

for example, is a comparatively rare West African visitor; and there can be little interest amongst "students in senior schools" in such bits of information as "The English Song Thrush has its local counterpart in the Kurrichane Thrush; it has just the same plump build as the Song Thrush and Blackbird that are so typical of English gardens . . ." or in "Only one kind breeds in England, the Red-backed Shrike, which is a summer migrant". There are plenty of others; and the space so occupied could well have been devoted to more adequate description of some of the many commonly seen West African birds, some of which at present find no place.

On page 1 it is stated that the warm reception given to this book "has made it possible to revise it completely and bring it up to date". The revision has not been so thorough as it might have been; nor has the text really been brought up to date in the sense that times have changed very much since 1946, and any West African book must be clearly addressed to an audience that knows not Europe. Yet despite these criticisms of detail "Animals of West Africa" continues to merit, as a whole, the warm reception which it has enjoyed in the past. It is safe to say that no one interested in wild life will for one moment regret investing five shillings in Mr. Cansdale's very readable and informative volume.

Cover designers are mostly of the sort that rarely receive mention. I think that this one deserves a word of praise for the charming porcupine and the rather apprehensive Crown Bird—albeit both are founded upon Mr. Cansdale's own highly commendable photographs.

D. R. ROSEVEAR.

The Hawkmoths of Nigeria

By J. Boorman, M.A., F.R.E.S.

With photographs by the author

PART II

40. *Cephonodes hylas*, L.

The form *virescens*, Willgr., occurs in Nigeria. $2\frac{1}{4}$ " ; quite unmistakable, since both FW and HW are devoid of scales over most of their surface, with only a few greenish scales at the costa and base. ABD greenish yellow, with a broad transverse dark red band. A day flier, mostly in bright sunshine. When the moth emerges from the pupa, the wings are covered with scales, but

these are shed during the first flight (Dr. McNulty's observation). Recorded from Kano (M), Ibadan (I), Lagos (BM, JB), Minna (BM), and Port Harcourt (M). SD 8, 9, 10, 11.

41. *Deilephila nerii*, L.

$3\frac{3}{4}$ " ; FW green, with creamy white, grey, and pink markings. HW greyish black at the base, with a whitish median band bordered outside with greenish. ABD greenish, unmarked. A common species recorded from many localities over the whole of Southern Nigeria, and from many localities in the North. The larvae have been found feeding on *Allamanda* sp. and *Rauwolfia* sp., and apparently exist in two colour forms ; one which is mainly greenish white and the other which is deep orange and brown. SD 2, 4, 5, 6, 7, 9.

42. *Nephele vau*, Wkr.

$2\frac{1}{2}$ " ; FW reddish brown, with a darker triangular area on the outer half from the costa to hind angle, and with a pale marginal band. Stigma white, and V-shaped. HW brown, darker at the margin. ABD brown, with narrow lateral black spots. Recorded from Bauchi (BM), only.

43. *Nephele comma*, Hopff.

This species occurs in two forms ; *N. comma* f. *comma*, with a white stigma on the FW, and f. *derasa*, R. and J., without the white stigma. Both are equally common. 3" ; FW dark greenish brown, with a distinct, paler marginal band. Stigma large, white, and C-shaped. HW dark brown with a darker marginal band. Recorded from Abakaliki (H), Calabar (BM), Ikom (I), Lagos (JB), Ogoja (H), and Port Harcourt (M). SD 1, 2, 5, 6, 7, 8, 10, 11, 12.

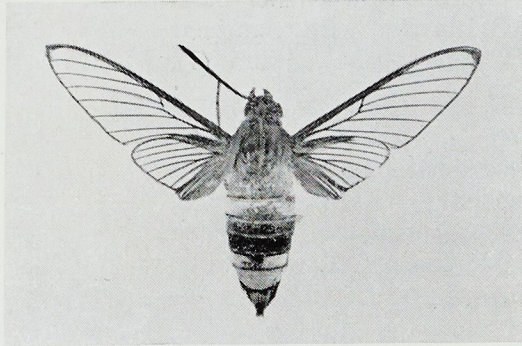
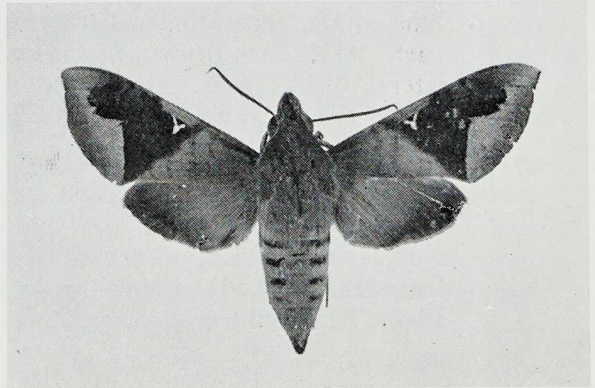
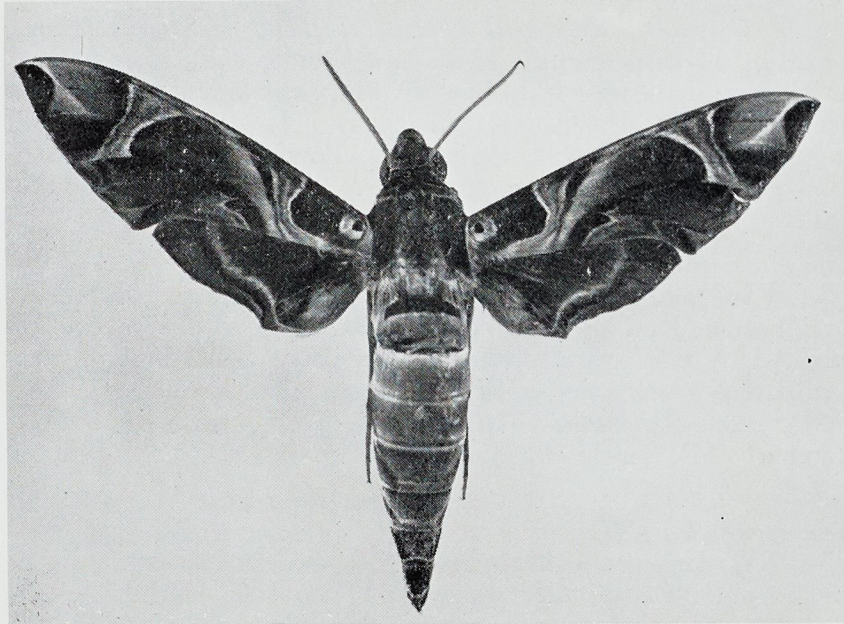
44. *Nephele funebris*, F.

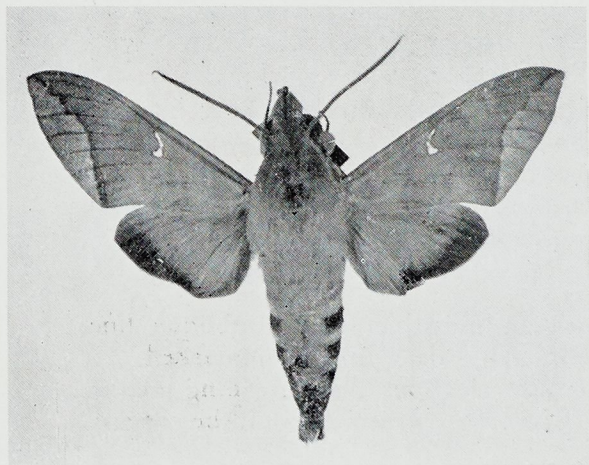
3" ; FW dark brown, with indistinct darker transverse markings and a very small white stigma. HW dark brown, darker towards the base. Recorded from Abakaliki (H), Calabar (BM), Ibadan (W), Ikom (I), Lagos (JB), Ogoja (H), and Port Harcourt (M). All of the *Nephele* sp. seem to be attracted to flowers, and can be taken freely at dusk flying around the flowers of the flame tree. SD 1, 4, 5, 6, 9, 10.

45. *Nephele maculosa*, R. and J.

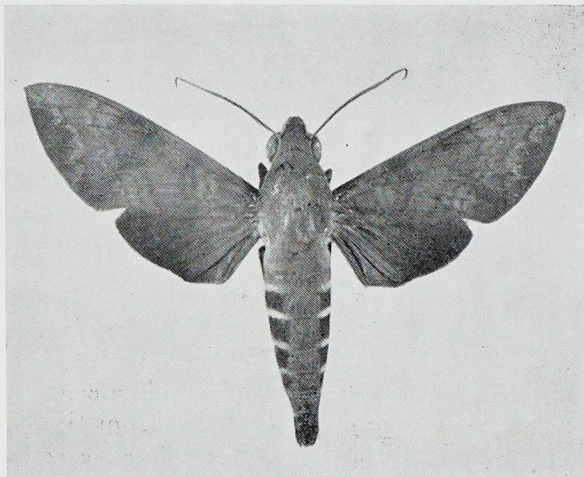
Not illustrated. Very similar in size and markings to the preceding species, but with a large white round stigma on the FW. Recorded from Calabar (BM), and Port Harcourt (M). SD 12.

46. *Nephele bipartita*, Btlr.
3" ; FW brown, with an oblique dark line from 1/2 costa to the hind angle, separating a darker apical portion from a paler basal part. HW dark brown, unmarked. ABD brown, with triangular lateral black spots. Recorded from Calabar (BM), Ikom (I), Ilesha (BM), and Lagos (JB). SD 5, 12.
47. *Nephele discifera*, Karsch.
2½" ; FW dark brown, with a buff marginal band and with a large circular buff spot at 1/2 hind margin. ABD dark brown, with lateral black spots separated by narrow buff lines. Recorded from Ikom (BM), Lagos (JB), Port Harcourt (M), and Sobo Plain (M). SD 3, 4, 6, 7.
48. *Nephele peneus*, Cr.
3" ; FW brown, with darker, indistinct markings. Stigma with three white (occasionally pale brown) spots. FW more rounded at the margin than in either *N. comma* or *N. funebris*. HW dark brown, with an indistinct darker marginal band. ABD brown, with large lateral black spots. Recorded from Bauchi (BM), Calabar (BM), Enugu (H), Ibadan (W), Ikom (I), Lagos (BM, JB), Ogoja (H), Onitsha (BM), Port Harcourt (M), and Sapele (BM). Very common. SD 4, 5, 6, 8, 9, 10, 11.
49. *Nephele accentifera*, Beauvois.
3" ; FW brown, with well defined markings. Stigma white, consisting of three spots. HW dark brown, with an indistinct darker marginal band. ABD brown with large lateral black spots. Recorded from Ahoada (I), Abakaliki (H), Ibadan (H, JB), Lagos (JB), Obudu (H), Ogoja (H), Port Harcourt (M), and Sobo Plain (M). A common species. SD 2, 3, 4, 5, 6, 7, 8, 9, 11.
50. *Nephele rosae*, Btlr.
3¼" ; FW pale greenish brown, with a broad median chocolate band bordered on the outside by white, then another chocolate band. HW dark brown, lighter at the base. ABD brown, with small lateral black spots. Recorded from Abakaliki (H), Calabar (BM), Ikom (I), Ilesha (BM), Ogoja (H), Onitsha (BM), Port Harcourt (M), Sapele (BM), and Sobo Plain (M). SD 1, 2, 3, 5, 7, 9, 10, 11, 12.
51. *Nephele aequivalens*, Wkr.
4¼" ; FW dark greenish brown, with a distinct blackish oblique streak from 1/2 costa to hind angle. HW brown, slightly lighter

40. *Cephonodes Hylas*42. *Nephele vau*41. *Deilephila nerii*



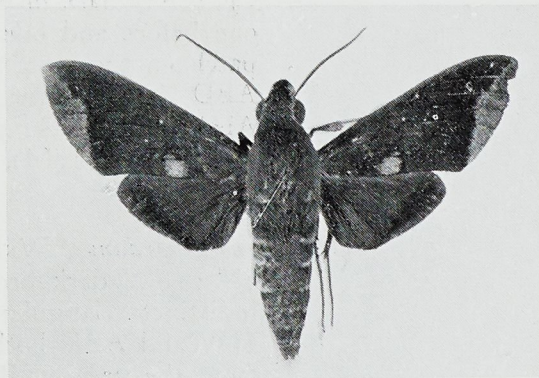
43. *Nephele comma*



44. *Nephele funebris*



46. *Nephele bipartita*



47. *Nephele discifera*

at the base. ABD brown, unmarked. Recorded from Abakaliki (H), Ibadan (W), Lagos (JB), Okundi (I), and Port Harcourt (M). SD 2, 3, 4, 5, 6, 7, 8, 11.

52. *Temnora livida*, Holl.

$2\frac{3}{4}$ " ; FW grey with some darker brown patches. HW blackish brown with some grey at the hind angle. ABD grey, unmarked. (The dark band near the tip of the ABD of the specimen illustrated is an artefact, due to "grease".) Recorded from Calabar (BM), Ilesha (BM), Lagos (JB), and Sapele (BM). SD 6, 7, 8, 11.

53. *Temnora stevensi*, R. and J.

2" ; FW dark brown, with an indistinct darker oblique line. HW dark brown, unmarked. ABD dark brown, unmarked. A rather dull species without any clear-cut distinguishing marks. Recorded from Ilesha only (BM). Any record should be checked with a reference collection.

54. *Temnora funebris*, Holl.

$2\frac{1}{2}$ " ; very similar to *T. sardanus*, but the wings are longer and narrower and lack the white stigma. The dark marking towards the apex of the FW is more a broad line than triangular as in *T. sardanus*, and there is a trace of an orange submarginal band on the HW. ABD brown, unmarked. Recorded from Calabar (BM), Lagos (BM, JB), Port Harcourt (M), and Sobo Plain (M). SD 1, 3, 4, 6, 7, 8, 11.

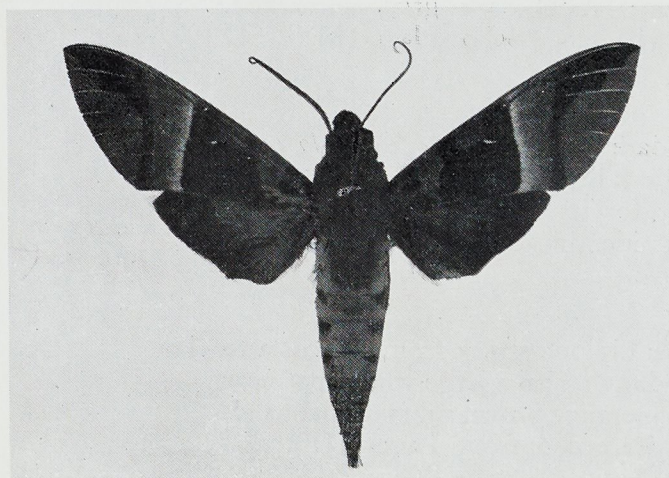
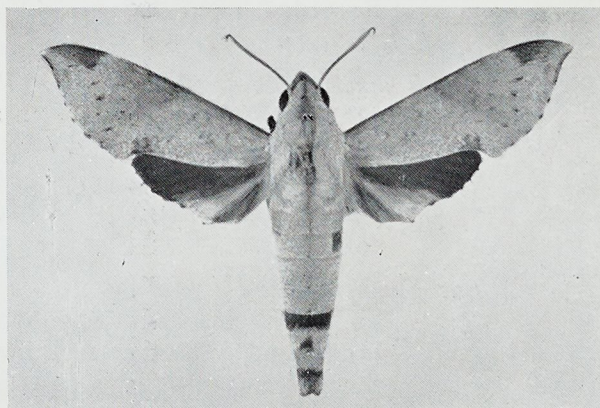
55. *Temnora fumosa*, Wkr.

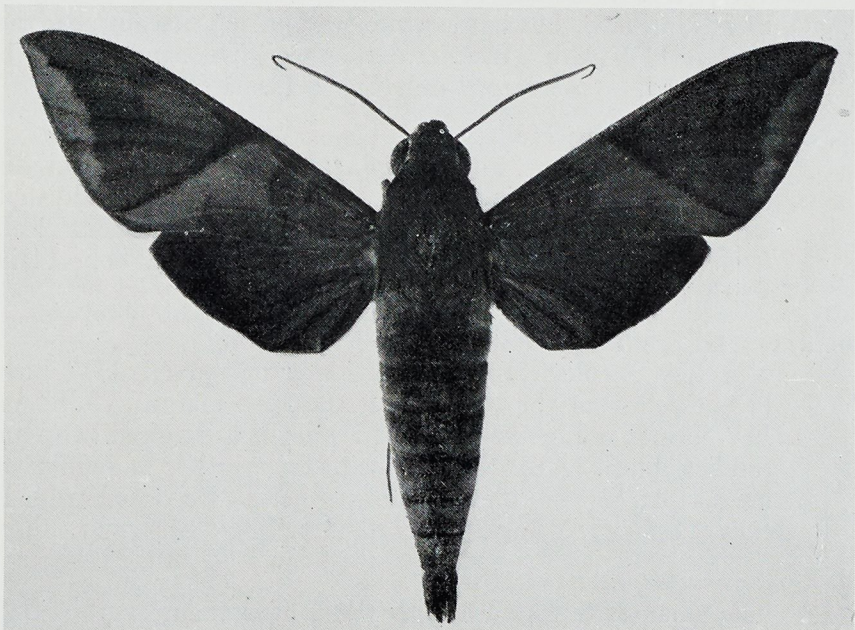
$2\frac{1}{2}$ " ; FW dark brown, with two prominent transverse dark bands one before and one after the stigma. Also with a pale greyish patch on the costa at about $\frac{3}{4}$. HW dark brown, unmarked. ABD dark brown, unmarked. Recorded from Calabar (BM), Abakaliki (H), Enugu (H), Ibadan (H, W), Ikom (I), Lagos (JB), Port Harcourt (M), and Sobo Plain (M). SD 1, 2, 4, 5, 6, 7, 8, 12.

56. *Temnora sardanus*, Wkr.

$1\frac{3}{4}$ " ; FW dark brown, with a darker oblique band forming an indistinct triangular area at the costa. Apex slightly hooked. HW and ABD both dark brown and unmarked. Distinguished from the very similar *T. funebris* by the FW having a distinct, minute white stigma. Recorded from Ibadan (W), and Lagos (JB). SD 1, 4, 6, 7, 8, 9.

57. *Temnora atrofasciata*, Holl.
 $1\frac{3}{4}$ " ; FW dark brown, with a darker oblique band forming an indistinct triangular marking at the costa. Apex slightly hooked. HW and ABD both dark brown and unmarked. One specimen only, labelled simply "Nigeria" (BM). Should be compared with specimens from a reference collection.
58. *Temnora hollandi*, Clark.
 $1\frac{3}{4}$ " ; FW greyish, with a large triangular brown patch at $1/2$ costa. Margin conspicuously scalloped. HW brownish, without distinct markings. ABD brownish, unmarked. Recorded from Ibadan (BM), and Sobo Plain (M). SD 3.
59. *Temnora spiritus*, Holl.
 $1\frac{3}{4}$ " ; FW buffish brown, with a triangular greenish or brownish mark at $1/2$ costa. HW brownish yellow, with a dark brown marginal band and darker brown at the base. ABD brownish, unmarked. Recorded from Ibadan (BM, W), Ilesha (BM), Lagos (BM, JB), Sapele (BM), Sobo Plain (M), and Warri (BM). SD 4, 5, 6, 8.
60. *Temnora elegans*, Rothsch.
 $1\frac{3}{4}$ " ; FW greyish, with a large triangular brown patch at $1/2$ HW bright reddish brown, with a darker marginal band. ABD brownish, unmarked. Recorded from Abakaliki (H), and Ibadan (W). SD 4, 5, 6, 7.
61. *Temnora crenulata*, Holl.
2" ; FW dark grey, with a distinct dark line from $1/2$ costa to hind angle. HW dark brown ; ABD dark grey, unmarked. Recorded from Lagos (BM, JB), and Sobo Plain (M). SD 5, 6, 7, 8, 9.
62. *Temnora reutlingerii*, Holl.
 $2\frac{1}{2}$ " ; FW dark brown, with a dark oblique streak from $1/2$ costa to hind angle. HW and ABD dark brown and unmarked. Not a very distinctive species, except for its size. One record only, from Calabar (BM). Check identification with a reference collection.
63. *Temnora scitula*, Holl.
 $1\frac{3}{4}$ " ; FW blackish grey with an oblique streak from $1/2$ costa to hind angle, and other dark markings ; also a large white spot near the margin. HW brown, with an orange brown submarginal band. ABD dark grey, unmarked. Recorded from Lagos (JB), and Sobo Plain (M). SD 1, 3, 6, 7, 8, 11.

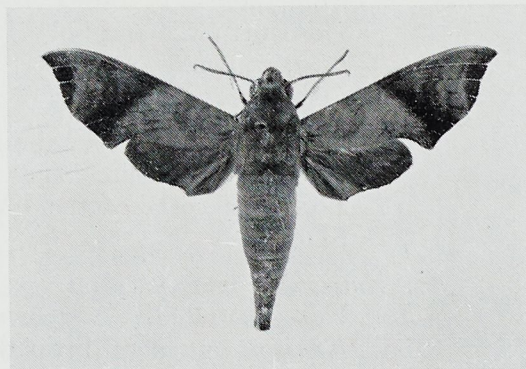
48. *Nephela Peneus*49. *Nephela accentifera*50. *Nephela rosae*52. *Temnora livida*



51. *Nephela aequivalens*



53. *Temnora stevensi*

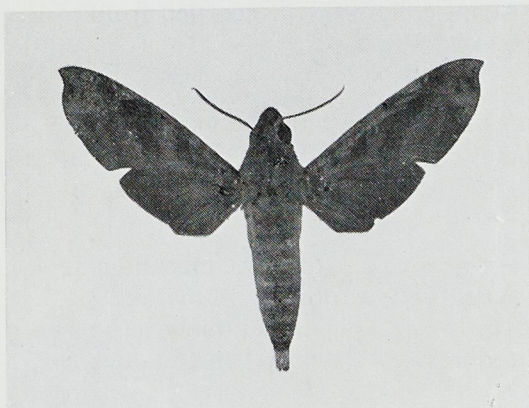
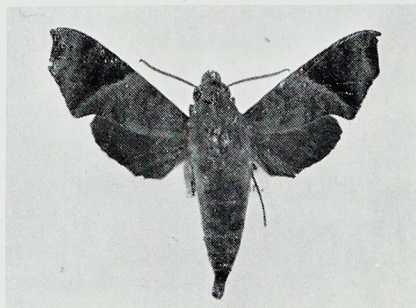
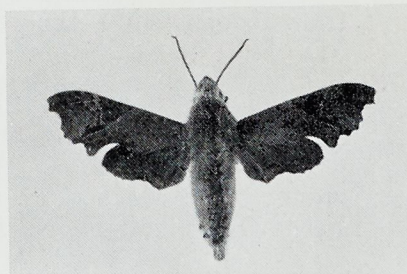
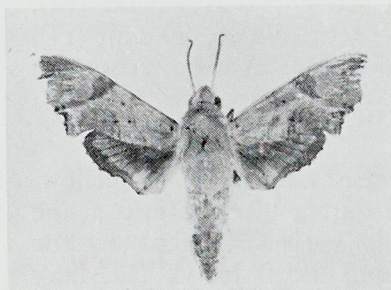


54. *Temnora funebris*

64. *Temnora eranga*, Holl.
 $1\frac{1}{2}$ " ; FW brownish grey with darker markings ; very similar to *T. iapygoides*, but has a white spot on the margin near the hind angle. HW with a distinct darker marginal band. ABD brown, unmarked. One record only, from Ilesha (BM).
65. *Temnora iapygoides*, Holl.
 $1\frac{1}{2}$ " ; FW brown, with prominent darker marks including an oblique line from $1/2$ costa to hind angle. HW reddish brown with a darker marginal band. ABD brown, unmarked. Recorded from Enugu (H), Ikom (H), Lagos (BM, JB), and Sobo Plain (M). Fairly common. SD 1, 3, 5, 6, 7, 8, 9.
66. *Pseudenyo benitensis*, Holl.
2" ; FW purplish brown, with darker markings. HW brownish, bright yellow at the base and at the hind margin. Underside of HW bright orange yellow with a purplish marginal band and two reddish lines. ABD brown, with two rather indefinite orange lateral patches on the middle segment. Recorded from Ibadan (H), Lagos (JB), and Port Harcourt (M). SD 5, 11.
67. *Sphingonaepiopsis nana*, Bsdv.
The smallest hawkmoth with the longest name. 1" ; FW dull brown with a dark wedge shaped mark at $1/2$ costa. HW brown, with indistinct lines. ABD dull brown, unmarked. Flies at dusk over flowers. Fairly common. Recorded from Ikom (I), Ilobi (JB), Lagos (JB), Port Harcourt (M), and Sobo Plain (M). SD 3, 4, 5, 6, 12.
68. *Antinephele anomala*, Btlr.
 $1\frac{1}{2}$ " ; FW chocolate brown with greenish and white lines. HW dark brown, unmarked. ABD dark brown, unmarked. Recorded from Ikom (H), Ilesha (BM), Lagos (BM, JB), Obubra (I), Port Harcourt (M), and Sobo Plain (M). Fairly common. SD 3, 4, 6, 7, 8, 12.
69. *Antinephele achlora*, Holl.
Not illustrated. Very similar to *A. anomala*, but the two transverse greenish and white bands are not linked by the greenish mark along the costa of the FW. Recorded from Sobo Plain (M). SD 1.
70. *Antinephele muscosa*, Holl.
Not illustrated. A brown species very like the following *A. lunulata*, but more distinctly marked. Any suspected *Antinephele*

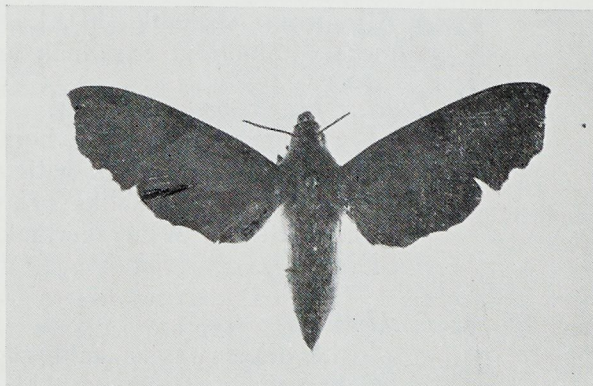
sp. which do not correspond exactly to *A. anomala* should be determined by reference to a Museum collection. Recorded from Sobo Plain (M). SD 1.

71. *Antinephele lunulata*, R. and J.
 $1\frac{3}{4}$ " ; a dull brown species with only indistinct markings and no really distinctive features. Recorded from Lagos (BM), one specimen only.
72. *Antinephele maculifera*, Holl.
2" ; FW brown, with darker brown and greenish markings. HW dark brown, unmarked. ABD yellow brown, unmarked ; on the underside white with median brown spots. Unlikely to be mistaken for any except *Hypaedalea insignis*. Recorded from Lagos only (BM).
73. *Hypaedalea butleri*, Rothsch.
3" ; FW dark brown, with indistinct darker markings ; stigma black and sometimes surrounded by a ring of buff colour. HW dark brown, unmarked ; ABD brown, unmarked. Recorded from Ibadan (BM), Ikom (BM, H), Ilesha (BM), and Uwet (I). SD 7, 11.
74. *Hypaedalea insignis*, Btlr.
 $1\frac{3}{4}$ " ; FW brown, with whitish, green and brown markings. HW dark brown, unmarked. ABD dark brown with two large lateral orange spots which often meet in the mid line. Recorded from Ilesha (BM), and Lagos (BM, JB). SD 12.
75. *Atemnora westermanni*, Bsdv.
 $2\frac{1}{4}$ " ; FW dark brown, with an oblique darker stripe from $1/2$ costa to hind angle, rather as in *Temnora* sp. Also with a dark band from $1/3$ costa to $1/3$ hind margin. HW dark brown, with a trace of yellow on the hind margin. ABD brown, with small lateral yellow spots. Recorded from Abak (I), Abakaliki (H), Ibadan (W), Lagos (JB), Mamfe (I), Ogoja (H), Olokemji (H), Port Harcourt (M), and Sobo Plain (M). A fairly common species. SD 1, 2, 3, 4, 6, 8, 10, 11.
76. *Macroglossum trochilus*, Hbn.
 $1\frac{1}{2}$ " ; FW brown with darker transverse bands. HW yellow, with a broad blackish marginal band and a blackish area at the base. ABD brown, unmarked. This species belongs to the same genus as the English "Humming Bird Hawk". Many specimens in the BM collection, from Baro, Bauchi, Calabar,

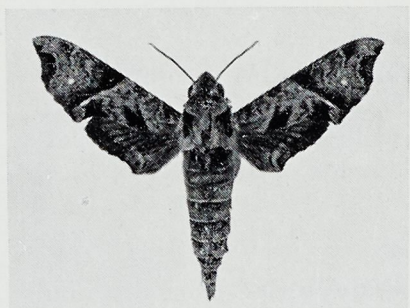
55. *Temnora fumosa*56. *Temnora sardanus*57. *Temnora atrofasciata*58. *Temnora hollandi*59. *Temnora spiritus*60. *Temnora elegans*



61. *Temnora crenulata*



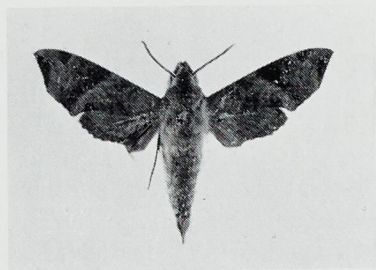
62. *Temnora reutlingeri*



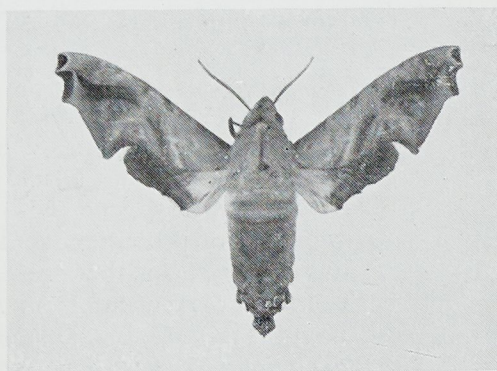
63. *Temnora scitula*



64. *Temnora eranga*



65. *Temnora iapygoides*



66. *Pseudenyo benitensis*

Ikot-Epene, Ilesha, Lokoja, Minna, and Mount Cameroon. Also from Abakaliki (H), Lagos (JB), and Ogoja (H). Possibly more common in Savannah and Northern areas. SD 1, 5, 6, 7.

77. *Leucostrophus commasiae*, Wkr.

1½"; quite unmistakable, both FW and HW pure black without markings. ABD black with a broad transverse sky blue band. Recorded from Abakaliki (H), Lagos (Dr. Roche), Ogumni (BM), Oringa (BM). A day flier, taken hovering over flowers in the sun. SD 3, 5, 9.

78. *Euchloron megaera*, L.

4"; another unmistakable species. FW bright green, HW bright yellow orange with black markings. ABD bright green with black lines between the segments. Recorded from Lagos (JB), Port Harcourt (M), and Sobo Plain (M), common. SD 1, 6, 8, 9, 11, 12.

79. *Basiothea medea*, Fldr.

2"; FW green with indistinct markings; HW bright yellow with a brown marginal band. ABD bright green, unmarked. Recorded from Ikom (H, JB), Ilorin (JB), Lagos (JB), Port Harcourt (M), and Sobo Plain (M). Common. SD 3, 5, 6, 8, 9, 10, 11.

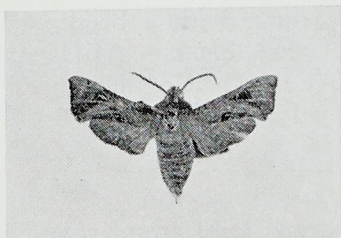
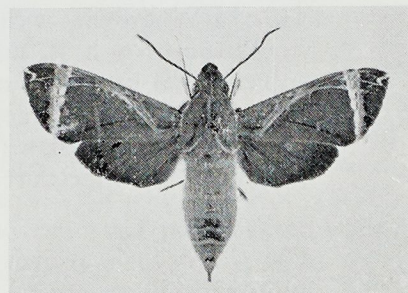
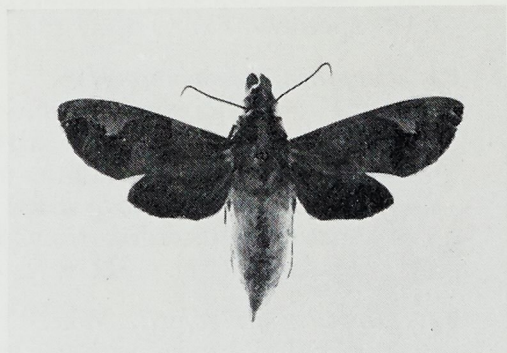
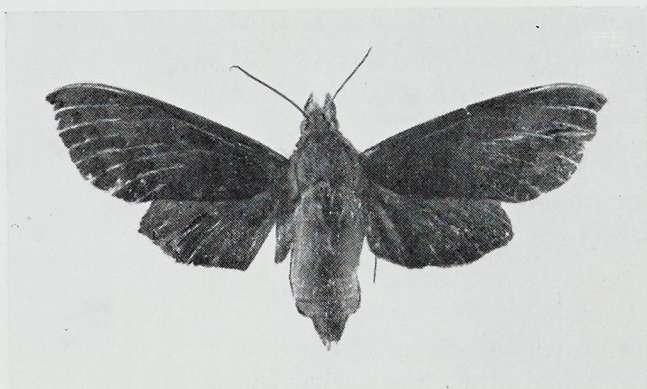
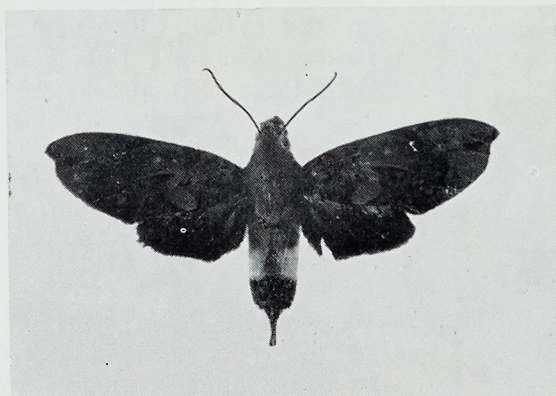
80. *Basiothea charis*, Bsdv.

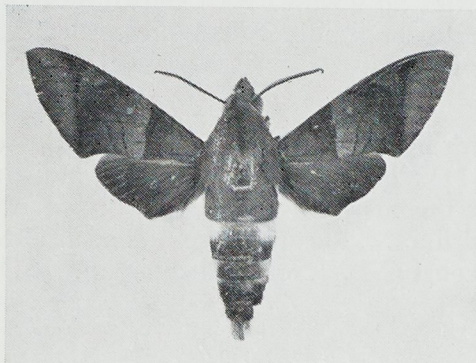
1¾"; FW brown, with an oblique whitish stripe from 1/2 hind margin to apex, and some brown lines. HW pinkish red with a brown marginal band. ABD brown, with two fine median whitish lines. This species might be confused with an *Hippotion* sp. Recorded from Ikom (H, I), Lagos (JB), and Sobo Plain (M). Not a common species. SD 1, 3, 11, 12.

81. *Hippotion osiris*, Dalm.

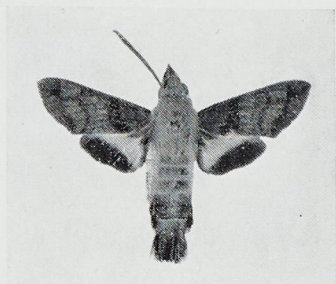
3½"; FW brown, with a broad cream stripe and several black and brown lines from 1/2 hind margin to apex. HW pink, with a broad submarginal black band and a black median band. ABD brown, with two fine pinkish median lines, two silvery lines, and two pairs of prominent pink and black lateral spots. Very similar to *H. celerio*, but that species lacks the lateral spots on the ABD. Common; recorded from Abakaliki (H), Ibadan (W), Ikom (H), Lagos (JB), Ogoja (H), Onitsha (BM), Port Harcourt (M). SD 1, 3, 4, 5, 6, 7, 8, 9, 12.

82. *Hippotion celerio*, L.
2 $\frac{1}{4}$ " ; FW brown, with a broad cream stripe and several darker lines from 1/2 hind margin to apex. HW pink, with a black submarginal band and median band, and the veins black. ABD brown, with several median darker and lighter lines. Common ; recorded from Ibadan (H, W), Ikom (H, I), Lagos (JB), Ogoja (H), and Port Harcourt (M). SD 2, 3, 4, 5, 6, 7, 9, 10, 11.
83. *Hippotion eson*, Cr.
2 $\frac{3}{4}$ " ; FW pale brown with several faint darker lines from 1/2 hind margin to apex. HW bright pinkish red, with a narrow brown marginal band, and blackish at the base. ABD pale brown, darker mid dorsally, with two golden median longitudinal lines. Recorded from Abakaliki (H), Agwa (I), Ibadan (W), Lagos (JB), Port Harcourt (M), and Sobo Plain (M). A common species. SD 1, 2, 4, 5, 6, 7, 8, 9.
84. *Hippotion balsaminae*, Wkr.
2 $\frac{1}{2}$ " ; FW creamy brown, with several darker lines from 1/2 hind margin to apex. HW dark grey at base, with a yellowish submarginal band and a grey marginal band. ABD creamy brown, with a darker median stripe bordered by golden lines. A common species. Recorded from Ibadan (H), Lagos (JB), and Port Harcourt (M). SD 1, 5, 6, 7, 8, 9, 10, 11, 12.
85. *Hippotion irregularis*, Wkr.
3" ; FW brown, with two transverse darker lines on the outer half, the outermost line of which is broken up into small dots. HW brown, a little lighter at the margin. ABD brown, with pairs of median black small dots on each segment. Might be confused with *Theretra jugurtha*, but this species has no median black dots on the ABD. Recorded from Agberi (BM), Asaba (BM), Ibadan (Caswell), Ilobi (JB), Kumba (JB), Port Harcourt (M), Sobo Plain (M), and Warri (BM). SD 1, 2, 3, 4, 5, 6, 10, 12.
86. *Theretra jugurtha*, Bsdv.
3" ; FW brownish green, with two distinct transverse lines on the outer half. HW blackish, with no obvious markings. ABD brownish green, unmarked. Recorded from Lagos (JB), not common. SD 6, 7, 9.
87. *Theretra cajus*, Cr.
1 $\frac{3}{4}$ " ; FW pale brown, with a dark brown and creamy white streak from 1/2 hind margin to apex, and also other fine darker lines.

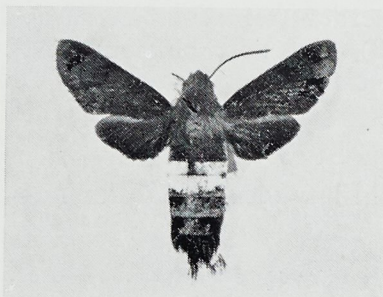
67. *Sphingonaepiopsis nana*68. *Antinephele anomala*71. *Antinephele lunulata*72. *Antinephele maculifera*73. *Hypaedaleia butleri*74. *Hypaedaleia insignis*



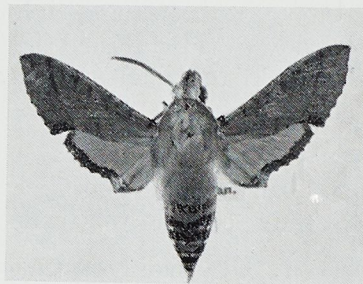
75. *Atemnora westermanni*



76. *Macroglossum trochilus*



77. *Leucostrophus commasiae*



79. *Basiothea medea*



78. *Euchloron megaera*

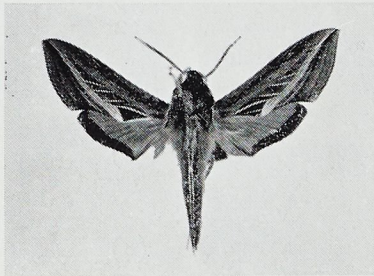
- HW pale creamy brown, with no obvious markings. ABD pale brown with a creamy median longitudinal line. Recorded from Olokemeji (BM), no other records.
88. *Theretra orpheus*, H.-S.
 $1\frac{3}{4}$ " ; FW dark brown, with lighter areas, and a pale streak from $1/2$ hind margin to apex. HW blackish brown, with an indistinct median line and darker at the margin. ABD pale brown, with darker median longitudinal lines. Recorded from Ibadan (BM), Lagos (JB), and Port Harcourt (M). Not very common. SD 5, 6, 8, 12.
89. *Centroctena rutherfordi*, Drc.
 $2\frac{3}{4}$ " ; FW brownish green, with an oblique cream stripe from $1/2$ hind margin to apex, bordered with darker lines. HW dark brown, without obvious markings. ABD brown, with longitudinal darker and lighter lines. Recorded from Calabar (BM), Enugu (H), Ilesha (BM), Lagos (JB), and Port Harcourt (M). Not common. SD 1, 4, 5, 8, 9, 12.

KEY TO THE SPECIES

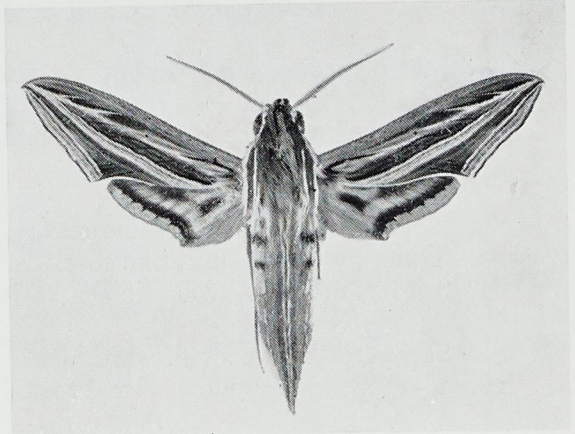
In the following key, the numbers in brackets refer to the numbers of the species in the text.

- | | | |
|---|---|-------------------------------|
| 1. FW mainly green, with or without darker markings | 2 | |
| FW not mainly green | 5 | |
| 2. Large species, more than 3" across wings | 3 | |
| Smaller, less than 3" | 4 | |
| 3. HW bright orange and black | <i>Euchloron megaera</i> (78) | |
| HW mainly dark grey | <i>Deilephila nerii</i> (41) | |
| 4. HW yellow, with brown marginal band | <i>Basiothea medea</i> (79) | |
| HW pale brownish | <i>Polyptychus virescens</i> (16) | |
| 5. HW mainly bright yellow or with bright yellow areas or spots | 6 | |
| HW otherwise | 13 | |
| 6. Both FW and HW mainly yellow, peppered with small greyish or red spots | { <i>Platysphinx constrigilis</i> (11)
<i>Platysphinx phyllis</i> (12)
<i>Platysphinx stigmatica</i> (13) | |
| FW not mainly yellow, or, if so, then FW yellow and bright pink | | 7 |
| 7. FW pink with broad yellow longitudinal stripe | | <i>Leucophlebia afra</i> (14) |
| FW not pink and yellow | 8 | |

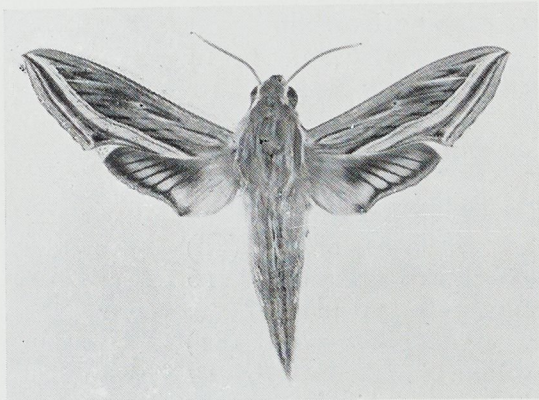
8. Large species, more than 3" 9
 Smaller, less than 3" 12
9. HW yellow, with black basal spot and black submarginal line
Pseudoclanis postica (10)
 HW otherwise 10
10. Thorax with pale skull-like mark .. *Acherontia atropos* (2)
 Thorax without skull-like mark 11
11. Stigma of FW large, silvery white and C-shaped *Xanthopan*
morgani (4)
 Stigma of FW a small white dot .. *Coelonia fulvinotata* (3)
12. 1"-1½" ; HW yellow with broad black marginal band
Macroglossum trochilus (76)
 1¾"-2¼" ; HW yellow basally, shading gradually to brown at
 the margin *Pseudenyo benitensis* (66)
13. ABD when viewed from above with a number of white or
 brown longitudinal lines in the mid line, running from tip
 to base 14
 ABD either unmarked or marked otherwise than with longi-
 tudinal lines 21
14. HW partly pink or red 15
 HW brownish, not pink or red 18
15. Less than 2" ; HW red with definite black marginal band only
Basiothea charis (80)
 HW pink, or, if red, then black at base as well as margin .. 16
16. First three segments of ABD with prominent pink and black
 lateral spots *Hippotion osiris* (81)
 ABD without well defined lateral spots of colour 17
17. Veins of HW black, contrasting with pink ground colour
Hippotion celerio (82)
 Veins of HW pinkish red, the same as ground colour
Hippotion eson (83)
18. FW with very prominent creamy white stripe from 1/4 hind
 margin to apex *Centroctena rutherfordi* (89)
 FW otherwise, or, if with white stripe, then less than 2¼" .. 19
19. FW mainly pale brown, with several lighter and darker lines
 from 1/3 hind margin to apex ; HW mainly pale brown .. 20
 FW mainly dark brown ; HW dark brown *Theretra orpheus* (88)
20. HW dark at base ; more than 2" *Hippotion balsaminae* (84)
 HW pale at base ; less than 2" *Theretra cajus* (87)
21. ABD with pink and black lateral spots separated by white lines
 on each segment *Herse convolvuli* (1)
 ABD otherwise 22



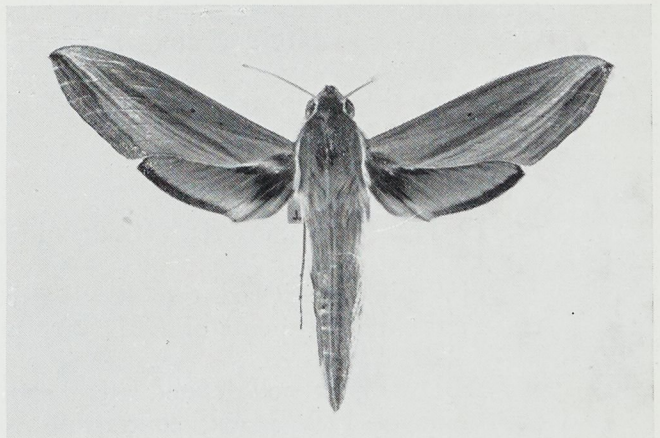
80. *Basiothea charis*



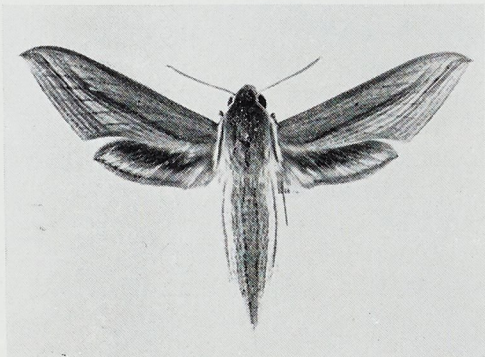
81. *Hippotion osiris*



82. *Hippotion celerio*



83. *Hippotion eson*



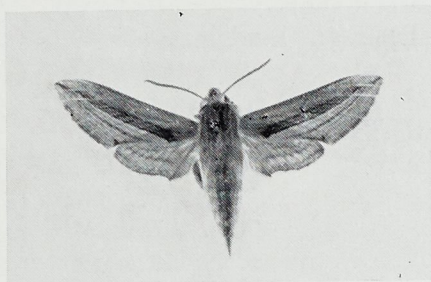
84. *Hippotion balsaminae*



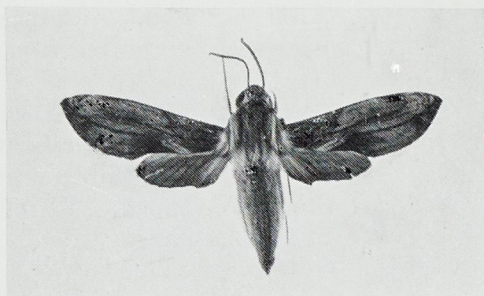
85. *Hippotion irregularis*



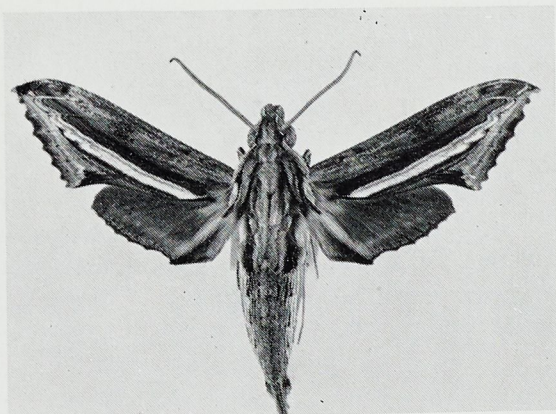
86. *Theretra jugurtha*





87. *Theretra cajus*



88. *Theretra orpheus*



89. *Centroctena rutherfordi*

22. Wings clear, without scales ; ABD red and green
Cephonodes hylas (40)
 Wings normal, with scales 23
23. Wings black ; ABD with broad transverse sky blue band
Leucostrophus commasiae (77)
 Wings otherwise 24
24. ABD with some lateral yellow spots or yellow transverse bands 25
 ABD otherwise 26
25. HW with trace of yellow at hind margin
Atemnora westermanni (75)
 HW dark brown, no yellow at hind margin *Hypaedaleia insignis* (74)
26. Large dark brown species, over 4" ; with a thin black line
 from 1/2 costa to hind angle *Nephele aequivalens* (51)
 Not as above 27
27. FW with large circular buff spot at 1/2 hind margin, and buff
 marginal band *Nephele discifera* (47)
 FW without circular spot 28
28. ABD when viewed from above with prominent black lateral
 spots 29
 ABD unmarked, without definite lateral spots 34
29. FW with white line from 1/2 costa to 3/4 hind margin
Nephele rosae (50)
 FW without transverse white line 30
30. FW with large, prominent white stigma 31
 FW without prominent white stigma 32
31. Stigma V-shaped, FW reddish *Nephele vau* (42)
 Stigma C-shaped *Nephele comma* (43)
 Stigma -shaped *Nephele peneus* (48)
 Stigma -shaped *Nephele accentifera* (49)
 Stigma a large circular dot *Nephele maculosa* (45)
32. FW sharply divided by a dark line from 1/2 costa to hind angle
 into a lighter basal half and a darker distal half
Nephele bipartita (46)
 FW otherwise 33
33. FW with sharply demarcated pale marginal band
Nephele comma f. derasa (43)
 FW not pale at margin *Nephele funebris* (44)
34. Large species, more than 4 1/2" ; FW mainly greenish orange
Rhadinopasa hornimanni (6)
 Not as above ; if over 4 1/2" then not greenish orange 35
35. HW pure white with brown veins *Pemba jordani* (5)
 Not as above 36

36. ABD with a single or double longitudinal row of small black dots along mid-line 37
 ABD without black dots, unmarked, or with a single black median spot near the tip of ABD 39
37. ABD with two small black dots on each segment
Hippotion irregularis (85)
 ABD with only one dot on each segment 38
38. Underside of FW reddish ; above with large dark spot at 1/2 hind margin *Polyptychus murinus* (21)
 Underside of FW not reddish ; no spot at 1/2 hind margin above *Polyptychus retusus* (30)
39. Very large species, more than 5" ; with a large white, \rightarrow shaped stigma *Lophostethus demolini* (39)
 Not as above 40
40. Large species, over 4" ; FW purple brown with green marginal band *Acanthosphinx gussfeldti* (38)
 Not as above 41
41. FW pale brown, with very prominent hook at tip and single black spot near base *Lycosphingia hamata* (36)
 Not as above 42
42. Large species, over 4" ; HW reddish pink without markings
Libyoclanis major (8)
 Not as above ; if HW red then less than 4" 43
43. FW with hook at tip, and a single minute dark basal spot ; HW reddish brown *Polyptychus anochus* (25)
 Not as above 44
44. FW with a distinct large or small basal spot, which may be grey, black, brown, or reddish 45
 FW without basal spot 54
45. FW with two large black basal spots ; HW bright orange brown *Polyptychus andosus* (24)
 Not as above 46
46. HW bright pink *Polyptychus roseus* (27)
 Not as above 47
47. Basal spot of FW large and brownish red
 { *Polyptychus pauperculus* (33)
 { *Polyptychus hollandi* (34)
 Basal spot of FW pale grey, brown, or black 48
48. HW with a dark streak along hind margin 49
 HW without a dark streak along hind margin 50
49. Margin of FW concave *Polyptychus spurelli* (31)
 Margin of FW convex *Polyptychus nigriplaga* (32)

77. Underside of ABD whitish, with brown spots
Antinephele maculifera (72)
- Underside of ABD brown 78
78. Large species, more than $2\frac{1}{4}$ " ; stigma of FW a minute black spot sometimes surrounded by a buff ring
Hypaedalia butleri (73)
- Smaller, less than $2\frac{1}{4}$ "
 { *Antinephele lunulata* (71)
Antinephele muscosa (70)

References

- Seitz, A. (1930): The Macrolepidoptera of the World. Vol. 14: The African Bombyces and Spingines. A. Kernen, Stuttgart.
- Williams, C. B. (1954): Notes on a Small Collection of Spingidae from Nigeria. *The Nigerian Field*. 19: 176-179.

Correspondence

Bat-Eating Snakes

To: The Editor,
The Nigerian Field.

20 October, 1960.

Sir,

Mr. Stanley Woodward in his interesting contribution to Vol. XXV No. 4 seeks further information about bat-eating by snakes. Cases are not uncommonly reported in zoological periodicals; and he will find a number of instances cited in G. M. Allen's *Bats* (Cambridge, Mass., 1939). One of these concerns a West African species, the Yellow-winged Bat (*Lavia frons*), swallowed by a large black mamba—in East Africa, of course, since the black mamba is unknown on the western side of the continent. In Texas, where they do things in a big way, one Chicken snake was found to have fourteen bats inside him.

Yours faithfully,

D. R. Rosevear.

Cowper House,
 Cowper Road, Bedford.

To: The Editor,
The Nigerian Field.

Dear Sir,

I should like to comment on Mr. Woodward's note in your issue of October 1960.

The photograph appears to be that of a specimen of *Boiga blandingii* (Hallowell), not *B. pulverulenta* (Fischer). The size, shape and black edging of the superior labials is typically