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An illustrated catalogue of the type specimens of Tortricidae in the Iziko South African Museum, Cape Town (Lepidoptera: Tortricidae)

J. Razowski & M. Krüger

Abstract


Lectotypes were designated for the following 20 taxa in an effort to stabilize the nomenclature: *Pharmacis stigmatica* Meyrick, 1909; *Tortrix crispata* Meyrick, 1912; *Cacoecia heliaspis* Meyrick, 1909; *Proselena ionephela* Meyrick, 1909; *Cacoecia adustana* Walsingham, 1881; *Cacoecia dorsiplagana* Walsingham, 1881; *Tortrix bisormis* Meyrick, 1920; *Lozotaenia elegans* Walsingham, 1881; *Cnephasia macrostoma* Meyrick, 1920; *Cnephasia chlorocrossa* Meyrick, 1926; *Acharneodes atrinodis* Meyrick, 1926; *Eccopsis fluctuata* Walsingham, 1881; *Argyroloce globigera* Meyrick, 1914; *Dolichastis homograpta* Meyrick, 1920; *Eucosma galactis* Meyrick, 1912; *Eucosma insolens* Meyrick, 1912; *Eucosma tenax* Meyrick, 1920; *Spilonota sinuosa* Meyrick, 1917, and *Laspeyresia ichthyura* Meyrick, 1926.

KEY WORDS: Lepidoptera, Tortricidae, type specimens, Iziko South African Museum, Afrotropical Region.

An illustrated catalogue of the type specimens of Tortricidae in the Iziko South African Museum, Cape Town (Lepidoptera: Tortricidae)

Resumen

Hectaphelia mensaria (Meyrick, 1912), comb. n. (Tortrix); Hectaphelia sporadias (Meyrick, 1920), comb. n. (Tortrix); Hectaphelia vestigialis (Meyrick, 1914), comb. n. (Epichorista); Clepsis biformis (Meyrick, 1920, comb. n. (Tortrix)); Nkandla macrostoma (Meyrick, 1920), comb. n. (Cnephasia); Eccopsis orichlora (Meyrick, 1920), comb. n. (Argyroloce); Strepsicrates sinuosa (Meyrick, 1917), comb. n. (Spilonota); Fulciferia ocnogramma (Meyrick, 1910), comb. n. (Laspeyresia) y Fulciferia ichthyura (Meyrick, 1926), comb. n. (Laspeyresia).

Se han designado los Lectotipos fueron designados para las siguientes 20 taxa en un esfuerzo para estabilizar la nomenclatura: Pharmacis stigmatica Meyrick, 1909; Tortrix crispata Meyrick, 1912; Cacoecia heliaspis Meyrick, 1909; Proselena ionephela Meyrick, 1909; Cacoecia adustana Walsingham, 1881; Cacoecia dorsiplagana Walsingham, 1881; Tortrix biformis Meyrick, 1920; Lozotaenia elegans Walsingham, 1881; Cnephasia macrostoma Meyrick, 1920; Cnephasia chlorocrossa Meyrick, 1926; Acharneodes atrinodis Meyrick, 1926; Argyroloce orichlora Meyrick, 1920; Eccopsis fluctuatana Walsingham, 1881; Argyroloce globigera Meyrick, 1914; Doliochastis homographa Meyrick, 1920; Eucosma galactitis Meyrick, 1912; Eucosma insolens Meyrick, 1912; Eucosma tenax Meyrick, 1920; Spilonota sinuosa Meyrick, 1917 y Laspeyresia ichthyura Meyrick, 1926.

PALABRAS CLAVE: Lepidoptera, Tortricidae, especies tipo, Iziko South African Museum, región Afrotropical.

Introduction

The present paper serves to complement the information detailed in RAZOWSKI & KRÜGER (2007) in that it presents, in similar format, a catalogue of the type specimens of Tortricidae preserved in the Iziko South African Museum of Cape Town; together these two contributions provide a complete account of the type material of this family held in South African collections.

Although less extensive, the Lepidoptera collection of the South African Museum is nevertheless of considerable importance, especially with regard to the exploration of the Lepidoptera fauna of southern Africa during the 19th and the early part of the 20th century. Among the approximately 500 Lepidoptera type specimens are those of 36 species of Tortricidae described by Edward Meyrick between 1909 and 1926 in a series of seven papers in the Annals of the South African Museum, and by Lord Walsingham in one of the pioneering contributions on South African Lepidoptera, which appeared in 1881. As with its predecessor, with this contribution we hope to make this little-known material known to a wider audience and at the same time improve our knowledge of this still comparatively little known group of moths.

Material and methods

Label data are cited verbatim, but months of capture or eclosion are quoted in hyphenated upper case Roman numerals throughout and names of collectors appear in parentheses to ensure uniformity.

CATALOGUE

COCHYLINI

Eugnosta stigmatica (Meyrick, 1909) (Fig. 53)


Lectotype male, here designated, [South Africa, Western Cape]: Type; Cape Colony, George (Wilman); Pharmacis stigmatica Meyr. Type; 5931.; G[enitalia slide No.] 257; genitalia slide 257 SAM 33A5; SAM-LEP-A016903. Erroreously labeled ‘type’ male, [South Africa, Western Cape]: Type; Cape Town (K. H. Barnard) / Jan[uary] 1917; Euxanthis stigmatica Meyr.; SAM-LEP-A016904.

Comments: (i) Male and female genitalia were described and illustrated by RAZOWSKI (1993)
based on specimens from Natal. (ii) The original description was based on two specimens from Cape Colony, one from George (collected by Wilman) and the other from Cape Town, collected by Lightfoot. The latter specimen could not be traced in SAM; there is almost certainly no type material of this species in BMNH (K. Tuck, pers. comm.)

ARCHIPINI

**Clepsis crispata** (Meyrick, 1912), comb. n.  (Fig. 55)


*Lectotype* male, here designated, [South Africa, KwaZulu-Natal]: Type; M’fongosi, Zulu L[and], Nov[ember] 1911 (W. E. Jones); *Tortrix crispata* Meyr.; Meyrick Det[erminavit]; 5933; G[enitalia slide No.] 243; genitalia slide 243 SAM 33 B 4; SAM-LEP-A016858.

Male genitalia (Fig. 1): Uncus broad, indistinctly concave apically; socii small; gnathos arms with small angular lobe and thorns, terminal plate small, rounded apically; valvae rather oval; sacculus weakly convex near middle, with some small thorns, slender posteriorly; lateral lobe of transtilla elongate, tapering terminal and with large spined basal process; aedeagus relatively long, simple.

Comment: The original description was based on two male specimens collected by Jones in M’fongosi, Zululand, in November 1911; the paratypotype is in the Meyrick collection in BMNH.

**Choristoneura heliaspis** (Meyrick, 1909) (Fig. 54)


*Lectotype* female, here designated, [South Africa, KwaZulu-Natal]: Type; Durban, Nat[al], 27-XII-1902 (G. F. Leigh); *Cacoecia heliaspis* Meyr. type; 5947; G[enitalia slide No.] 241; SAM-LEP-A016921.

Female genitalia (Fig. 41): Papillae anales rather evenly broad medially; membranous portion of stigmata transversely plicate, posterior part forming long lateral sclerites; cestum with seven coils; signum fairly short.

Comments: (i) This species was discussed by RAZOWSKI (2008). (ii) The original description was based on two specimens from ‘Natal, Durban (Leigh)’. There are two male specimens without abdomen labeled ‘Durban, Natal, G. F. L[eigh]’ placed under *Archips occidentalis* (Walsingham) in the Meyrick collection in BMNH, but these have not been labeled as types.

**Doridostoma symplecta** (Meyrick, 1910), comb. n.  (Fig. 56)


*Holotype* male, [South Africa, Mpumalanga]: Type; White River, E[astern] Transvaal, Nov[ember] 1908 (A. T. Cooke); *Tortrix symplecta* Meyr. type; Meyrick Det[erminavit]; 5914; G[enitalia slide No.] 262; genitalia slide 262 SAM 33 37; SAM-LEP-A016891.

Male genitalia (Figs 2, 3): Uncus broad, concave apically, setose ventro-terminally; socii small; gnathos arms with end of process spinose; terminal plate of gnathos large; valvae with costa membranous; sacculus simple, broad to middle, with slender posterior fold; base of transtilla a large spined sclerite, median part arched; aedeagus moderately broad with ventral prominence before a distinct termination; coecum penis long, slender.

**Epichoristodes acerbella** (Walker, 1864)  (Fig. 57)

Lectotype male, here designated, [South Africa, Western Cape]: Type; Clanwilliam 1898; Proselena ionephela Meyr. type; Meyrick Determinavit; G[enitalia slide No.] 264; W[ing preparation] 87; 5936; Gen. No. 3181 [genitalia preparation label of Diakonoff, who maintained his own register]; SAM-LEP-A016956.  
Male genitalia (Figs 4, 5): Uncus broadening terminally; socii moderate; valvae oval; sacculus simple, broad to beyond middle; aedeagus slender with short coecum penis.  
Comment: The original description was based on three specimens collected by Lightfoot in Cape Town and Clanwilliam in January. Although it is stated at the beginning of the paper that the types are in the collection of the South African Museum, the remaining two paralectotypes could not be traced; they are almost certainly not in the Meyrick collection in BMNH (K. Tuck, pers. comm.).

Epichoristodes adustana (Walsingham, 1881), comb. n. (Fig. 58)  
Lozotaenia adustana: Brown, 2005, World Cat. Insects, 5: 411 (under synonymy of L. capensana (Walker, 1863) (Tortrix)).  
Lectotype female, here designated, [South Africa, KwaZulu-Natal]: Type; Natal, Durban (Gooch); Cacoecia adustana Wlsm. TYPE; S[outh] Af[rica]; Pl.1 f.1; SAM-LEP-A016856 [abdomen missing].  
Male genitalia from the specimen labeled ‘[South Africa, KwaZulu-Natal]: Karkloof, Natal, 27-I-[19]17 (A. J. T. Janse); TM Lep. Heter. Genitalia slide No. 16403’ (in TMSA) (Figs 6, 7). Uncus somewhat expanding terminad, rounded apically; valvae broad, rounded; sacculus slender with small, sharp termination; lateral lobes of transtilla broad, spiny; aedeagus moderately slender, weakly curved, with a minute ventroterminal thorn.  
Female genitalia from the specimen labeled ‘[South Africa, KwaZulu-Natal]: Karkloof, Natal, 15-I-[19]17 (A. J. T. Janse); TM Lep. Heter. Genitalia slide No. 16404’ (in TMSA) (Fig. 42). Lateral parts of sterigma somewhat expanding proximally; sclerite of antrum large, slender proximally; ductus bursae slender; signum with large base and rather short blade.  
Comments: (i) Based on adult facies this species certainly belongs to Epichoristodes Diakonoff, 1960. Two specimens externally similar to the holotype have the genitalia as in capensana but show slight differences in the shape of the uncus. In this group there are a few species with similar genitalia, hence we do not include adustana in the synonymy of the former. A thorough revision of this group is needed but a confirmation of the systematic position of these species should be based on a study including molecular data. (ii) The original description states, ‘In Mr Gooch’s collection are two specimens, both females, taken at light in October at Spring Vale.’ The collection made at Spring Vale in Natal by W. D. Gooch during the years 1873 to 1879 was purchased by the Trustees of the South African Museum before 1881; the female paralectotype could not be traced in SAM.

Epichoristodes cinerata (Meyrick, 1920), comb. n. (Fig. 59)  
Holotype male, [South Africa, Western Cape]: Type; G[root] Wint[er]-hoek, Tulbagh, 4,500 ft. / Nov[ember]1916 (Lightfoot); Epichorista cinerata Meyr.; 5890; genitalia slide 245 SAM 32 D 5; SAM-LEP-A016937.  
Male genitalia (Figs 8, 9): Uncus broad, rounded terminally, weakly concave apically; socii small; gnathos arms angled, terminal plate rather small; valvae broad, subtriangular terminally; sacculus simple, broad basally; basal lobe of transtilla heavily spined; aedeagus slender.  
Comment: The original description was based on two specimens from ‘Cape Colony, Gt Wint[er]-hoek, 4500 ft’; the paratype, which lacks its abdomen, is in the Meyrick collection in BMNH.
Epichoristodes dorsiplagana (Walsingham, 1881), comb. n. (Fig. 60)


Lozotaenia dorsiplagana: Brown, 2005, World Cat. Insects, 5: 411 (under synonymy of L. capensana (Walker, 1863) (Tortrix)).

Lectotype male, here designated, [South Africa, KwaZulu-Natal]: Type; Natal, Durban (Gooch);
Lozotaenia dorsiplagana Wlsm. TYPE; S[outh] Af[rica]; Pl. 1 f.2; SAM-LEP-A016870 [abdomen missing].

Male genitalia from a specimen from Pretoria (TM Lep. Heter. Genitalia slide No. 16405) (in TMSA) (Figs 10, 11). Uncus tapering basally, rounded posteriorly, concave apically; valva broad, short; sacculus convex postbasally, with small termination; lateral parts of transtilla moderate, long-spined; aedeagus moderately long, weakly curved.

Comment: (i) This species is not conspecific with capensana as supposed by BROWN (2005). For further comments see adustana. (ii) The original description states, ‘One male and two females in Mr Gooch’s collection. The collection made at Spring Vale in Natal by W. D. Gooch during the years 1873 to 1879 was purchased by the Trustees of the South African Museum before 1881; the two female paralecotypes could not be traced in SAM.

Epichoristodes exanimata (Meyrick, 1920), comb. n. (Fig. 61)


Holotype male, [South Africa, Western Cape]: Type; Gr[oot] Wint[er]-hoek, Tulbagh, 4,500 ft. / Nov[ember] 1916 (Lightfoot); 5884; G[enitalia slide No.] 247; genitalia slide 247 SAM 32 D 7; SAM-LEP-016938.

Male genitalia (Figs 12, 13): Uncus strong, broad terminally with lateral lobes (?); gnathos arms simple, terminal plate with two spines; valvae tapering terminal; sacculus convex postbasally, with posterior lobe; transtilla not discernible in slide; aedeagus long, tapering terminally, laterally spinose near middle.

Epichoristodes niphosema (Meyrick, 1917), comb. n. (Fig. 62)


Holotype male, [South Africa, Western Cape]: Type; Hott[entots]-Holl[and] Mts, 4,000 f[t], Caledon, C[ape] C[olony], [K. H.] Barnard 1915; 5917; 86; G[enitalia slide No.] 248; genitalia slide 248 SAM 32 D 8; SAM-LEP-A016939.

Male genitalia (Fig. 14): Uncus broad, widening terminally, slightly concave apically; socii small; gnathos arms simple, terminal plate short; valvae broad; sacculus rather slender, long with posterior, slender lobe; lateral lobe of transtilla large, spinose; aedeagus large, slender terminally; one cornutus present.

Comment: The original description was based on two specimens collected by Barnard at the type locality; the undissected paratype is in the Meyrick collection in BMNH.

Epichoristodes phalaraea (Meyrick, 1920), comb. n. (Figs 63, 64)


Holotype male, [South Africa, Western Cape]: Type; Cape Town, Table M[oun]t[ai]n (K. H. Barnard) / 1,500 ft., 20-XI-[19]18; Epichoristra phalaraea n. sp.; 5908; G[enitalia slide No.] 249; genitalia slide 249 SAM 32 D 10; SAM-LEP-016943.

Paratype (?) female, [South Africa, Western Cape]: Type; Cape Town, Table M[oun]t[ai]n, 1,500 ft. (K. H. Barnard) / Dec[ember] 1918; Epichoristra phalaraea n. sp.; 5889; G[enitalia slide No.] 250 SAM 32 D 10; SAM-LEP-A016942.

Male genitalia (Fig. 15): Uncus very broad, slightly concave apically; socii small, drooping; gnathos arms and terminal plate strong; valvae broad; sacculus broad except for terminal portion, convex medially; lobes of transtilla broad, densely spinose; aedeagus broad with slender ventral termination; coecum penis moderate; one cornutus present.
Female genitalia of ?paratype (Fig. 43): Papillae anales comparatively large, broadening posteriorly; sterigma moderate with small, rounded proximal corners; sclerite of antrum small; ductus bursae rather short; signum taking the form of a minute spine.

Comment: The original description was based on one male and two female specimens from ‘Cape Colony, Table Mountain, 1500 ft., in November and December (Barnard)’. As there are two female paratypes in the Meyrick collection in BMNH, the female specimen in SAM above is probably not a paratype.

**Hectaphelia mensaria** (Meyrick, 1912), comb. n. (Fig. 65)


Holotype male, [South Africa, KwaZulu-Natal]: Type; M‘fongosi, Zulu L[and], Nov[ember] 1911 (W. E. Jones); *Tortrix mensaria* Meyr.; Meyrick Det[erminavit]; 5935; G[enitalia slide No.] 260; genitalia slide 260 SAM 3385; SAM-LEP-A016877.

Male genitalia (Fig. 16): Uncus very large, broad, expanding terminally, concave apically, with two small lateral prominences subterminally; socii minute; gnathos arms large with submedian process; terminal plate of gnathos long; costa of valvae small, basal, remaining part weakly sclerotized, with subdorsal fold; sacculus slender, forming a long postmedian lobe; transtilla simple, slender medially; aedeagus broad, terminating in a short ventro-terminal spine.

**Hectaphelia sporadias** (Meyrick, 1920), comb. n. (Fig. 66)


Holotype male, [South Africa, Northern Cape]: Vryburg, C[ape] C[olony], 1918 (J. Brown); *Tortrix sporadias* Meyr.; 5940.; G[enitalia slide No.] 261; genitalia slide 261 SAM 33/36; SAM-LEP-A016890.

Male genitalia (Figs 17, 18). Uncus broad, somewhat expanding terminally; socii apparently absent; gnathos arms broadening and convex subterminally; terminal plate large; dorsum of valvae membranous; a triangular subdorsal process beyond middle; sacculus broad to 1/3, with slender postmedian fold; transtilla damaged; aedeagus comparatively slender; coecum penis short.

**Hectaphelia vestigialis** (Meyrick, 1914), comb. n. (Fig. 67)


Holotype female, [South Africa, Mpumalanga]: Type; Barberton, Transvaal (H. Edwards) / Feb[ruary] 1912; *Epichorista vestigialis* Meyr.; 5924; G[enitalia slide No.] 246; genitalia slide 246 SAM 32 D6; SAM-LEP-016950.

Female genitalia (Fig. 44): Papillae anales relatively large; apophyses very slender, long; sterigma short and broad with large anteostial part provided with small, rounded corners and a finely setose median lobe; sclerite of antrum long, indistinctly sclerotized proximally; ductus bursae short; signum absent.

**Clepsis biformis** (Meyrick, 1920), comb. n. (Figs 73, 74)


Lectotype female, here designated, [South Africa, Western Cape]: Type; G[root] Wint[er]hoek, Tulbagh, 4,500 ft. / Nov[ember] 1916 (Lightfoot); 5915; *Tortrix biformis* Meyr.; genitalia slide 259 SAM 3303; SAM-LEP-016841.

Paralectotype female, [South Africa, Western Cape]: Type; G[root] Wint[er]hoek, Tulbagh, 4,500 ft. / Nov[ember] 1916 (Lightfoot); 5915; *Tortrix biformis* Meyr.; SAM-LEP-A016841 [abdomen missing].

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Male genitalia (Figs 19, 20, from paralectotype in BMNH): Uncus very broad, hardly tapering postmedially; socius small; gnathos simple; sacculus arched outwards medially; labis large, elongate, heavily spined; aedeagus doubly curved, rather slender.

Female genitalia (Fig. 45): Papillae anales broadening posteriorly; apophyses very slender; sterigma in form of latero-posterior arms followed by broad scobinate area; antrum membranous except for slender proximal part; ductus bursae moderately broad; blade of signum rather short, basal plate elongate.

Comment: The original description was based on eight specimens, of both sexes, from ‘Cape Colony, Gt. Wint[er]hoek, 4500 feet’. Four of the remaining paralectotypes are in the Meyrick collection in BMNH; the whereabouts of the other two are not known.

**Metamesia elegans** (Walsingham, 1881) (Fig. 68)


*Metamesia elegans*: Brown, 2005, World Cat. Insects, **5**: 418.

Lectotype female, here designated, [South Africa, KwaZulu-Natal]: Type; Natal, Spring Vale (Gooch); *Lozotaenia elegans* Wlsm. TYPE, S[outh] Af[rica]; Pl. 1 f.4; SAM-LEP-A016989.

Note: Although spelled *elegantana* on the label of the above syntype, the specific epithet was published as *elegans*.

Male genitalia (Figs 21, 22): Uncus broad, bifid from beyond middle, with lateral parts tapering apicad; arms of gnathos slender; valva tapering terminally; sacculus hardly convex, slender in distal part; lateral parts of transtilla large, elongate; aedeagus moderately broad with lateroterminal process; cornuti strong.

Comment: The original description was based on four specimens ‘in Mr Gooch’s collection. Taken at light at Spring Vale in November, and in the Botanic Garden at D’Urban in September and October.’ The collection made at Spring Vale and in the vicinity of Durban in Natal by W. D. Gooch during the years 1873 to 1879 was purchased by the Trustees of the South African Museum before 1881. The remaining three paralectotypes could not be traced in SAM.

**Nkandla macrostoma** (Meyrick, 1920), comb. n. (Fig. 69)


*Cnephasia macrostoma*: Brown, 2005, World Cat. Insects, **5**: 595 (under unplaced Cnephasiiini).

Lectotype male, here designated, [South Africa, Western Cape]: Type; G[root] Wint[er]-hoek, Tulbagh, 4,500 ft. / Nov[ember] 1916 (Lightfoot); *Cnephasia* sp.?, *Cnephasia macrostoma* Meyr.; 5916; [genitalia slide No.] 251; SAM-LEP-016986. Paralectotype, [South Africa, Western Cape]: Type; Hott[entots]-Holl[and] M[ountain]s, C[ape] C[olony], 1917 (Barnard); *Cnephasia macrorrhyncha* Meyr[ick]; should this be *macrostoma* [sic]? [in A. J. T. Janse’s hand]; SAM-LEP-016985 [abdomen missing].

Male genitalia from identical specimen (Fig. 23): Uncus short with broad base; gnathos small and slender; valvae weakly sclerotized dorsally; sacculus with two long dorsal processes near middle; transtilla not discernible in slide; juxta taking the form of a large simple plate; aedeagus long, slender, strongly curved beyond zone, with short ventral termination; coecum penis long, slender.

Comments: (i) The original description was based on four specimens representing both sexes from ‘Cape Colony, Gt. Wint[er]hoek, 4,500 ft. and Hottentot-Holland Mts’ collected by K. H. Barnard. As the lectotype was collected by Lightfoot it appears likely that Meyrick made a mistake when writing the original description. (ii) In addition to the lectotype and paralectotype in SAM above, a third undissected male paralectotype from Wint[er]hoek is in the Meyrick collection in BMNH; the whereabouts of the fourth are unknown.

**Tuckia africana** (Walsingham, 1881) (Fig. 70)


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Syntype male, [South Africa, KwaZulu-Natal]: Natal, Spring Vale (Gooch); Conchylis africana Wlsm. TYPE, [South Af[rica]]; Pl. 1. f. 6; SAM-LEP-A016836.

Comments: (i) The original description was based on ‘Three specimens, of which one only is in good condition, taken at light in October at Spring Vale. I have also a specimen from Zululand’. The collection made at Spring Vale in Natal by W. D. Gooch during the years 1873 to 1879 was purchased by the Trustees of the South African Museum before 1881; the whereabouts of the two remaining type specimens are not known. (ii) RAZOWSKI (2001) examined a specimen from Salisbury, Southern Rhodesia (now Harare, Zimbabwe) determined in the Natural History Museum London as africana which fits the original description.

UNPLACED SPECIES

Cnephasia catastrepta Meyrick, 1926 (Fig. 71)


Holotype male, [South Africa, Western Cape]: Type; Llandudno, Cape T[own] / P. Penfold 1915; 5939; G[enitalia slide No.] 242; Cnephasia catastrepta Meyr.; genitalia slide 242 SAM 32 C 12; SAM-LEP-016976.

Male genitalia (Fig. 24): Uncus consisting of two claw-shaped parts; gnathos arms long, terminal plate with posterior process; valvae long, slender; sacculus simple, short; transtilla a transverse weakly arched sclerite; aedeagus large, spinose laterally; coecum penis broad, rounded; anellus finely spinose above aedeagus.

Cnephasia chlorocrossa Meyrick, 1926 (Fig. 72)


Lectotype male, here designated, [South Africa, Western Cape]: Type; Montagu, C[ape] C[olony], Oct[ober] 1919 (K. Barnard); Cnephasia chlorocrossa Meyr.; Meyrick determ[inavit]; 5927; SAM-LEP-016981 [abdomen damaged].

Comment: The original description was based on three specimens collected by K. H. Barnard at ‘Cape Province, Montagu and Oudebosch’ in October and December. In addition to the above, there are two undissected paralectotypes (labeled as Lectotype and Paralectotype) from Montagu and Oudebosch in the Meyrick collection in BMNH; the lectotype designation proposed earlier, however, remains unpublished (K. Tuck, pers. comm.).

CHLIDANOTINI

Trymalitis scalifera Meyrick, 1912 (Fig. 75)


Holotype male, [South Africa, KwaZulu-Natal]: Type; M’fongosi, Zulu L[and], Nov[ember] 1911 (W. E. Jones); Trymalitis scalifera Meyr; Meyrick Determ[inavit]; SAM-LEP-A017201.

Male genitalia from the specimen labeled ‘[South Africa, KwaZulu-Natal]: Pongola R[iver], Oct[ober] 1929 (Bell-Marley); TM Lep. Heter. Genitalia slide No. 16406’ (in TMSA) (Figs 25, 26). Uncus broad terminally and basally, strongly curved; hami slender; gnathos weak, with slender arms; valva broad, convex ventrally, tapering beyond an ill-defined sacculus; transtilla weakly sclerotized, broad; scobinate dorsal part of anellus very long; aedeagus uniformly broad throughout, slightly curved.

Female genitalia from the specimen labeled ‘[South Africa, KwaZulu-Natal]: 3217; Eshowe, 4-I-[1916] A. J. T. Janse); teste Meyrick; TM Lep. Heter. Genitalia slide No. 16407’ (in TMSA) (Fig. 46). Sterigma weakly sclerotized, antrum expanding posteriorly; ductus bursae moderately short; signum
taking the form of a strong group of spines extending from a rounded base; ductus of accessory bursa originating from the latter.

**MICROCORDINI**

*Cryptaspasma caryothicta* (Meyrick, 1920) (Fig. 76)


Lectotype male, here designated, [South Africa, Western Cape]: Type; Rondebosch, Cape Town / P. Penfold, 1915; _Eucosma atrinodis_ Meyrick; Gen. No. 2857 [genitalia preparation label of Diakonoff's, who maintained his own register]; 85; 5882; see _Acharneodes_; SAM-LEP-A017199.

Comment: The original description is based on two male specimens from Cape Town collected by Penfold. Although it is stated at the beginning of the paper that the types are preserved in the South African Museum, the paralectotype could not be located there; it is almost certainly not in BMNH (K. Tuck, pers. comm.).

**OLETHREUTINI**

*Eccopsis orichlora* (Meyrick, 1920), comb. n. (Fig. 77)


Lectotype male, here designated, [South Africa, Western Cape]: Type; Oudebosch, Caledon, 1,500 ft. / K. H. Barnard Jan[uary] 1919; _Arroyoploce orichlora_ n. sp.; 5904; G[enitalia slide] 240; SAM-LEP-A017065 (dissected, genitalia slide 240.SAM3 2C6).

Male genitalia (Figs 27, 28): Uncus comparatively broad, concave apically, bearing bristles ventro-terminally; socii fairly large, curved postbasally; right valva with proximal bristles of cucullus larger than remaining ones; postmedian group of long setae of sacculus large; left valva without setae of sacculus; dorso-basal process of valvae large, setose terminally; aedeagus long, rather slender, curved; cornutus relatively large.

Comments: (i) This species is closely related to _E. maschalista_ (Meyrick, 1932) but _orichlora_ is distinguished by a distinct cornutus, recalling the condition in _E. wahlbergiana_. (ii) The original description was based on three specimens representing both sexes from 'Cape Colony, Oudebosch (1,500 ft.) and Table Mountain, in January and February (Barnard)'. In addition to the above, there exists a further undissected paralectotype collected on Table Mountain in February in the Meyrick collection in BMNH.

*Eccopsis fluctuatana* Walsingham, 1881 (Fig. 78)


Lectotype female, here designated, [South Africa, KwaZulu-Natal]: Type; Natal, Durban (Gooch); _Eccopsis fluctuatana_ Wals. TYPE; S[outh] Af[rica]; Pl. 1 f. 7; SAM-LEP-A017025 [abdomen missing].


Male genitalia (Figs 29, 30): Uncus strong, hardly expanding terminally, with two apical groups of spines; socii fairly long, well sclerotized, pointed terminally; valvae elongate with weak neck and long
Eudemis globigera (Meyrick, 1914), comb. n. (Fig. 79)


Lectotype male, here designated, [South Africa, KwaZulu-Natal]: Type; Natal, Victoria Dist[rict] / Purch[ased] 1879 (W. D. Gooch); *Argyroproce globigera* Meyr.; Meyrick Det[erminavit]; 5905; SAM-LEP-017063 [abdomen missing].

Male genitalia from the specimen labelled ‘[South Africa, KwaZulu-Natal], Durban, 26-VI-[19]18, Coll. Janse; TM Lep. Heter. Genitalia slide No. 4657’ (in TMSA) (Fig. 31). Uncus short; socii very long, broadening basally and terminally, ventral broadening at base of cucullus bristled; gnathos present, fully developed, with elongate terminal plate; valvae long, broadest submedially, densely spined ventrally in the broadest part of the valvae; sacculus convex postbasally; aedeagus moderately large, simple, weakly curved.

Female genitalia from the specimen labeled, ‘[South Africa, KwaZulu-Natal]: 2947; Umbilo, 25-X-[19]14 / L. Bevis 1427; DM.; Teste Meyrick; TM Lep. Heter. Genitalia slide No. 16410’ (in TMSA) (Fig. 48). Apophyses slender, rather short; sterigma elongate, forming two latero-terminal lobes; antrum sclerite weak, broadening posteriorly; ductus bursae slender; cingulum absent; signa large, of unequal size.

Comments: The original description states, ‘Natal, Victoria district (Gooch), one specimen; also one in my collection from Durban, in March (Leigh)’. The specimen from Durban is in the Meyrick collection in BMNH and is labeled as a paralectotype.
sterigma short, broad, weakly convex proximally; antrum long, well sclerotized, widening posteriorly; two rather small signa present.

EUCOSMINI

**Doliochastis homograpta** Meyrick, 1920 (Fig. 81)


Lectotype female, here designated, [South Africa, North-West]: Type; Junction [of] Crocodile [and] Marico R[ivers], Transvaal / R. Tucker Feb[ruary] 1918; *Doliochastis homograpta* Meyr.; Determ[inavit] E. Meyrick; G[enitalia slide No.] 244; 5942; genitalia slide 244 SAM 3aD2; SAM-LEP-A017400.

Female genitalia (Fig. 50): Sterigma short, convexly rounded posteriorly, with short anteostial part; ductus bursae broad; cingulum large; corpus bursae elongate; signa prominent, of unequal size.

Comments: (i) This taxon is the type-species of the monotypic genus *Dolichastis* Meyrick, 1920. As the male remains unknown the systematic position of this genus is doubtful; based on wing venation Meyrick placed it in Eucosmini. BROWN (2005) followed this interpretation and we can only surmise that *Dolichastis* is related to the genera of the *Eucosma* Hübner group. (ii) The original description was based on six specimens from ‘Transvaal, junction of Crocodile and Marico Rivers, in February (R. Tucker)’. In addition to the female lectotype above, there are three undissected paralectotypes in the Meyrick collection in BMNH; the whereabouts of the remaining two is unknown.

UNPLACED SPECIES

**Eucosma galactitis** Meyrick, 1912 (Fig. 82)


Lectotype male, here designated, [South Africa, Mpumalanga]: Type; Barberton, Transvaal, April 1911 (H. Edwards); 5911.; *Eucosma galactitis* Meyr.; Meyrick det. [genitalia slide 4632].

Male genitalia (Fig. 33): Uncus relatively large, rather weakly sclerotized; socii well developed, drooping; valvae elongate with horn; sacculus long, weakly convex medially, with broad posterior lobe; ventral incision of valvae short; cucullus elongate with triangular ventral lobe; aedeagus simple, moderately large.

Female genitalia (Fig. 51) from the specimen labelled ‘[South Africa, KwaZulu-Natal], New Hanover, 26-X-1913 (Hardenberg), Coll. Janse; TM Lep. Heter. Genitalia slide No. 16412’ (in TMSA). Sterigma fairly large, incised posterior-medially; antrum membranous; cingulum large; two prominent signa of equal size present.

Comment: The original description was based on three specimens (Transvaal, Barberton, in April (H. Edwards), and Johannesburg, in January (one male in my own collection); Zululand, M’fongosi, in May (W. E. Jones); three specimens). The syntypes from M’fongosi and Johannesburg are in the Meyrick collection in BMNH, with the latter specimen lacking its abdomen.

**Eucosma insolens** Meyrick, 1909 (Fig. 83)


Male genitalia (Fig. 34): Tegumen short; uncus and socii absent; valvae large, elongate; ventral lobe of cucullus broad, armed with a strong spine, dorso-posterior part rounded; sacculus simple; aedeagus moderately long, simple.
Comment: The original description was based on two specimens from ‘Cape Colony, Hex River, bred in August from larvae feeding on a species of Ceroplastis (Coccidae) (Lounsbury)’. In addition to the above specimen, there are two undissected specimens with identical data and hence seemingly eligible as paralectotypes. It seems that Meyrick must have made a mistake when indicating numbers of specimens when he described this species (K. Tuck, in litt.).

**Eucosma siccescens** Meyrick, 1912 (Fig. 84)


**Eucosma siccescens**: Brown, 2005, World Cat. Insects, 5: 334 (under unplaced Eucosmini).

Holotype male, [South Africa, Northern Cape]: Bushmanland, Jackals Water (Lightfoot) / Oct[ober] 1911; *Eucosma siccescens* Meyr.; Meyrick Det[erminavit]; 5893; Genitalia slide No. 254; genitalia slide 253; SAM 32D13; SAM-LEP-A017136.

Male genitalia (Figs 35, 36): Tegumen fairly long; uncus simple, slender, tapering terminally; socii comparatively small, hairy; valvae damaged before ventral incision; angle of sacculus produced; aedeagus short.

**Eucosma lochmaea** Meyrick, 1920 (Fig. 85)


**Eucosma lochmaea**: Brown, 2005, World Cat. Insects, 5: 332 (under unplaced Eucosmini).

Lectotype male, here designated, [South Africa, KwaZulu-Natal]: Type; Krantzkl[oo]f, 6-16 [denoting June 1916, vide infra] (Marley); [from] seed pods [of] Sugar Bush; *Eucosma lochmaea* Meyr.; 5881; SAM-LEP-A017117 [abdomen missing].

Comment: The original description was based on four specimens from ‘Natal, Durban (Marley); bred in June from larvae feeding in pods of sugar-bush, presumably a Leguminous shrub’. In addition to the specimen above there are two undissected paralectotypes in the Meyrick collection in BMNH; the whereabouts of the fourth are unknown.

**Eucosma tenax** Meyrick, 1920 (Fig. 86)


**Eucosma tenax**: Brown, 2005, World Cat. Insects, 5: 334 (under unplaced Eucosmini).

Lectotype male, here designated, [South Africa, Western Cape]: Type; Groo[Wit]h[ol]k, Tulbagh, 4,500 ft. / Nov[ember] 1916 (Lightfoot); *Eucosma tenax* Meyr. male; 5887; SAM-LEP-A017138.

Paralectotype female, [South Africa, Western Cape]: Type; Groo[Wit]h[ol]k, Tulbagh, 4,500 ft. / Nov[ember] 1916 (Lightfoot); *Eucosma tenax* Meyr. female; 5887; SAM-LEP-A017138 [abdomen missing].

Male genitalia (Figs 37, 38): Uncus fairly large, weakly tapering terminally; socii atrophied; arm of gnathos with small postmedian convexity; terminal plate of gnathos expanding proximally; valvae broad; sacculus slender, from beyond middle and with minute free termination; aedeagus simple, tapering terminally; cornutus thorn-shaped with distinct base.

Comments: (i) *Eucosma tenax* was described in Olethreutinae but examination of the female genitalia shows that it certainly belongs to Tortricinae: Archipini. Unfortunately we cannot identify its genus thus we preserve the original interpretation. (ii) The original description was based on three specimens representing both sexes from ‘Cape Colony, Gt. Wint[er]hoek, 4500 ft.’; the second ( undissected) paralectotype is in the Meyrick collection in BMNH.

**Steganoptycha infausta** Walsingham, 1881 (Fig. 87)


**Steganoptycha infausta**: Brown, 2005, World Cat. Insects, 5: 331.

Holotype male, [South Africa, KwaZulu-Natal]: Type; Natal, Durban (Gooch); *Steganoptycha infausta* Wlsm. TYPE; S[outh] Af[rica]; Pl. 1 f. 8; SAM-LEP-A017097 [abdomen missing].
Strepsicrates sinuosa (Meyrick, 1917), comb. n. (Fig. 88)


_Spilonota sinuosa_ Brown, 2005, World Cat. Insects, 5: 568.

Lectotype female, here designated, [South Africa, KwaZulu-Natal]; type; Gillets, Natal, 9-15 [denoting September 1915] (Marley); _Spilonota sinuosa_ Meyr.; Meyrick Determinavit; 5901.; Genitalia slide No. 258; W 88; SAM-LEP-A017143.

Female genitalia (Fig. 52): Anteostial part of sterigma well sclerotized, short, postostial part submembranous; antrum sclerite fairly long, tapering proximad; cingulum long; corpus bursae densely spinose; two very small sigmas present.

Comment: The original description was based on two specimens collected by Marley in Natal, Durban. The second syntype is in the Meyrick collection in BMNH.

GRAPHOLITINI

_Fulcrifera ocnogramma_ (Meyrick, 1910), comb. n. (Fig. 89)


_Laspeyresia ocnogramma_ Brown, 2005, World Cat. Insects, 5: 331 (under unplaced Enarmoniini).

Holotype male, [South Africa, Mpumalanga]: Type; White River, E[astern] Transvaal, Nov[ember] 1908 (A. T. Cooke); _Laspeyresia ocnogramma_ Meyr. Type; Genitalia slide No. 256; 5910; SAM-LEP-A017168.

Male genitalia (Fig. 39): Valvae broad with weak ventral incision; cucullus short and broad, with small lobes; aedeagus long, slender beyond zone, fulcrum broad, bearing a few spines.

_Fulcrifera ichthyura_ (Meyrick, 1926), comb. n. (Fig. 90)


Male genitalia (Fig. 40): Valvae broad with short postmedian incision; sacculus angulate postmedially; cucullus oval, with distinct ventral lobe adorned with some strong spines.

Comment: The original description was based on three specimens representing both sexes from ‘South West Africa, Otjimbulumbe, Kunene R[iver], and Namutoni, in February and March (K. H. Barnard)’. The paralectotype from Namutoni is in the Meyrick collection in BMNH; the whereabouts of the third type specimen are not known.

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BIBLIOGRAPHY


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Figs 40-44.– Male and female genitalia: 40. Fulcrifera ichthyura (Meyrick, 1926), lectotype; 41. Choristoneura heliaspis (Meyrick, 1909), holotype; 42. Epichoristodes adustana (Walsingham, 1881), specimen from Karkloof; 43. Epichoristodes phalarcaea (Meyrick, 1920), ?paratype; 44. Hectaphelia vestigialis (Meyrick, 1914), holotype.
Figs 49-52.— Female genitalia: 49. Ancylis natalana (Walsingham, 1881), specimen from Pretoria North; 50. Doliochastis homograpta Meyrick, 1920, holotype; 51. Eucosma galactitis Meyrick, 1912, specimen from New Hanover; 52. Strepsicrates sinuosa (Meyrick, 1917), lectotype.