11. GYMNARCHUS.

Gymnarchus, Cuv. R. An. 2nd ed. ii. p. 357 (1829); Günth. Cat. vi. p. 225 (1866); Bouleng. Ann. Mus. Congo, Zool. i. 1898, p. 2.

Teeth forming a single complete series on the entire edge of both jaws (14 in the upper, 25-28 in the lower), with compressed, pointed or truncated crowns finely serrated on the sides; palate and tongue toothless; mouth wide, terminal. Nostrils far apart, remote from the eye. Body much elongate, the tail gradually attenuated into a filament. Dorsal occupying the whole length of the body; anal, ventral, and caudal fins absent. Vertebræ 114-120 (45-47+67-75). Air-bladder cellular, lung-like.

1. Gymnarchus niloticus.

Rifaud, Voy. Égypte, pl. 138 bis (1830).

Gymnarchus niloticus, Cuv. l. c.; Erdl, Abh. Bayer. Ak. v. 1847, p. 209, pl. v.; Heckel, Denkschr. Ak. Wien, vi. 1854, p. 11, pl. i.; Hyrtl, Denkschr. Ak. Wien, xii. 1856, p. 1, pls. i-iv.; Günth. Cat. vi. p. 225 (1866); Steind. Sitzb. Ak. Wien, lxi. i. 1870, p. 556.

Depth of body 7 to $9\frac{1}{2}$ times in total length, length of head $5\frac{1}{3}$ to 6 times. Head 2 to $2\frac{1}{2}$ times as long as deep; snout rounded, scarcely projecting beyond the lower jaw; eye very small; a strong fold of the skin connects the opercles across the isthmus. Dorsal 183–210. Pectoral rounded, $\frac{1}{4}$ to $\frac{2}{7}$ length of head. Scales very small, largest along the middle of the side. Olive or brown above, whitish beneath.

Total length 800 millim. Upper Nile, Senegal, Niger.

EXPLANATION OF PLATE LI.

Sciagraph of Gnathonemus rhynchophorus, p. 810.

5. A List of Butterflies obtained in the Harar Highlands by Capt. H. G. C. Swayne, R.E. By ARTHUR G. BUTLER, Ph.D., F.L.S., F.Z.S., &c.

[Received August 20, 1898.]

The small collection of which the following is an account was somewhat hurriedly made, all the specimens having been secured in about three days, at an elevation of from 4000 to 8000 feet on the Harar Highlands. It is therefore not surprising that most of them are a good deal shattered; some of them are nevertheless very acceptable additions to the Museum collection: one species is new.

So little is known even now of the Lepidopterous fauna of this part of Africa that every consignment received thence is of importance and is worthy of careful record, even though many of the examples may have no further value when that record has been published.

¹ They do not appear to have been netted, but rather knocked down and captured by hand.

The following is a list of the species:—

1.	Limnas klugi Butl.	15. Acræa antinorii Oberth.
	Byblia ilithyia Drury.	16. Mylothris agathina Cram.
3.	Charaxes brutus Cram.	17. , yulei of var. ? Butl.
	Junonia actia Dist.	18. " swaynei, sp. nov.
5.		19. Colias electra Linn.
6	nyriformis Ruth	20. " marnoana Rogenh.
7.	" cebrene Trim.	21. Teracolus phillipsi Butl.
8.	clelia Cram.	22. " protomedia Klug.
9.	,, cebrene Trim. ,, clelia Cram. ,, here Lang.	23. Belenois mesentina Cram.
10.	" orthosia Godt.	24. Leuceronia thalassina Boisd.
	Pyrameis abyssinica Feld.	25. Papilio demoleus Linn.
	Atella columbina Cram.	26. ,, erinus, var. Gray.
	Neptis agatha Cram.	27. ,, antinorii Oberth.
	Acræa serena, var. perrupta Butl.	
170 H TO SEC 1 1		

MYLOTHRIS SWAYNEI, sp. n.

3. Intermediate in character between M. trimenia and M. narcissus: primaries above milk-white; the costal border blackish, widening gradually into an apical patch which curves round to join the first of three trigonal marginal spots between veins 4 and 5; internal border also blackish to external angle: secondaries bright lemon-yellow; seven small marginal black spots, the first of which (at end of costal vein) is the largest and elongated: body normal. Primaries below white, costal border sprinkled with grey scales; base of cell slightly washed with lemon-yellow; apical border lemon-yellow; a marginal series of seven black dots: secondaries as above: body normal, the pectus clothed with greenish-white hair, becoming somewhat fulvous at the side of the eyes. Expanse of wings 55 millim.

Hab. Harar Highlands.

The following specimens in the collection are worthy of mention :-

The example of Charaxes brutus is not only interesting on account of the narrowness of the white band across the primaries, but also because of the prominence of the grey lunulated submarginal line of the secondaries.

Acrea antinorii, of which two rather damaged specimens were obtained, was previously known to me only by the illustration

(Annali del Museo Civico di Genova, xv. tav. i. fig. 3).

The male of Mylothris yulei more nearly approaches the typical female than the male which I described; but there is not sufficient evidence to warrant their separation at present.

The example of Colias marnoana is larger than those which we

previously possessed and tends to link it to C. sareptensis.

The two males of Papilio erinus are actually more or less intermediate between the var. pseudonireus and Papilio bromius; it therefore seems probable that P. erinus and P. bromius will eventually have to be united, in spite of the considerable differences which exist on both surfaces between the extreme forms.

A pair, unfortunately much shattered, of P. antinorii was

obtained.



Butler, Arthur G. 1898. "A List of Butterflies obtained in the Harar Highlands by Capt. H. G. C. Swayne, R.E." *Proceedings of the Zoological Society of London* 1898, 821–822. https://doi.org/10.1111/j.1096-3642.1898.tb03182.x.

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