

DIAGNOSIS OF A NEW GENUS OF TROGONS (HETEROTROGON), BASED ON HAPALODERMA VITTATUM OF SHELLEY; WITH A DESCRIPTION OF THE FEMALE OF THAT SPECIES.

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AMONG the many birds sent to the United States National Museum from Mount Kilima-Njaro and other points in East Africa, by Dr. W. L. Abbott, are four very fine specimens of the rare *Hapaloderma** *vittatum*, Shelley, the female of which is, apparently, as yet undescribed. The specimens sent by Dr. Abbott consist of one adult and one immature female and two adult males, all obtained on Mount Kilima-Njaro, between 6,000 and 7,000 feet altitude, during the years 1888 and 1889.

An examination of these specimens, and a careful comparison with the common African trogon (*A. narina*) leads me to believe this species should be removed from *Apaloderma* and recognized as representing a distinct genus. From *Apaloderma narina*, its supposed nearest relative, it differs in several important respects. The bill is very small and slender, and much compressed from above downward, being, in fact, the extreme in this direction, among the Old World trogons. The tomia of both maxilla and mandible are without serrations behind the subterminal notch, the presence or absence of which is an important factor in the recognition of genera in this very homogeneous family. Both *A. narina* and its close ally (probably subspecies), *A. constantia*, have these serrations, they being the only known representatives of the family in the Old World possessing this character. The pattern of coloration in the female of *A. vittatum* differs from that of *A. narina* in that the color of the whole head is unlike that of the male; in the latter species the top of the head is similar to that of the male. Another character, of probably not more than specific importance, is the difference in the pattern of coloration of the tail. In *A. narina* the three outer retrices are white for their exposed portion, while in *A. vittatum* these feathers are conspicuously marked with black and white bars.

In view of these very considerable differences existing between the two species, fully enough, in my estimation, to warrant the adoption of

* Originally spelled *Apaloderma* by Swainson.

a new generic term for *A. vittatum*, I am led to propose for this species the name

HETEROTROGON, new genus.

Diagnosis.—Size medium; form slender; tail long; rectrices not truncate. Three center pairs of rectrices, dark purplish-blue, with metallic reflections, in both sexes; no black terminal bar on middle pair; three outer pairs with black and white bars on their exposed portions. Bill small, slender, and much compressed. Tomia of both maxilla and mandible smooth, without signs of serrations posterior to subterminal notch. Sexes unlike in coloration.

Habitat.—Equatorial Africa, extending across the continent. Apparently confined to the highlands.

Type.—*Hapaloderma vittatum*, Shelley.

The points of distinction between this genus and *Apaloderma*, Swainson, may best be seen by the following key:

- a. Bill extremely small and slender; much compressed.
 - b. Tomia of maxilla and mandible without serrations posterior to subterminal notch.
 - c. Three outer rectrices with bars of black and white.
 - d. Female differs decidedly from male on top of head... HETEROTROGON.
 - a'. Bill large and swollen.
 - b'. Tomia of maxilla and mandible with serrations posterior to subterminal notch.
 - c'. Three outer rectrices white, for their exposed portions, without bars.
 - d'. Female similar to male on top of head..... APALODERMA.

The extreme rarity of *Heterotrogon vittatus* in collections, and the absence of information respecting the female, probably account for its non-separation from *Apaloderma* before the present time. It is unnecessary to compare this genus with *Apalharpactes* or *Pyrotrogon** of the East Indies, as they belong to a different section of the family.

The adult female obtained by Dr. Abbott on Mount Kilima-Njaro, August 7, 1888, at an elevation of 6,000 feet (No. 117973, U.S.N.M.) may be described as follows: Pileum Prout's brown, somewhat darker on lores, with a distinct coppery gloss, except on forehead; this gloss most intense on sides of occiput, where it is reddish bronze; ear coverts slightly darker, with slight greenish reflections, the feathers of normal length with filamentous terminations; suborbital region blackish slate without metallic gloss; back, rump, and upper tail coverts metallic green, quite golden bronze on back, scapulars, and rump, but plain grass green on upper tail coverts. Three inner pairs of rectrices dark

*The name *Harpactes*, Swainson, Class. Birds, II, 1837, p. 337, commonly applied to this genus of trogons, is preoccupied by *Arpactus*, Jurine, Hymen., 1807, and *Harpactes*, Templeton, Arachn., 1834. Cabanis and Heine (Mus. Hein. No. IV, part 1, 1863, p. 154) long ago pointed out the untenability of the name *Harpactes* as used in ornithology, but this fact has been quite generally ignored. Two other names, having priority over *Pyrotrogon*, but preoccupied in other branches of zoology, are *Hapalurus*, Reichenbach, 1850 (nec *Hapalura*, Cabanis, Weig. Arch., 1847, p. 252), and *Duraucelins*, Bonaparte, 1854 (nec *Duraucelia*, Risso, [—?] 1826, and *Duraucelia*, Desvoidy, Dipt., 1830).

purplish blue, with narrow metallic green edgings on the outer webs; three outer pairs same color, but barred with white on exposed portions, exactly as in the male. Throat, jugulum, and upper breast raw umber, tinged with cinnamon, rather inclining to drab on the throat; sides of neck metallic green as on the back; lower breast russet, the color sharply defined from the raw umber of upper breast and throat; abdomen and crissum geranium red, some of the russet feathers of breast bordering the abdomen also tinged with this color; flanks and tibia, slate; wing, as a whole, dull slaty black, a slight greenish reflection appreciable on tertials and wing coverts; outer edges of second, third, fourth, fifth, and sixth primaries narrowly bordered with white for basal half of exposed portions, and to their insertions; secondaries, tertials, and greater coverts of wing with narrow zigzag bars of white, the bars 0.08 to 0.10 of an inch apart; primary coverts plain dull slate black; middle and lesser coverts dull black, broadly margined with metallic green, the greater coverts and tertials narrowly edged with the same color. Bases of secondaries, tertials, and fifth, sixth, and seventh primaries white, making an irregularly-shaped spot an inch long, on the under surface of the wing; under wing coverts smoke gray. Wing, 4.90; tail, 6.60; tarsus, 0.65; exposed culmen, 0.55; width of maxilla at base, 0.60 inches. "Feet white" (light brown in dried specimen); bill yellowish buff.

Another female, immature, obtained in the same locality, at 7,000 feet altitude, June 10, 1888 (No. 117974, U.S.N.M.), differs from the one just described in the following particulars: Pileum Prout's brown, some of the feathers broadly edged with metallic green, as on the back; lower breast russet, with indistinct buffy edgings to the feathers on the sides, and occasional buff feathers, tipped with dull black (these are feathers of the first plumage); abdomen pale geranium red, sparsely intermingled with buff feathers near median line; under tail coverts cinnamon, with faint mottlings or bars of greenish black (with metallic reflections) on some of the feathers; bars on three outer rectrices irregular and indistinct, the second and third pair with 1.25 inches of unbarred white at terminal end. A few white spots on greater wing coverts, secondaries, and tertials are signs of immaturity; these spots are on the outer webs, near the distal ends of the feathers. Maxilla blackish; mandible yellowish horn color, tip black. Wing, 4.80; tail, 6.50; tarsus, 0.62; exposed culmen, 0.55; width of maxilla at base, 0.55 inches.

The two adult males in the collection agree with published descriptions. They were obtained on Kilima-Njaro, altitude 6,000 feet, one on August 8, 1888, and the other on October 9, 1889. Their measurements are given below:

Measurements of adult males of Heterotrogon vittatus.

U.S.N.M. No.	Wing.	Tail.	Tarsus.	Exposed culmen.	Width of maxilla at base.
117972	4.70	-----	-----	0.52	0.58
119223	5.00	7.10	0.58	.56	.66