019 (1♀), E. van den Berghe (EAP).

59. *Platynota* species 2 (new species—pale orange). We examined a series of specimens from Comayagua and Bejuco Farm that appear to represent an undescribed species of *Platynota*. The female genitalia are characterized by the absence of a signum, and the male genitalia by a broadly rounded sacculus. Specimens from Honduras were reared from *Acalypha setosa* A. Rich. (Euphorbiaceae) and *Lantana camara* L. (Verbenaceae).

Specimens examined: Honduras: Dept. Cortés, Distrito Hiquerito, Bejuco Farm, Aug 1956 (3♂, 3♀), reared from *Acalypha setosa* (USNM). Dept. Comayagua, Comayagua, 10 May 1980 (1♂), 24 Jan 1980 (1♂), 22 Jun 1980 (1♀), Recursos Station, 8 Jul 1979 (1♀), 5 Oct 1979 (1♀), S. Passoa (SCPC). [El] Zamorano, Sep 1953 (1♀), reared from *Lantana camara*, N. Krauss (USNM).

60. *Platynota* species 3 (new species—triangular brown blotch). We examined three males and a female from Emerald Valley that appear to represent another undescribed species of *Platynota*. Male haves a broad costal fold that extends about one-third the length of the forewing; complex scaling of the frons; and relatively short sensory setae of the antenna.

Specimens examined: Honduras: Dept. Cortés, Yojoa, Emerald Valley, 14.9250, -88.0481, 16 Dec 2021 (3♂, 1♀), blacklight, E. van den Berghe (EAP).

61. *Sparganothina anopla* B. Landry, 2001. Landry & Powell (2001) documented this small species from Veracruz, Mexico, and Honduras.

Specimens examined: Honduras: Dept. Cortés, Peña Blanca, Lago Yojoa, 21 Jun 1979 (3♂), J. Chemsak, M. Michelbacher & W. Middlekauf (EME, USNM).

62. *Sparganopseustis* n. spp. Images of at least three different species in this genus were captured by EVDB. The genus was the subject of an unpublished revision prepared by Soowon Cho during a PEET grant to Jerry Powell and Felix Sperling. It is likely that all three represent undescribed species.

Image examined: Honduras: San Antonio de Oriente, 20 Feb 2021, E. van den Berghe (https://www.inaturalist.org/observations/41231190)/

63. "*Sparganothoides*" *plemmelana* Kruse & Powell, 2009. Although Kruse & Powell (2009) list *S. teratana* from Honduras, specimens we examined appear to represent the closely related *S. plemmelana* Kruse & Powell. "*Sparganothoides*" *teratana* was described from northern Mexico, whereas "*S.*" *plemmelana* was described from Guatemala.

Specimens examined: Honduras: Dept. Cortés, Peña Blanca, Lago Yojoa, 21.vi.1979 (1♂), J. Chemsak, M. Michelbacher & W. Middlekauff (EME). Dept. Cortés, P.N. Cerro Azul Meámbar, Panacam, 1900 m, 14.8721, -87.9047, 5–7 Mar 2021 (1♂, 1♀), E. van den Berghe (EAP). Dept. Lempira, P.N. Celaque, centro de visit., 14.5603, -86.6421, 1400 m, 4–8 Jun 2021 (3♂, 1♂), E. van den Berghe (EAP). Dept. Olancho, La Muralla centro de visit., 15.0821, -867410, 1421 m, 8–10 Apr 2021 (1♂, 1♀), 8–10 May 2021 (1♂) E. van den Berghe (EAP).

64. *Sparganothoides cornutana* Kruse & Powell, 2009. This species was described from southern Mexico and recorded as far south as Guatemala (Kruse & Powell 2009). Specimens that appear to be this species were collected in Uyuca Biological Reserve in Honduras.

Specimen examined: Honduras: Dept. Francisco Morazán, Reserva Biol. Uyuca, 1700 m, 9 Mar 2019 (1♂), 11–12 Mar 2021 (6♂), E. van den Berghe (EAP).

65. *Sparganothoides ocrisana* Kruse & Powell, 2009 (Fig. 24). This species has been recorded from southern Mexico (Veracruz) to Costa Rica in disturbed or remnant rainforest habitat. Adults have been collected in every month of the year except April and September, suggesting that it is multivoltine in Costa Rica and perhaps bivoltine farther north. We examined a long series of specimens from Tegucigalpa in the Becker collection.
Specimens examined: Honduras: Dept. Francisco Morazán, Tegucigalpa, [Parque Nacional] La Tigra, 1000 m, 24 Aug 2000 (10♂, 17♀), V. Becker (VBC).

Tortricinae: Atteriini

66. *Anacrusis turrialbae* Razowski & Becker, 2011 (Figs. 25, 26). This species was described from Costa Rica; we present the first records from Honduras.

FIGURES 25–32. Tortricidae of Honduras. 25, *Anacrusis turrialbae* (male) (USNMENT02007054); 26, *Anacrusis turrialbae* (female) (USNMENT02007055); 27, *Anacrusis ellensatterleeae* (female) (USNMENT02007053); 28, *Templemania sarothrura* (USNMENT02007052); 29, *Tina adaculana* (USNMENT02007051); 30, *Tinacrucis aqulia* (USNMENT02007050); 31, *Bactra philocherda* (USNMENT02007050); 32, *Bactra verutana* (USNMENT01585533)

Specimens examined: Honduras: Dept. Cortés, P. N. Cerro Azul Meámbar, Panacam, 1900 m, 14.9081, -87.9057, 5–7 Mar 2021 (1♂, 1♀), E. van den Berghe (EAP).

Images examined: Honduras: Dept. Cortés, Panacam, 750 m, 14°52'22"N, 87°54'17W, 5–7 Mar 2021 (1♂), E. van den Berghe. Dept. Francisco Morazán, Reserva Biologica Uyuca, 1700 m, 14°02´06.86"N, 87°04'32.16"W, 11–12 Mar 2021 (1♀), E. van den Berghe (EAP) (iNaturalist).

67. *Anacrusis ellensatterleeae* Brown, 2014 (Fig. 27). The Costa Rican species of *Anacrusis* were reviewed by Brown *et al.* (2014), who described and illustrated this species. These are the first records from Honduras.

Specimens examined: Honduras: Dept. Francisco Morazán, Reserva Biologica Uyuca, 1700 m, 14.9080352, -86.7334, 4–10 Oct 2021 (1♂, 1♀), E. van den Berghe (EAP).

68. *Templemania sarothrura* (Felder & Rogenhofer, 1875) (Fig. 28). This large and distinctively colored species was previously known from Mexico and Guatemala; we provide the first records from Honduras.

Specimens examined: Honduras: Dept. Francisco Morazán, Reserva Biologica Uyuca, 1700 m, 14°02´06.86"N, 87°04'32.16"W, 19 Feb 2021 (5♀), 11–12 Mar 2021 (1♂, 1♀), 4–5 Apr 2021 (2♀), E. van den Berghe (EAP). Dept. Intibucá, La Esperanza, 28 Dec 1971 (2♂, 2♀), R. Lehman (USNM). Dept. Lempira, P. N. Celaque, Camp Quetzal, 2600 m, 14.5276, -88.6835, 24 May 2021 (3♀), E. van den Berghe (EAP).

69. *Tina audaculana* (Busck, 1907) (Fig. 29). This species, described from Mexico, was recorded from several localities in Honduras, representing the first records from this country. DNA barcodes of our specimens are a nearly perfect match (99.39% and 99.69% similar) with "Tinacrucis talamanca5859" on BOLD, which is almost certainly *T. audaculana*.

Specimen examined: Honduras: Dept. Cortés, Cerro Cusuco, Cusuco N.P., 1600 m, 13–15 May 2021 (1♂), E. van den Berghe (EAP). Dept. Francisco Morazán, Reserva Biologica Uyuca, 1700 m, 14°02´06.86"N, 87°04'32.16"W, 21 Sep 2019 (1♂), 19 Feb 2022 (10♂, 3♀), 11–12 Mar 2021 (1♂, 2♀), 4–5 Apr 2021 (1♀), 1 May 2023 (1♂), 4–10 Oct 2021 (4♂, 1♀), E. van den Berghe (EAP). Dept. Lempira, P. N. Celaque, Camp Quetzal, 2600 m, 14.5276, -88.6835, 24 May 2021 (3♂, 2♀), E. van den Berghe (EAP). P. N. Celaque, Centro de visit., 1400 m, 14.5603, -88.6421, 4–8 Jun 2021 (1♀), E. van den Berghe (EAP). Dept. Olancho, La Muralla, Centro de visit., 1421 m, 15.0821, -86.7410, 8–10 Apr 2021 (8♂, 5♀), 8–10 May 2021 (19♂, 7♀), 1–4 Jul 2021 (1♂), E. van den Berghe (EAP).

70. *Tinacrucis* aff. *aqulia* (Busck, 1914) (Fig. 30). *Tinacrucis aqulia* is a sexually dimorphic species described from Mexico over 100 years ago. DNA barcodes of our specimens (see BOLD—https://v4.boldsystems.org/index.php/TaxBrowser_TaxonPage/SpeciesSummary?taxid=405459) are nearly a perfect match (99.24% similar) with those of "Tinacrucis BioLep3726" in BOLD from Costa Rica, which is closest to *T. aquila*.

Specimens examined: Honduras: Dept. Cortés, Cerro Cusuco, Cusuco N.P., 1600 m, 13–15 May 2021 (3♂), E. van den Berghe (EAP). Dept. Francisco Morazán, Reserva Biologica Uyuca, 1700 m, 14°02´06.86"N, 87°04'32.16"W, 9 Mar 2019 (1♂), 21 Sep 2019 (1♂), 29 Dec 2021 (1♂), 19 Feb 2022 (12♂, 3♀), 11–12 Mar 2021 (10♂, 2♀), 4–5 Apr 2021 (3♂, 1♀), 4–10 Oct 2021 (1♀), E. van den Berghe (EAP). Dept. Lempira, P. N. Celaque, Camp Quetzal, 2600 m, 14.5276, -88.6835, 24 May 2021 (4♂), 12–16 Jun 2021 (6♂, 1♀), E. van den Berghe (EAP). P. N. Celaque Centro de visit., 14.5603, -88.6421, 4–8 Jun 2021 (4♂), E. van den Berghe (EAP). Dept. Olancho, La Muralla Centro de visit., 1421 m, 15.0821, -86.7410, 8–10 Apr 2021 (1♂), 8–10 May 2021 (5♂), E. van den Berghe (EAP).

Olethreutinae: Microcorsini

71. *Cryptaspasma* species. The genus *Cryptaspasma* is known from a single specimen from Honduras, probably Comayagua, 1957, coll. Banegas, on avocado (det. J. Brown 2004, SEL identification report on lot number 304368).

Unfortunately, we were unable to locate this specimen; it is likely at the USNM, but it may be in the S. Passoa collection. The locality information is based on partial notes and memory of the first author. It was a female, which prevented species-level identification based on genitalia. The genus, country of capture, and host are not in doubt.

It is possible that the specimen represents *Cryptaspasma perseana* Gilligan & Brown 2011, a pest of avocado described from neighboring Guatemala (Gilligan *et al.* 2011). Adults of *C. perseana* are dark gray and black with no obvious wing pattern. Males have specialized coremata from abdominal segment seven. Distinguishing this species from relatives requires examination of the genitalia. Recent rearings suggest that *C. perseana* feeds on plants other than avocado. Brown *et al.* (2020) recorded it from *Prioria copaifera* Griseb., a legume in Panama. Species of *Cryptaspasma* for which larval hosts are known feed on a hard seeds or kernels of a variety of plant families (Brown & Brown 2004).

Olethreutinae: Olethreutini

72. *Bactra philocherda* Diakonoff, 1964 (Fig. 31). In his description of this species, Diakonoff (1964) reported specimens from the southeastern U.S.A. (Florida), the Caribbean (Dominica, Cuba, Jamaica), Central America (Panama), and western Africa. Like most species of *Bactra*, the host is reported to be *Cyperus* species (Cyperaceae) (Diakonoff 1964, Keeley *et al.* 1970, Roditakis *et al.* 2016).

Specimens examined: Honduras: Dept. Comayagua, Comayagua, 8 Apr 1980 (1♂), S. Passoa (SCPC).

73. *Bactra verutana* Zeller, 1875 (Fig. 32). This widespread species, commonly referred to as the "javelin moth," was described from Texas, U.S.A. It has been recorded throughout much North America (including the Caribbean), Central America, and South America (south to Chile) (Vargas & Vargas-Ortiz 2019). Extraordinarily, there are also records from Africa. Like other species of *Bactra*, the larval host is *Cyperus* species (Cyperaceae).

Specimens examined: Honduras: Dept. Comayagua, Comayagua, 15 Apr 1979 (1♂), 6 May 1979 (1♂), 11 Jun 1979 (1♀), 2 Jul 1979 (no abdomen), 6 Aug 1979 (1♂), 20 May 1980 (1♂), S. Passoa (SCPC).

Gilligan *et al.* (2008) characterized the genus *Bactra* in the midwestern United States. The valva in the male is divided into two round lobes and the female genitalia has a ringlike sclerotization on A8. Horak & Brown (1991) gave characters of the tribe.

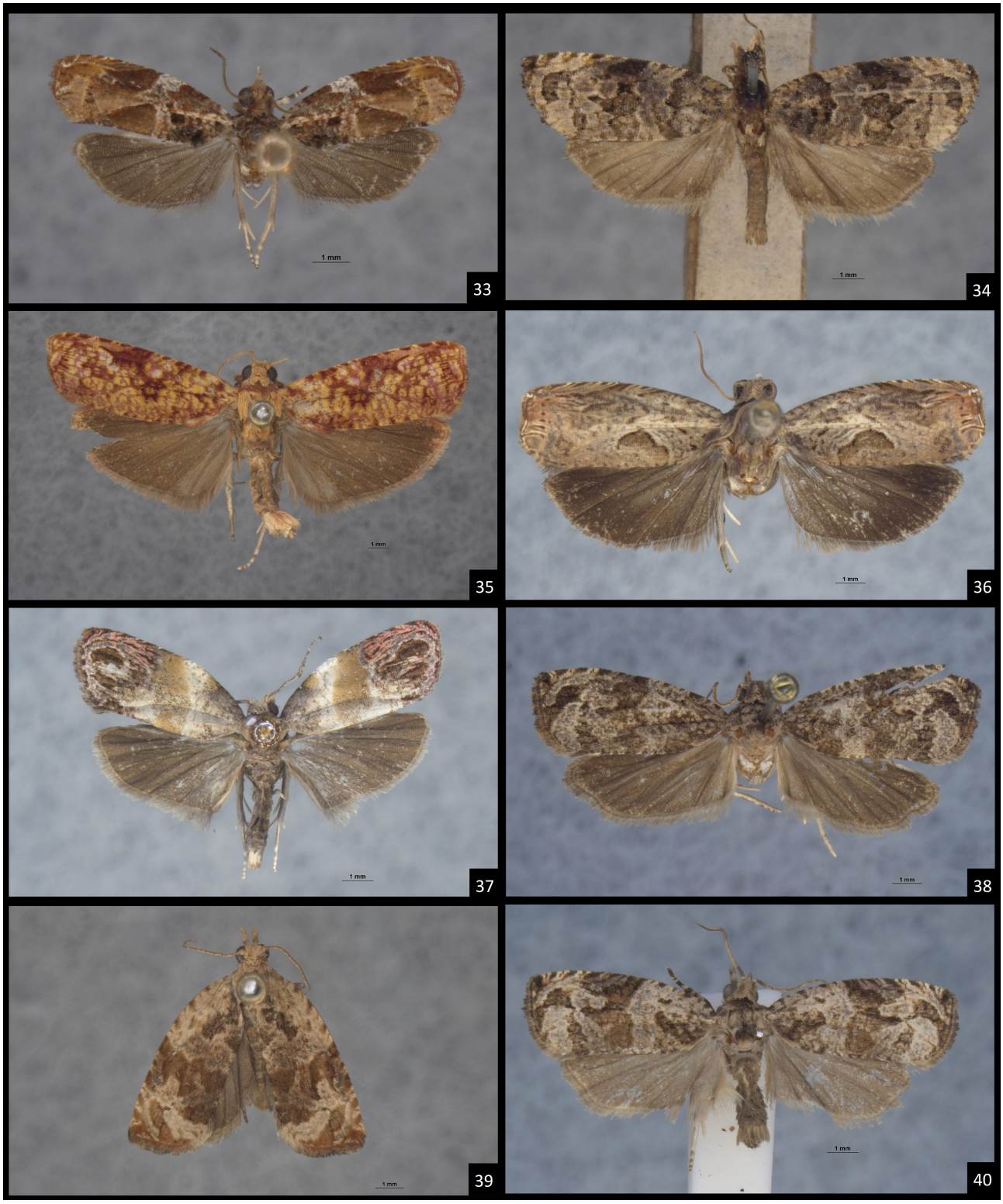
74. *Cacocharis cymotoma* (Meyrick, 1917) (Fig. 33). This species ranges from Florida through the Caribbean and Central America to Brazil and Paraguay (Brown 2008). A single male was reported from Honduras by Brown (2008). The larval food plants are *Phyllanthus acidus* Skeels and *P. niruri* L. (Euphorbiaceae) (Brown 2008).

Specimen examined: Honduras: La Ceiba, CURLA [Centro Universitario Regional del Litoral Atlántico], 23 May 1979 (1♂), [no collector], USNMENT02007245 (USNM).

75. *Endothenia hebesana* (Walker, 1863) (Fig. 34). This species is widespread in the New World, ranging from the northern U.S. to South America. It is considerably less common south of the U.S. border.

Specimen examined: Honduras: Dept. Comayagua, Comayagua, 24 Jan 1980 (1♂), S. Passoa (SCPC).

76. *Episimus caveatus* (Meyrick, 1912). (Fig. 35) According to Razowski & Brown (2008), "*Episimus caveatus* is recorded from Central America (Costa Rica and Panama), the Caribbean (Jamaica), and northern South America (French Guiana, Guyana, Trinidad, and Venezuela), from sea level to ca. 1100 m elevation." Those authors illustrated the adult and its male and female genitalia.



FIGURES 33–40. Tortricidae of Honduras. 33, *Cacocharis cymotoma* (USNMENT02007065); 34, *Endothenia hebesana* (USNMENT02007064); 35, *Episimus caveatus* (USNMENT02007072); 36, *Episimus semicirculanus* (USNMENT02007061); 37, *Eumarozia beckeri* (USNMENT02007060); 38, *Megalota aquilonaris* (USNMENT02007059); 39, *Megalota submicans* (USNMENT02007071); 40, *Megalota vulgaris* (INBIO CRI002062725).

Specimen examined: Honduras: Dept. Olancho, La Muralla, Centro de visit., 1421 m, 15.0821, -86.7410, 8–10 May 2021 (1♂), E. van den Berghe (EAP).

77. *Episimus semicirculanus* (Walker, 1863) (Fig. 36). *Episimus semicirculanus* and its junior synonym *Episimus metaspilana* (Walker, 1863) were both described from Honduras. The two were synonymized by Razowski & Brown (2008) who stated "in both sexes [of *Episimus semicirculanus*] the venter of the pedicel [of the antenna] has a roundish black patch of scales near the distal end, and this character, along with the forewing pattern [see Razowski & Brown 2008: fig. 77], immediately distinguishes *E. semicirculanus* from all congeners." However, this may actually be a complex of species with a similar forewing pattern and black spot on the antennal pedicel. The immature stages are unknown.

Specimens examined: Honduras: [no further data] (2♂, 2♀) (NHMUK).

78. *Episimus* species. A series of an undetermined species of *Episimus* was collected in Uyuca Biological Reserve by EVDB. The male genitalia are typical of those of the Albidorsanus Species Group, with spiny socii and a long slender valvae with a conspicuous, spined, triangular process from the venter of the valva subbasally.

Specimens examined: Honduras: Dept. Francisco Morazán, Reserva Biol. Uyuca, 1700 m, 14.0852, -87.0753, 1700 m, 3–9 Mar 2019 (1♀), 6–18 Jun 2019 (1♀),1 Sep 2019 (1♀), 9 Mar 2019 (1♀), 21 Sep 2019 (1♂), 4–10 Dec 2001 (1♀), E. van den Berghe (EAP).

79. *Eumarozia beckeri* Clarke, 1973 (Fig. 37). There is single specimen of this species in the collection of the USNM. Heppner (2010) reported that it occurs in Mexico, Guatemala, Honduras, Costa Rica, Cuba, and Venezuela. Clarke (1973) reported the host as *Juglans olanchana* Standl. & L. O. Williams (Juglandaceae) in Costa Rica, and there is a record from *Diospyros acapulcensis* Kunth (Ebenaceae) (Janzen & Hallwachs 2018), also from Costa Rica.

Specimen examined: Honduras Dept. Cortés, San Pedro Sula, 15 Jan 1972 (1♂), R. Lehman (USNM).

80. *Megalota aquilonaris* Brown, 2009 (Fig. 38). This species was described based on specimens from the Mexican states of Chiapas, Jalisco, San Luis Potosí, and Veracruz. The female genitalia of a specimen collected in Honduras match the illustration of those of this species in Brown (2009).

Specimen examined: Honduras: Dept. Olancho, La Muralla Centro de visit., 1421 m, 15.0821, -86.7410, 8–10 Apr 2021 (1♀), E. van den Berghe (EAP).

81. *Megalota submicans* (Walsingham, 1897) (Fig. 39). The genitalia (slide JWB-21-045) of a single female collected at Comayagua match those illustrated by Brown (2009) for *M. submicans*, a Caribbean species. Specimens similar to *M. submicans* have also been reported from southern Texas and Venezuela (Brown 2009), but morphological variation suggests that these specimens are part of a species complex.

Specimen examined: Honduras: Dept. Comayagua, Comayagua, Comayagua, Recursos Station, 28 Jun 1979 (1♀), S. Passoa, genitalia slide JWB-21-045 (SCPC).

82. *Megalota vulgaris* Brown, 2009 (Fig. 40). *Megalota vulgaris* is recorded from Guatemala south to Costa Rica, with the vast majority of specimens from lowland rainforest localities below about 200 m. The early stages and larval food plant are unknown; adults have been collected throughout the year in Costa Rica, with many fewer records from June through September. We examined three specimens of this species from Honduras, which represent the first records for the country.

Specimens examined: Honduras: Dept. Comayagua, Comayagua, Comayagua, Recursos Station, 3 Sep 1979 (1♂), S. Passoa (USNM). Dept. Cortés, San Pedro Sula, 21 Mar 1972 (1♂), R. Lehman (USNM). Honduras, Dept. Francisco Morazán, [El] Zamorano central, 22–30 Jan 2021 (1♂), E. van den Berghe (EAP).

Image examined: Honduras: Dept. Francisco Morazán, El Zamorano, Escuela Agrícola Panamericana, 19 Feb 2021, E. van den Berghe. (https://www.inaturalist.org/observations/69815297).

83. *Ophiorrhabda hyeroglypha* (Razowski & Wojtusiak, 2009). A single male from Honduras matches illustrations of *O. hyeroglypha* (Razowski & Wojtusiak 2009: figs. 104, 207), a species described from Ecuador and subsequent collected in Brazil and Costa Rica (Razowski & Becker 2016). The specimen was reared from *Inga* species (Fabaceae). While most host records for the genus are in Myrtaceae, there are a few scattered reports of larvae feeding on Fabaceae. Originally described in *Statherotis*, *hyeroglypha* was transferred to *Ophiorrhabda* by Razowski & Becker (2016). The genus *Ophiorrhabda* previously was documented only from the Indo-Australian Region.

Specimen examined: Honduras: Dept. Francisco Morazán, Escuela Agrícola Panamericana, 30 km E Tegucigalpa, 19 Nov 1983 (1♂), larva on *Inga*, J. Dick, slide JWB-21-065, USNMENT02007242 (USNM).

84. *Tsinilla lineana* (Fernald, 1901) (Fig. 41). This species, described from Florida, is widely distributed throughout the New World tropics, with records from Mexico to Brazil (Razowski & Becker 2011). However, specimens from that broad geographic range may represent a complex rather than a single species. Two specimens were reared from *Annona* species (Annonaceae) in Honduras, the host plant previously reported from Florida as well (Dyar 1901, Heinrich 1931, MacKay 1959, Kimball 1965).

Specimens examined: Honduras: Dept. Francisco Morazán, Zamorano, Escuela Agrícola Panamericana, 20 Sep 1981, larva on *Annona*, em: 6 Oct 1981 (1 adult), S. Passoa; same locality, 26 Sep 1981, larva on *Annona*, em: 16 Oct 1981 (1 adult), S. Passoa (SCPC).

Olethreutinae: Enarmoniini

85. *Ancylis* species. We examined five specimens that have a strongly falcate forewing apex and genitalia similar to those of other species of *Ancylis*, which likely represent an undescribed species of that genus.

Specimens examined: Honduras: Dept. Francisco Morazán, Reserva Biol. Uyuca, 1700 m, 14.0852, -87.0753, 1700 m, 11–12 Mar 2021 (2♂), 4–5 Apr 2021 (1♂), 1 May 2021 (1♂, 1♀), E. van den Berghe (EAP).

Olethreutinae: Eucosmini

86. *Chimoptesis* species 1 (aff. *mitrion* Razowski & Becker, 2015). A female *Chimoptesis* was collected during our survey work. Although the genitalia are similar to those of *C. mitrion* (see Razowski & Becker, 2015), it likely represents an undescribed species.

Specimen examined: Honduras: Dept. La Paz, Opatoro, 2200 m, 13 Mar 2019 (1♀), E. van den Berghe (EAP).

87. *Chimoptesis* species 2. A single female of a second species of *Chimoptesis* was collected at El Zamorano central by EVDB. Although genitalia are similar to those of several species of *Chimoptesis* illustrated by Razowski & Becker (2015), they do not match any of those species. Hence, our female likely represents an undescribed species.

Specimen examined: Honduras: Dept. Francisco Morazán, [El] Zamorano central 14.0075, -87.4832, 22–30 Jan 2021, E. van den Berghe, USNM slide 154,044 (EAP).

88. *Crocidosema accessa* (Heinrich, 1931) (Fig. 42). Described from Panama, this common and widespread pest of legumes is frequently misidentified as *C. aporema* (Walsingham, 1914). However, males of *C. accessa* are easily distinguished from those of the latter by the characteristic mid-dorsal groove in the scaling of the first two abdominal segments.

FIGURES 41–48. Tortricidae of Honduras. 41, *Tsinilla lineana* (USNMENT01370736); 42, *Crocidosema accessa* (USNMENT02007078); 43, *Crocidosema plebejana* (USNMENT02007063); 44, *Crocidosema lantana* (USNMENT02007079); 45, *Rhyacionia frustrana* (USNMENT02007069); 46, *Strepsicrates smithiana* (USNMENT02007068); 47, *Ecdytolopha fabivora* (USNMENT02007068); 48, *Gymnandrosoma aurantianum* (USNMENT01585237).

Specimen examined: Honduras: Dept. Cortés, P.N. Cerro Azul Meámbar, Panacam, 1900 m, 14.8721, -87.9047, 5–7 Mar 2021 (1♂), E. van den Berghe (EAP).

89. *Crocidosema plebejana* Zeller, 1847 (Fig. 43). This nearly cosmopolitan species occurs throughout Central America. SCP collected it as a larva on *Croton* (*Julocroton*) *argenteus* (Euphorbiaceae), which is a somewhat unusual host because the majority of the hosts of this species are Malvaceae (CABI 2020).

Specimens examined: Honduras: Dept. Comayagua, Comayagua, 29 Mar 1979 (1♂), S. Passoa, larva # 75, mandible slide # 167, S. Passoa coll., ex *Croton* (*Julocroton*) *argenteus* (det. A. Molina), (SCPC). Dept. Francisco Morazán, [El] Zamorano central, 14.0075, -87.4832, 22–30 Jan 2021 (2♂), E. van den Berghe (EAP).

90. *Crocidosema lantana* (Busck, 1910) (Fig. 44). This Mexican species was described from Hawaii based on material introduced there for the biological control of weedy *Lantana* (Verbenaceae). It has been redescribed several times from Australia and once from Sr Lanka, with those names now recognized as synonyms. It occurs in the southern U.S. and in many places throughout Central America. Males are easily distinguished by the strongly upturned labial palpi that fit into shallow grooves on the frons of the head.

Specimens examined: Honduras: Dept Comayagua, Siguatepeque, 5 Nov 1980 (1♂), S. Passoa (SCPC). Dept. Francisco Morazán, El Zamorano, Escuela Agrícola Panamericana, 18–19 Dec 1965 (1♂), G. Freytag, USNMENT02007243 (USNM).

91. *Crocidosema* aff. *monias* Razowski & Becker 2017. We examined a male and a female of a eucosmine with mostly green forewing maculation. The male genitalia are similar to those illustrated by Razowski & Becker (2017) for *Crocidosema monias*, and the DNA barcode (JWB-22-005) was a 100% match with "Epinotia BioLep164" of BOLD, from Costa Rica. However, the female genitalia do not match those of this species. Hence, we are uncertain whether our male and female represent different species, or if they are not *C. monias*.

Specimens examined: Honduras: Dept. Olancho, La Murralla, Centro de visit. 1421 m, 15.0821, -86.7410, 8–10 May 2021 (1♂, 1♀), blacklight, E. van den Berghe (EAP).

92. *Crocidosema* species. A male and a female collected at Uyuca Biological Station bear a resemblance to the illustration of the adult of *Pollexinia costaricae* (Razowski & Becker 2018: fig. 38), with a large, brown, isolated spot near the apex of the forewing. However, the male genitalia are extremely similar to those of *C. aporema*, and the female genitalia are unlike those of any described species we have seen. It is possible the male and female are not conspecific, but they have nearly identical forewing patterns and were collected on the same night.

Specimens examined: Honduras: Dept. Francisco Morazán, Reserva Biol. Uyuca, 1700 m, 14.0352, -87.0753, 21 Sep 2019 (1♂, 1♀), E. van den Berghe (EAP).

93. *Epinotia huatuscana* Razowski & Becker, 2014. A single male collected by EVDB at Uyuca Biological Station matches the illustrations of the adult and genitalia in Razowski & Becker's (2014a) review of Neotropical *Epinotia*.

Specimen examined: Honduras: Dept. Francisco Morazán, Reserva Biol. Uyuca, 1700 m, 14.0852, -87.0753, 11–12 Mar 2021 (1♂), E. van den Berghe (EAP).

94. *Proteoteras* new species. A single male of an undescribed species of *Proteoteras* was collected by SCP in 1979. Only one species of this genus is known from south of U.S. border—*P. atromacula* Razowski & Landry, 2008, described from the Galapagos Islands. Hence, this is first record of the genus from Central America.

Specimen examined: Honduras: Dept. Comayagua, Comayagua, 10 May 1979 (1♂), at light, S. Passoa (SCPC).

95. *Pseudexentera tambitoana* Razowski & Wojtusiak, 2011. Five specimens of *Pseudexentera* from Honduras appear to be conspecific with *P. tambitoana*, described from Colombia. We have also examined what appear to be conspecific specimens from Costa Rica.

Specimens examined: Honduras: Dept. Comayagua, Comayagua, 15 Mar 1980 (1♂, 1♀), 8 Apr 1980 (1♂), S. Passoa (SCPC). Dept. Olancho, La Muralla, Centro de visit., 1421 m, 15.0821, -86.7410, 8–10 May 2021 (2♂), E. van den Berghe (EAP).

96. *Rhyacionia frustrana* (Scudder, in Comstock, 1880) (Fig. 45). This common pest of pines is recorded throughout the New World. It was reported from Honduras by Becker (1973), who reared it from *Pinus oocarpa* Schiede ex Schltdl. in early August 1972. A specimen reared by SCP from pine shoots at Siguatepeque may represent this species or a closely related *Rhyacionia*.

Specimens examined: Honduras: Dept Comayagua, Siguatepeque, 20 Jul 1980, ex larva on pine, larva #219, em. 8 Aug 1980 (1♂), genitalia slide #139 SCPC (1 adult), S. Passoa; pine shoots (1 larva) (SCPC).

97. *Sonia* species. A single male with genitalia similar to those of other species of *Sonia* was collected by SCP in 1981. No additional specimens have been examined. No species of *Sonia* have previously been reported south of the U.S. border., so we assume that the specimen represents an undescribed species.

Specimen examined: Honduras: Dept. Francisco Morazán, El Zamorano, Escuela Agrícola Panamericana, 11 Nov 1981 (1♂), S. Passoa (SCPC).

98. *Strepsicrates smithiana* Walsingham, 1891 (Fig. 46). This genus is widespread in the tropical regions of the New World, with 34 described species. The males of many, including *S. smithiana*, are characterized by a unique indentation of the flagellomeres near the base of the antennae.

Specimen examined: Honduras: Dept. Francisco Morazán, El Zamorano, Escuela Agrícola Panamericana, leaf tiers on guayaba [*Psidium guajava* L., Myrtaceae], 11 Nov 1982, S. Passoa (SCPC). Dept. Comayagua, Comayagua, 8 May 1980 (1♂), 17 May 1980 (1♂), 11 Nov 1982 (1♂), 16 Jun 1986 (1♂), S. Passoa, genitalia slides 288, 289 (SCPC).

Olethreutinae: Grapholitini

99. *Cydia* aff. *anaranjada* (Miller, 1959). Carlin & Nuñez (1985) recorded "*Cydia* poss *anaranjada*" from Honduras in the mature cones of *Pinus oocarpa* Schiede ex Schltdl. and *Pinus caribaea* var. *hondurensis* (Sénéclauze) W.H.G. Barrett & Gol. They examined 600 cones of each pine species and found infestation rates of 15% for *P. caribaea* and 6% for *P. oocarpa*.; no larvae were found in *P. maximinoi* H. E. Moore. They describe the adult as follows: "The forewing is orange with gold bands. The hindwing is colored like the forewing, but without markings. The hindlegs are white with a large spur." The adult was determined by H. H. Neunzig but the location of vouchers, if any, are unknown.

100. *Cydia* aff. *ingens* (Heinrich, 1926). Two males of an undetermined species of *Cydia* were collected in Honduras. Although they are somewhat reminiscent of *C. ingens*, although smaller, their genitalia are not similar to those of *C. ingens*.

Specimen examined: Honduras: Dept. Francisco Morazán, El Zamorano, Escuela Agrícola Panamericana, 15 Jun 1986 (1♂), 16 Jun 1986 (1♂), S. Passoa (SCPC).

101. *Cydia latiferreana* (Walsingham, 1879). This widespread species ranges from southern Canada to Mexico, and from coast to coast. Razowski & Becker (2014b) listed records for *C. latiferreana* from Tegucigalpa in September.

Quercus species (Fagaceae), the primary larval hosts of *C. latiferreana*, are common in the vicinity of Tegucigalpa. Larvae of *C. latiferreana* feed inside acorns and fruits of various trees (see Gilligan & Epstein 2012 for a list of species).

Specimen examined. Honduras: Dept. Lempira, Finca La Fortaleza, 1300 m, 15.4247, 88.0583, 16 Jun 2019 (1♂), E. van den Berghe (EAP).

102. *Cydia* aff. *ninana* (Dyar, 1903). We examined two specimens of a species of *Cydia* similar to *C. ninana*, which was described from Arizona, U.S.A. The specimens likely represent an undescribed species that is a member of a complex that includes *Cydia ninana* (Dyar, 1903), *C. pyraspis* (Meyrick, 1928), *C. rhodaspis* (Meyrick, 1928), *C. sagittula* Razowski, 2011, and perhaps one or two additional undescribed species.

Specimens examined. Honduras: Dept. Francisco Morazán, El Zamorano, Escuela Agrícola Panamericana, 12 Jun 1986 (2♂), S. Passoa (SCPC).

103. *Cydia* species 1. A single male of an undetermined and probably undescribed species of *Cydia* was collected at Zamorano in 1978. No additional specimens have been discovered. The specimen is rather small with a non-descript grayish forewing, lacking conspicuous pattern elements.

Specimen examined: Honduras: Dept. Francisco Morazán, Zamorano, 10 Dec 1978 (1♂), at light, S. Passoa, USNMENT02007244 (USNM).

104. *Cyanocydia salvadorana* (Heppner, 2013). Heppner (2013b) described *Cydia salvadorana* from a series that included two paratype males collected by R. Lehman at El Zamorano, Honduras in late July. The wing pattern of this genus is distinctive, but the species closely resemble each other and can only be separated by details of the genitalia. Razowski (2019) transferred *salvadorana* to *Cyanocydia*, and Brown (2019) described the wing pattern as having "7–8 iridescent cyan-blue lines extending various lengths from the costa toward the hind margin on a ground color of black or dark gray". The immature stages are unknown.

Image examined: Honduras: San Antonio de Oriente, Honduras, 9 Mar 2019, E. van den Berghe (https://www.inaturalist.org/observations/41231190)

105. *Dichrorampha* species. A male in poor condition of an undetermined species of what may be *Dichrorampha* was collected by EVDB at P.N. Celaque. The terminal region of the forewing has a row of small black spots, typical of *Dichrorampha*, *Talponia*, and *Ricula*, but the genitalia (USNM slide 154,879) lack the long slender socii typical of the latter two genera. The distal third of the valva is strongly recurved downward and inward, somewhat reminiscent of the male genitalia of *D. incanana* (Clemens) and *D. leopardana* (Busck), but it is much narrower than in those two species.

Specimen examined. Honduras: Dept. Lempira, Cerro Celaque, Centro de visit., 1400 m, 14.5603, -88.6421, 4–8 Jun 2021 (1♂), E. van den Berghe (EAP).

106. *Ecdytolopha fabivora* (Meyrick, 1928) (Fig. 47). A single specimen of this widespread Neotropical species was recorded from Honduras. Elsewhere, it is occasionally an important pest of legumes. Beans are particularly affected by this pest.

Specimen examined: Honduras: Dept. of Comayagua, Taulabe, ex larva on *Pachyrhizus ferrugineus* (Piper) Sørensen (= *Pachyrhizus vernalis* var. *integrifolius* (Donn. Sm.) Clausen) (Fabaceae)(det. A. Molina), 29 Feb 1980, em: 20 Mar 1980 (1♂), S. Passoa (USNM).

107. *Ethelgoda* aff. *stynophra* Razowski & Becker, 2012. A single male with genitalia similar to those of *E. stynophra* was collected by EVDB at the Uyuca Biological Station. The genitalia of our specimen can be distinguished from

those of *E. stynophra* by the rounded rather than triangular basal lobe of the sacculus (Razowski & Becker 2012: fig. 3).

Specimen examined: Honduras: Dept. Francisco Morazán, Reserva Biol. Uyuca, 1700 m, 14.0352, -87.0753, 6 Mar 2019 (1♂), E. van den Berghe (EAP).

108. *Gymnandrosoma aurantianum* Lima, 1927 complex (Fig. 48). This widespread species of the New World tropics was reported from Honduras by Adamski & Brown (2001) based on a specimen in the collection of Vitor Becker. The larvae of *G. aurantianum* attack a wide range of fruit in many families, notably *Citrus* (Rutaceae), *Theobroma* (Sterculiaceae), *Annona* (Annonaceae), *Psidium* (Myrtaceae), and *Byrsonima* (Malpighiaceae) (Adamski & Brown 2001). This may be a complex of species based on DNA barcodes (JWB, unpublished).

Specimens examined: Honduras: Tegucigalpa, 7 Sep 1973 (1♂), V. Becker (VBC); EAP, 30 km E. Tegucigalpa, 8 Mar 1979, S. Passoa, USNMENT02007246 (USNM). Dept. Comayagua, Comayagua, 10 Oct 1979 (1♂), S. Passoa (USNM).

109. *Satronia* species. An undetermined species of *Satronia* was recorded by Carlin & Nuñez (1985) in their study on species of insects attacking three species of pines in Honduras. Based on the plant species included their survey, potential hosts of the *Satronia* are *Pinus oocarpa*, *Pinus caribaea* var. *hondurensis* and/or *P. maximinoi* (Pinaceae). The identification was made by H. H. Neunzig, but the location of vouchers, if any, are unknown. Nothing is known about the biology of other Neotropical *Satronia* except for the altitude at which adults were collected (Razowski & Becker 2016). Some species may be misplaced in this genus, but *Satronia tantilla* Heinrich has been reared from the male flowers of *Pinus elliottii* Engelm. and *P. palustris* Mill. in North America (Brown 2022). These Honduran records seem to confirm an association of *Satronia* with *Pinus*.

List of species of Tortricidae recorded from Honduras

1. *Pseudatteria volcanica* (Butler, 1872)
2. *Pseudatteria* species
3. *Polyortha* species 1
4. *Polyortha* species 2
5. *Polyortha* species 3
6. *Hilarographa* aff. *plectanodes* Meyrick, 1921
7. *Heppnerographa tricesimana* (Zeller, 1877)
8. *Apotoforma apatela* (Walsingham, 1914)
9. *Acleris* species
10. *Aethesoides hondurasica* Razowski, 1986
11. *Aethesoides* new species
12. *Eugnosta emarcida* (Razowski & Becker, 1986)
13. *Eugnosta fraudulenta* Razowski & Becker, 2007.
14. *Rudenia leguminana* (Busck, 1907) complex
15. *Mimeugnosta particeps* Razowski, 1986
16. *Platphalonidia* aff. *subolivacea* (Walsingham, 1897)
17. *Saphenista multistrigata* Walsingham, 1914
18. *Spinipogon ialtris* Razowski, 1986
19. *Anopinella triquetra* (Walsingham, 1914)
20. *Anopinella styraxivora* Brown & Adamski, 2003
21. *Bidorpita* new species
22. *Cuproxena minimana* Brown, 1991.
23. *Dorithia* aff. *pseudocrucifer* Brown, 1991
24. *Dorithia* aff. *consacculana* Brown, 1991

25. *Dorithia* species 3
26. *Durangularia* aff. *druana* (Walsingham, 1914)
27. *Icteralaria idiochroma* Razowski, 1992
28. *Netechma pyrrhodelta* (Meyrick, 1931)
29. *Netechma technema* (Walsingham, 1914)
30. *Orthocomotis nitida* Clarke, 1956
31. *Pseudomeritastis* new species
32. *Seticosta rubicola* Brown & Nishida, 2003
33. *Thalleulia bisexta* Brown, 2022
34. *Argyrotaenia atima* (Walsingham, 1914)
35. *Argyrotaenia citharexylana* (Zeller, 1866)
36. *Argyrotaenia confinis* Razowski & Becker, 2000
37. *Argyrotaenia dichotoma* (Walsingham, 1914)
38 *Argyrotaenia dichroaca* (Walsingham, 1914)
39. *Argyrotaenia glabra* Razowski & Becker 2000
40. *Argyrotaenia heureta* (Walsingham, 1914)
41. *Argyrotaenia montezumae* (Walsingham, 1914)
42. *Argyrotaenia* aff. *artocopa* (Meyrick, 1932)
43. *Argyrotaenia* new species
44. *Clepsis abscisana* (Zeller, 1877)
45. *Clepsis dubia* Razowski & Becker, 2003
46. *Clepsis semanta* Razowski & Becker, 2003
47. *Clepsis* species
48. *Mictopsichia cubae* Razowski, 2009
49. *Mictopsichia* species
50. *Rubropsichia fuesiliniana* (Stoll, 1781)
51. *Aesiocopa* new species
52. *Amorbia concavana* (Zeller, 1877)
53. *Amorbia productana* (Walker, 1863)
54. *Amorbia revolutana* (Zeller, 1877)
55. *Amorbia santamaria* Phillips & Powell, 2007
56. *Amorbia* aff. *cacao* Phillips & Powell, 2007
57. *Platynota rostrana* (Walker, 1863) complex
58. *Platynota helianthes* (Meyrick, 1932)
59. *Platynota* species 2 (new species—pale orange)
60. *Platynota* species 3 (new species—brown blotch)
61. *Sparganothina anopla* B. Landry, 2001.
62. *Sparganopseustis* spp.
63. "*Sparganothoides*" *plemmelana* Kruse & Powell, 2009
64. *Sparganothoides cornutana* Kruse & Powell, 2009
65. *Sparganothoides ocrisana* Krusa & Powell 2009
66. *Anacrusis turrialbae* Razowski & Becker, 2011
67. *Anacrusis ellensatterleeae* Brown, 2014
68. *Templemania sarothrura* (Felder & Rogenhofer, 1875)
69. *Tina audaculana* (Busck)
70. *Tinacrucis* aff. *aquila* (Busck, 1914)
71. *Cryptaspasma* species
72 .*Bactra philocherda* Diakonoff, 1964
73. *Bactra verutana* Zeller, 1875
74. *Cacocharis cymotoma* (Meyrick, 1917)
75. *Endothenia hebesana* (Walker, 1863)
76. *Episimus caveatus* (Meyrick, 1912)

77. *Episimus semicirculanus* (Walker, 1863).
78. *Episimus* species
79. *Eumarozia beckeri* Clarke, 1973
80. *Megalota aquilonaris* Brown, 2009
82. *Megalota submicans* (Walsigham, 1897)
82. *Megalota vulgaris* Brown, 2009
83. *Ophiorrhabda hyeroglypha* (Razowski & Wojtusiak, 2009)
84. *Tsinilla lineana* (Fernald, 1901)
85. *Ancylis* species
86. *Chimoptesis* species 1 (aff. *mitrion* Razowski & Becker, 2015)
87. *Chimoptesis* species 2
88. *Crocidosema accessa* (Heinrich, 1931)
89. *Crocidosema plebejana* Zeller, 1847
90. *Crocidosema lantana* (Busck, 1910)
91. *Crocidosema* aff. *monias* Razowski & Becker, 2017
92. *Crocidosema* species
93. *Epinotia huatuscana* Razowski & Becker, 2014
94. *Proteoteras* new species
95. *Pseudexentera tambitoana* Razowski & Wojtusiak, 2011
96. *Rhyacionia frustrana* (Scudder, 1880)
97. *Sonia* species 1
98. *Strepsicrates smithiana* Walsingham, 1891
99. *Cydia* aff. *anaranjada* (Miller 1959)
100. *Cydia* aff. *ingens* (Heinrich, 1926)
101. *Cydia latiferreana* (Walsingham, 1879).
102. *Cydia* aff. *ninana* (Dyar, 1903)
103. *Cydia* species 1
104. *Cyanocydia salvadorana* (Heppner, 2013)
105. *Dichrorampha* species
106. *Ecdytolopha fabivora* (Meyrick, 1928)
107. *Ethelgoda* aff. *stynophra* Razowski & Becker, 2012
108. *Gymnandrosoma aurantianum* Lima, 1927
109. *Satronia* species

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