SOME NEW FORMS OF *ODONTOMACHUS* (HYM., FORMICIDAE).

By Horace Donisthorpe, F.Z.S., F.R.E.S., etc.

Odontomachus nigrifrons n. sp.

- \varphi. Pale testaceous, shining, mandibles except apex of teeth, legs and antennae lighter, head with the "front" black, thorax, node of petiole except apex of spine, a longitudinal patch on post-petiole and a transverse patch on second and third segments of gaster brown, clothed with short and some longer outstanding hairs.

Head narrower, longer, and more narrowed behind than in tyranicus Smith, to which species it is allied; narrow margin of posterior border sharper and more pointed at posterior angles, bent forwards in centre to form an angle; mandibles with intermediate apical tooth longer than in tyranicus, inner margins furnished with 11 somewhat irregular and variable teeth, decreasing in size towards base; front longitudinally striate, the striae at the sides not being as long but more numerous than in tyranicus; the longitudinal furrow in middle of posterior half of head reaching posterior border. Thorax more slender; pronotum narrower with striae in middle more slanting, not so transverse and much less distinct than in typical tyranicus; node with the two blunt teeth on anterior portion more developed, not nearly so abruptly narrowed to base of spine, which is long. Gaster with dorsal surface of post-petiole much flatter, and less gradually widened from base than in tyranicus. Sting longer. Legs long.

Long. 15.5 mm. Type in B.M. Coll.

Described from six workers taken by Miss L. E. Cheesman, East New Guinea, Humbolt Bay, Hollandia. Sea-level, vi.36, No. 174. Captured in forest.

Odontomachus tyranicus Smith var. obsolescens. n. var.

3. Dirty pale yellow, shining, a dark patch on each side of dorsal surface of mesonotum, eyes black, whole body clothed with some longer, and short outstanding hairs; antennae, except scape and first

joint of funiculus, which are shining, dull and pubescent.

Head without eyes about as broad as long, posterior border narrowly margined, posterior angles sharply pointed; clypeus convex, anterior border narrowly margined, almost straight; clypeus foreae small, round, deep; mandibles small, feeble, much reduced, bluntly pointed; maxillary palpi 6-jointed, long; antennae very long, slender, scape short but longer than broad, first joint of funiculus slightly transverse, about half as long as scape, the following 11 joints much longer than broad; eyes very large, kidney-shaped, prominent; ocelli large situated on vertex of head. Thorax narrowed anteriorly and posteriorly; pronotum transverse, narrowed to apex, posterior border semicircular, narrowly margined; mesonotum convex with a shallow longitudinal furrow in centre, finely transversely striate; scutellum transverse, convex, prominent; metanotum narrow trans-

verse; epinotum longer than broad, narrowed to base, flat on dorsal surface finely transversely striate at apex, declivity very gradual. Node of petiole rather sharply pointed above but not armed with a spine; gaster long, strangulation between post-petiole and rest of gaster strongly marked, cerci present; pygidium terminating in a long sharp curved spine. Stipes large. Long. 9 mm. Legs long. Wings iridescent; pterostigma light brown; veins pale yellow; fore wing with one discoidal cell, two cubital cells, and closed radial cell.

Described from four males taken by Miss L. E. Cheesman, Papua Kokoda, 1200 ft., v.33, No. 173. Taken with workers and larvae in nest in roots of Asplenium nidus. 3 type in B.M. Coll.

\$\tilde{\psi}\$. Smith, in his description of \$O\$. tyranicus worker, says the thorax is transversely striate. This is the case in the type and paratypes from Aru, the type locality, the entire thorax being strongly transversely striate. In all the specimens taken by Miss Cheesman in New Guinea and Waigeu the striation is considerably less strong and fails almost altogether on posterior part of pronotum. They are also a little more highly coloured; otherwise they agree very well with the typical form. Type in Coll. B.M.

Described from many workers taken by Miss L. E. Cheesman from Papua, Kokoda, 1200 ft., v. 33, and Waigeu, 2500 ft., iv. 38.

Odontomachus saevissimus Smith v. linae n. var.

This variety differs from the typical form chiefly in that the striae on the pronotum are not transverse but circular, being in the centre of disc quite longitudinal. The colour is of a more chestnut red as are the legs and scapes. In the female the striae of the mesothorax are longitudinal. Smith in his description of the female of saevissimus (Proc. Linn. Soc. Lond., Zool., 4, Suppl., 102 [1860]) says that the prothorax and metathorax (= epinotum) are transversely striate, and in the worker the whole thorax is so striated. Presumably therefore his female had the mesothorax longitudinally striate. For the figure of the female he gives plate i, fig. 9, but he gives the same for O. nigriceps Q!

Type and female type in Coll. B.M.

Described from 13 workers and one dealated female taken by Miss L. E. Cheesman in Dutch New Guinea, Cyclops Mts., Mt. Lina, 3400-4500 ft., iii.36. Nest in rotten log, and at large in dead leaves.

Emery (Gen. Ins., 118, 113 [1911]) gives O. tuberculatus Roger as a synonym of O. malignus Smith, but Mann (Bull. Mus. Comp.

Zool., 63, 305 [1919]) points out that whereas Smith described the mesonotum as being transversely striate, in tuberculata it is longitudinally so, and treats it as a good subspecies. He further states it is distinct from other species of Odontomachus in having the vertex bituberculate. This character however is very marked in the type of Smith's malignus from Aru. Smith does not mention this in his very poor description of the latter. The node in both is incrassate, and the spine begins rather abruptly from it—not "tapering into," as Smith describes it. I have compared Smith's type (for the loan of which I have to thank my friend Prof. Carpenter) with Mann's specimens of tuberculatus from the British Solomon Isles, which agree very well with Roger's description.

Odontomachus rufteeps Smith subsp. cephalotes Smith var. longitudinalis n. var.

Q. Blackish brown with a slight purplish hue, shining; mandibles, antennae and legs light brown, funiculi and tarsi lighter. Pubescence short, sparse, decumbent, yellowish. Some longer and shorter outstanding hairs on gaster.



Fig. 1.—Thorax of Odontomachus ruficeps Smith subsp. cephalotes Smith var. longitudinalis Donis.

Head longer than broad, broadest across eyes, strongly and evenly longitudinally striate, mandibles faintly punctured and longitudinally striate, apical tooth long and pointed, basal tooth broad, shorter and blunt, intermediate tooth shorter than either and sharply pointed; about 12 denticles along base of interior margin; antennal foveae transversely striate, striae less strong than those of rest of head.

Thorax: pronotum transversely striate anteriorly, the striae becoming curved and continued longitudinally down sides to base, enclosing a space which is longitudinally striate; meso- and metanotum transversely striate; epinotum with striae curved upwards and becoming transverse to base of dorsal surface, declivity with striae curved upwards. Node of petiole transversely striate, tapering to a fairly long sharp point. Gaster finely accountable striate, the striae transverse on anterior portions of segments, and longitudinal at posterior part.

Long. 11 mm. Type in B.M. Coll.

Described from eight workers taken by Miss L. E. Cheesman at Waigeu Island, Camp Nok, 2500 ft., iv. 1938, in soil under the roots of large trees.

This variety comes nearest to the var. aciculatus Smith, in which the pronotum and gaster are transversely striate. I have to thank

Mr. A. A. Allen for the drawing.

P.S.—In the Genera Insectorum the reference to Odontomachus tyranicus Smith var. nigriceps Emery is given as in vol. 36; it should be vol. 38.

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VANESSA CARDUI IN APRIL.—On Tuesday, April 2, 1940, I saw a quite fresh Vanessa cardui flying in the sun in a sunny little hollow called the Huggetts, near Waldron, East Sussex. There were sunny periods, but the weather was cool.—A. E. Moon, F.R.Met.S.; The

Furnace, Horam, East Sussex, April 7, 1940.

Vanessa cardui in March.—It may prove of interest, at so early a date, and after so severe a winter, to record the appearance to-day of a *V. cardui*. It was an undersized specimen, in good condition, and was flitting about from dandelion to dandelion in my garden, 200 yds. from the sea. It wandered off from time to time, but returned apparently satisfied that there were no other flowers of any attraction in the vicinity.—(Rev.) J. N. Marcon; Christ Church Vicarage, Seaside, Eastbourne, March 24, 1940.

NYMPHALIS ANTIOPA AT TUNBRIDGE WELLS.—Yesterday morning my friend Mr. Leonard Bellingham caught a female antiopa on a railway bank at Tunbridge Wells and brought it over to me in the afternoon. Considering it is a hibernated specimen it is in remarkably good condition. The borders are pure white.—J. LESLIE FULLER;

Copse Bank, Seal, Sevenoaks, Kent, April 1, 1940.

[Mr. L. Hugh Newman has also written that a N. antiopa was taken at Tunbridge Wells about this time, and it is clear from a second letter from Mr. Fuller that this is the one to which he refers. Mr. Newman adds that Messrs. Samuel Jones, who use the Camberwell Beauty as their trade mark, have informed him that they have not liberated any this year. It seems that this specimen must have hibernated here, and it would have been of interest to know whether its eggs were fertile.—Ed.]