

On a small Collection of Ants made by Dr. F. W. Edwards in Argentina. By HORACE DONISTHORPE, F.Z.S., F.R.E.S., &c.

THIS small paper deals with a few ants taken by Dr. F. W. Edwards in Argentina, Territory Rio Negro, in 1926, which have recently been handed over for me to study. They consist of nine species, of which no less than five are new to science. The chief interest in connection with this small collection of ants rests on the fact that there are three species of *Acanthomyops* Mayr (= *Lasius* F., nec Jurine) present. The ants of this genus were known heretofore to belong only to the purely north temperate fauna, being common to the Palæarctic (Europe and India) and Nearctic Regions. (N. America). There exists, however, some relationship between the faunas of western U.S.A. (Lower California &c.) and Chile. My friend Dr. Jordan tells me the best-known example is the Carabid genus *Ceroglossus*, which is closely related to the northern genus *Carabus*. It occurs only in Chile, and there is no *Carabus* anywhere in South America, there being also no *Carabus* in Central America. Dr. Jordan suggests that the explanation, which the geologists will not admit, is a former land-connection west of the present coast of S. and C. America, from Lower California to Chile—perhaps a chain of islands. It has also been suggested that such insects as these may have extended their range from N. America along the chain of mountains of the Andes. It is most interesting that there is the same large gap in the distribution of *Acanthomyops* as in *Carabus*.

The following is a list of the ants collected, with descriptions of the new species :—

MYRMICINÆ.

Pogonomyrmex (Pogonomyrmex) ater, sp. n.

♀.—Jet-black, shining, legs and funiculi of antennæ brown, tarsi and trochanters lighter, whole body furnished with dark, longer and shorter, bristly hairs, erect on head and thorax, suberect on rest of body and legs.

Head rectangular, covered with raised longitudinal ridges, the spaces between very closely covered with a network of punctures; *mandibles* strongly longitudinally striate with some large scattered punctures in the striæ,

armed with six teeth, the three basal ones being shorter than the rest, last joint long and pointed, undersides furnished with recurved hairs; *clypeus* with anterior border straight, furnished with long curved hairs; *frontal area* small, circular, with a distinct median carina; *antennæ*: *scape* with fine longitudinal ridges and small scattered punctures, a few very fine decumbent hairs, and some longer suberect bristly hairs are present, when the *scape* is bent back it does not quite reach posterior angles of the head; *funiculus* with 1st joint longer than 2nd, 2nd longer than 3rd, 3rd-11th increasing in length and breadth, last joint not much longer than penultimate; under side of head with the usual psammophore, or beard, of long recurved hairs. *Thorax* with a network of strongly raised ridges, circular round anterior angles of pronotum, longitudinal at sides, and transverse on epinotum, the spaces between finely punctured but shining; *epinotum* slightly concave, with two short sharp spines directed slightly upwards and outwards, declivity deep, slightly concave, the posterior angles armed with a second pair of short sharp spines directed upwards and outwards; *petiole* smooth and shining, the *peduncle* about the same length as the node, armed with a short triangular tooth beneath, anteriorly; *node* high, somewhat pointed, the anterior side not as long as the flat sloping downward dorsal side; *post-petiole* bell-shaped, broadest just before apex, smooth and shining. *Gaster* smooth and shining. *Legs* smooth and shining. *Long.* 4.6-6.2 mm.

♀.—Colour, sculpture, and pilosity much as in the ♂. The *head* is broader; *eyes* larger, the anterior margin of *mesonotum* raised and angled; the *scutum* of mesonotum and the *scutellum* are longitudinally striate, the interstices consisting of raised ridges; the *epinotum* is of similar structure to that of the ♂, but the teeth are somewhat longer. *Wings* iridescent with two closed cubital cells, a discoidal and closed radial cell, *pterostigma* and *veins* light brown. *Long.* 8 mm.

♂.—Colour as in ♂ and ♀, pilosity longer and more abundant.

Head exclusive of mandibles and including eyes a little broader than long, rounded behind; *mandibles* longitudinally striate, armed with four teeth; *clypeus* convex, slightly rounded in front, smooth in centre,

longitudinally striate at sides; *frontal area* larger than in ♂ and ♀ with a distinct median carina; *front* longitudinally striate; *temples* and *occiput* with the raised ridge more widely separated; *eyes* large, prominent; *ocelli* larger and more prominent than in ♀; *antennæ*: *scape* when bent back not reaching posterior angles of head; *funiculus* with 1st joint much shorter and a little broader than second, 2nd shorter than 3rd, 3rd than 4th, 4th, 5th, and 6th about equal, 7th–11th constricted at apex and base, decreasing in length, last joint pointed, barely as long as the two preceding taken together. *Thorax*: *mesonotum* convex, projecting over pronotum, with raised anterior margins, disc with rather widely separated longitudinal raised ridges, spaces between smooth; *mayrian furrows* distinct, rather wide and deep; *scutum* of mesonotum with closer raised longitudinal ridges; *scutellum* convex, with close fine raised longitudinal ridges; *epinotum* smooth between the very blunt projections which take the place of the teeth in the ♀, teeth at base of declivity also much blunter; *petiole* with *node* not as high and more rounded than in the ♂; *post-petiole* bell-shaped, broadest at apex; *gaster* oval, rounded in front and narrowed behind, longer than in the worker; *penicili* present; *genitalia* retracted. *Wings* as in the ♀. *Long.* 5·8 mm.

Described from 5 ♂♂, 8 winged ♀♀, and 2 ♂♂, taken by Dr. Edwards at Maquinchao, 2000 ft., Argentine, Terr. Rio Negro, 24. x. 1926. Type and allotypes in Coll. Brit. Mus.

Solenopsis geminata F. 2 ♂♂, Maquinchao, 24. x. 26.

Solenopsis clytemnestra Emery. 24 ♂♂, 3 dealated ♀♀, Bariloche, 2500 ft., 5. xi. 26.

DOLICHODERINÆ.

Iridomyrmex bicolor, sp. n.

♀.—Yellowish red, antennæ, palpi, eyes, legs, and gaster black; clothed with very fine decumbent grey pubescence, and a few short yellow hairs. *Head* without mandibles subquadrate, not emarginate posteriorly; *mandibles* large, longitudinally striate, with terminal tooth long and pointed; *clypeus* convex, shining, with four punctures arranged along the anterior border;

eyes large, placed laterally and rather forward on head; *antennæ* long, *scape* slightly curved, a little broadest before apex, when bent back reaching beyond posterior border of head by about one-third of its length; *funiculus* with joints elongate, 1st joint longer and a little broader than 2nd, 2nd-5th subequal, 6th-9th gradually decreasing in length and increasing in breadth, 10th a little longer than broad, last joint about once and a half as long as the one preceding. *Thorax* narrow; *pronotum* convex, rounded at sides; *epinotum* convex, globose, higher when seen in profile than mesonotum; *node* of *pedicel* long, pointed, inclined forward, flat anteriorly and posteriorly; *gaster* small, narrow-oval, not quite twice as long as broad. *Legs* long. *Long.* 3.2 mm.

Described from a single worker taken by Dr. Edwards at the eastern end of Lake Nahuel Huapi, 2000 ft., 28-31. x. 26. Type in Coll. Brit. Mus.

FORMICINÆ.

Janisphaeus

Acanthomyops (*Donisthorpea*) *edwardsi*, sp. n.

♂.—Yellowish brown, posterior part of head and gaster darker, eyes black; whole body smooth and shining (the front of head, mesonotum, and epinotum, however, very finely punctured when seen under a strong power); pubescence very sparse and minute, a few scattered hairs on head and gaster. *Head*, without mandibles, slightly longer than broad, somewhat rounded behind, with posterior border straight; *mandibles* long, striate, masticatory margin furnished with five rather sharp teeth, the last long and pointed, 2nd to 4th longer than 1st; *clypeus* broader than long, convex, distinctly carinate, anterior border straight (the carina from one point of view, however, gives it the appearance of being pointed); *frontal area* conspicuous, but with basal portion indistinctly defined; *ocelli* minute, but distinct; *frontal furrow* very faint; *eyes* oval, slightly prominent; *frontal carinæ* short but well marked; *antennæ* fairly long, *scape* without outstanding hairs, very slightly curved, when bent back reaching beyond margin of head by about one-fourth of its length; *funiculus*, 1st joint longer and broader than 2nd, 2nd-12th gradually increasing in breadth, 2nd slightly longer than 3rd, 3rd and 4th of about equal length, 5th-12th gradually increasing

in length, 12th pointed, about equal in length to 10th and 11th taken together; *maxillary palpi* 6-jointed, 3rd joint being the longest; 1st joint shorter than 2nd, 6th slightly longer than 4th and 5th, 5th and 6th taken together much longer than 4th.

Thorax: *prothorax* broad, rounded; *mesothorax* convex, oval, not as high as epinotum when seen in profile; *meso-epinotal furrow* well marked; *epinotum* convex, rounded above, basal declivity slanting, slightly concave. *Scale* high, wedge-shaped, broadest in middle, narrowed at apex, deeply emarginate, forming two sharp points.

Gaster moderate, with sides and base rounded, narrowed to apex. *Tibiae* without outstanding hairs. *Long.* 3.4 mm.

♀.—Colour as in the ♂, the puncturation rather more conspicuous, the pubescence on gaster slightly more evident.

Head much as in ♂, narrower than thorax; *teeth* on *mandibles* stronger; the *frontal furrow* distinct; *scape* of *antennæ* without outstanding hairs. *Scale* as in the ♀, but thicker. *Gaster* rather short and not voluminous. *Tibiae* without outstanding hairs. *Wings* slightly infuscate, discoidal cell present in all the specimens. *Long.* 4.6–5.8 mm.

♂.—Lighter or darker brown, mandibles, antennæ, palpi, legs, and external genital organs yellow, shining, slightly punctured and pubescent.

Head small, triangular; *mandibles* with masticatory margin armed with five teeth; *clypeus* broad, convex; *frontal area* indistinctly defined; *frontal furrow* very faint; *ocelli* very distinct; *front* with a somewhat deep oval pit before median ocellus; *eyes* large, prominent; *antennæ*, *scape* long, without outstanding hairs, 1st joint of *funiculus* longer and broader than 2nd, 3rd–13th gradually increasing in length and slightly in breadth, last joint not quite as long as the two preceding taken together. *Thorax* narrowly yellow at insertion of wings. *Scale* thick, high, rounded at sides and apex. *Wings* as in the ♀, but with discoidal cell in one specimen present on one fore wing and not on the other, absent from both in another, and present on both in a third. *Tibiae* without outstanding hairs. *Long.* 3.8 mm.

Described from 5 ♀♀, 4 winged ♀♀, and 3 ♂♂ taken by Dr. Edwards at L. Correntoso, 2500 ft., 18–25. xi. 26

(2 winged ♀♀ were taken at L. Nahuel Huapi, Puerto Blest, 2500 ft., 2-3. xii. 26). Type and allotypes in Coll. Brit. Mus.

Acanthomyops (*Chthonolasius*) *negrensis*, sp. n.

♀.—Dark brown, shining, mandibles, clypeus, cheeks, antennæ and legs brownish yellow; clothed with fine decumbent yellowish-grey pubescence, and scattered yellow outstanding hairs; puncturation very fine and close. *Head* as broad at base as thorax; *mandibles* long, longitudinally striate, and with a few widely separated punctures, masticatory margin furnished with eleven pointed teeth, terminal tooth rather long, penultimate tooth longer than those before it, 1st tooth shortest, 2nd bifid; *clypeus* broad, convex, subcarinate; *frontal area* large and indistinctly defined; *frontal furrow* faint; *eyes* large, prominent; *front* with a small circular pit before median *ocellus*; *antennæ* long, *scape* with outstanding hairs, when bent back reaching beyond margin of head by about one-third of its length, 1st joint of *funiculus* longer and broader than 2nd, 2nd very slightly longer than 3rd, 3rd-11th (=12th joint of antenna) increasing in length and breadth, 11th about equal to the two preceding it taken together. *Thorax* broad, convex; *scale* broadest in middle, apex distinctly but not deeply emarginate; *gaster* broader than thorax, but not very voluminous. *Wings* slightly infuscate; *veins* and *pterostigma* yellow. *Tibiæ* with outstanding hairs. *Long.* 8.6 mm.

Described from a single winged ♀ taken by Dr. Edwards at L. Nahuel Huapi, Eastern End, 17. xi. 26. Type in Coll. Brit. Mus.

Acanthomyops (*Chthonolasius*) *rufo-niger*, sp. n.

♂.—*Head*, *thorax*, *scale*, and *scapes* of antennæ light brownish red, *eyes* black, *gaster* black, reddish at extreme base; *mandibles*, *legs*, and *funiculi* of antennæ brown, shining; *pubescence* fine and sparse; a few scattered yellow hairs, which are longer on *gaster*.

Head rather large, broadest before base, sides rounded, posterior border slightly rounded; *mandibles* massive, longitudinally striate, masticatory border armed with six blackish pointed teeth, the terminal one being the longest, the 3rd and 5th longer than the rest; *clypeus*

large, broad, convex, carinate, with anterior border distinctly emarginate in the centre; *frontal area* indistinctly defined; *frontal furrow* very fine; *front* with a small circular pit before median ocellus; *ocelli* small, but distinct; *eyes* somewhat prominent; *antennæ* of medium length, *scape* with slight outstanding hairs, when bent back reaching beyond margin of head by about one-fourth of its length; *funiculus*, 1st joint longer and slightly broader than 2nd, 2nd-11th increasing in length and breadth, last joint about as long as the two preceding taken together; *maxillary palpi* 5-jointed (the first two joints are probably fused), the 2nd (probably=3rd) is the longest, 3rd-5th (probably=4th-6th) decreasing in length; *labial palpi* 3-jointed (instead of 4 as is usual in *Chthonolasius*). *Thorax*: *prothorax* large, rounded, prominent, *mesothorax* round, convex, prominent, *meso-epinotal* furrow well marked, *epinotum* convex, prominent slightly higher than mesothorax when seen in profile declivity slanting and slightly concave. *Scale* high, broadest before base, slightly emarginate at apex. *Gaster* short, not broader than head, rounded at sides. *Tibiæ* with outstanding hairs. *Long.* 4-8 mm.

Described from 3 ♀♀ taken by Dr. Edwards at Bariloche 2500 ft., 25-28. x. 26. Type in Coll. Brit. Mus.

Camponotus (Tancæmyrmex) chilensis Spinola. 3 ♀♀, 1 ♂, Bariloche, 2500 ft., 25-28. x. 26.

Camponotus (Tancæmyrmex) distinguendus Spinola var. *morosus* Smith. 1 ♀, Chile, Concepcion, 26-28. xii. 26; 1 ♀, Bariloche, 25-28. x. 26.