

From the ANNALS AND MAGAZINE OF NATURAL HISTORY,
Ser. 12, vol. iii. p. 1057, December 1950.

A First Instalment of the Ants of Turkey. By HORACE
DONISTHORPE, F.Z.S., F.R.E.S., etc.

THROUGH the kind agency of my friend Dr. Malcolm Burr we are now in possession of a fine collection of ants from Turkey. Now they have all been mounted they fill no less than 15 store-boxes. This is a very valuable addition to the ant collection of the Museum; for we had no Turkish ants, and, as far as I am aware, there is no list of the ants of Turkey in existence. Some of these were taken by Dr. Burr, but the great majority was captured by Professor C. Kosswig, of Istanbul. I hope, in time, to be able to publish a list of them all.

I give the known distribution to them all, for the distribution of the fauna of Turkey is rather curious. Dr. Burr points out that an earwig described by him is found in Turkey, and has Indian, Malayan and Australian affinities, and an apparently purely Ethiopian earwig is found near Ararat. There are many other cases, especially among the fishes.

Formicidae.

Subfamily DORYLINE.

Tribe DORYLINI.

Dorylus (Dorylus) affinis Shuckard, Ann. Mag. Nat. Hist., v, p. 316 (1840); Donisthorpe, Ann. Mag. Nat. Hist. (s. 12), iii (1950).

Known distribution : Tropical Africa.

6 ♀♀, Turkey, Southern Coastlands, Koribos, February, 1946 (C. Kosswig), No. 445.

Subfamily *PONERINÆ.*Tribe *PONERINI.*

Ponera eduardi Forel, Bull. Soc. Vaud. Sci. Nat., xxx, p. 15 (1894); Donisthorpe, Ann. Mag. Nat. Hist. (s. 12), iii (1950).

Known distribution: Basin of the Mediterranean, Madeira and Canaries.

6 ♀♀, West Turkey, Izmir, Denizli, No. 396, 3 ♀♀, Bebek, Istanbul, No. 131.

Tribe *PROCE R ATI INI.*

Sysphincta europea Forel, Ann. Soc. Ent. Belg., xxx, C.R. p. 162 (1884); Donisthorpe, Ann. Mag. Nat. Hist. (s. 12), iii (1950).

Winged and deälated ♀♀ and ♀♀, West Turkey, Bebek (C. Kosswig), 1947.

Subfamily *MYRMICINÆ.*Tribe *MYR M I C I N I.*

Myrmica lobicornis Nylander, Acta. Soc. Sci. Fennicæ, ii, p. 932 (1846).

Known distribution: North Europe, more in the south in the mountains, Alps, Appennines.

14 ♀♀, East Turkey, Nazit Gölü, February 2, 1947, Kars.

Myrmica scabrinodis Nylander, Acta. Soc. Sci. Fennicæ, ii, p. 930 (1846).

Known distribution: Europe, North and Central Asia.

Winged ♀, 4 ♀♀, Odemis, Izmir, No. 197; 1 winged ♀, Dinar Seyharap p'nari.

Myrmica sulcinodis Nylander, Acta. Soc. Sci. Fennicæ, ii, p. 934 (1846).

Known distribution: North of Europe and Asia, 4 ♀♀, Uludağ, 2200 m., Bursa, No. 19,

Tribe PHEIDOLINI.

Aphænogaster (Attomyrma) gibbosa Latreille, Fourmis France, p. 50 (1798).

Known distribution : France, Spain and Greece.

7 ♀♀, Bebek, Istanbul, No. 81.

Aphænogaster (Attomyrma) splendida Roger, Berlin Ent. Zeitschr. iii, p. 257 (1859).

Known distribution : South Europe, Algeria, Tunis, Syria.

4 ♀♀, Antalya, Izmir, No. 209.

Aphænogaster (Attomyrma) subterranea Latreille, Fourmis France, p. 49 (1798).

Known distribution : Europe, south and middle, Crimea, Asia Minor.

7 ♀♀, Bebek, Istanbul, No. 140 ; ditto, No. 155 ; 4 ♀♀, No. 220 ; 7 ♀♀, Kopa, Karadeniz.

Aphænogaster (Aphænogaster) testaceopilosa Lucas, Expl. Scient. Algerie, Zool., ii, 301 (1846).

Known distribution : Algeria, Tunis, Azores, Canaries, Spain, South of France, Sardinia, Caucasus.

1 ♂, 8 ♀♀, Bebek, Istanbul, No. 86.

Aphænogaster (Aphænogaster) testaceopilosa Lucas, subsp. *semipolita* Nylander, var. *rufoferruginea* Donisthorpe, Pro. R. Ent. Soc. Lond. (B) xv, Pts. 5 and 6, p. 54 (June 1946).

4 ♀♀, Antalya, Izmir.

Messor barbarus L., Syst. Nat. Edt., xii, p. 962 (1767).

Known distribution : South Europe, Asia, Africa.

This species appears to be common and widely distributed ; we have specimens from Arpharkoy, Bandirma, Cihanbeyli, İstanbul, Konga, Mersin, Tetrovar Nemyut, etc. Nos. 230, 240, 252, 253, 257, 258, 277, 279, 282, 297, 326, 357, 358, 359 and 390.

Messor barbarus L., subsp. *structor* Latreille, Fourmis France, p. 16 (1798).

Known distribution : France, middle and south.

Small ♀♀, No. 229. Ankara, No. 231. 15 ♀♀, ditto, No. 228. 14 ♀♀, ditto. Nazik Gülü, July 2, 1947.

Messor barbarus L., subsp. *semirufa* E. André, Spec. Hym. Europe, ii, p. 355 (1883).

Known distribution: Borders of the Caspian Sea, Syria, Persia, Abyssinia.

No. 213, common Antalya. No. 254, 3 ♀♀, W. Turkey, south coast of Anatolia. No. 255, 3 ♀♀, Araplarköy. No. 256, 6 ♀♀, south coast of Anatolia.

Messor barbarus L., subsp. *médiosanguineus* Donisthorpe, Proc. R. Ent. Soc. Lond. (B), xv, Pts. 5 and 6, p. 53, (June 1946).

Very many ♀♀, Gaziantep, August 25, 1947. The subspecies was described on 21 specimens 2 1/2 and ♀♀ taken in Turkey previous to 1946 by Professor C. Kosswig.

Messor barbarus L., var. *meridionalis* E. André, Spec. Hym. Europe, ii, p. 355 (1883).

Known distribution: Greece, Albania, Istanbul, Algeria, Tunis.

No. 86, 1 ♀, Bebek, Istanbul. No. 162, Toros, 13 ♀♀. No. 125, 5 ♀♀, Elbistan. No. 226, 26 ♀♀ and 2 1/2, Ankara.

Messor oertzeni Forel, var. *amphigea* Forel, Bull. Soc. Vaud. Sci. Nat., xlvi, p. 347 (1911).

No. 388, 1 ♀, West Turkey, Sarayköy, November, 1945 (C. Kosswig). No. 230, 11 ♀♀, Ankara, Istanbul. No. 213, ♀♀ and 2 1/2, Antalya.

Gonioma burri Donisthorpe, Ent. Record, lxiii, p. 60 (1950).

One winged ♀, two deälated ♀♀, West Turkey, Black Sea coast, Kopa.

Ceratopheidole pergandei Donisthorpe, Ann. Mag. Nat. Hist. (s. 12), iii, p. 639 (1950).

5 ♀♀, S.E. Turkey, Gaziantep, August 25, 1947.

Tribe CARDIOCONDYLINI.

No. 34, *Cardiocondyla elegans* Emery, Ann. Accad. Aspir. Nat. Napoli, ii, p. 21 (1869).

Known distribution: Italy, Central France, Spain, Caucasus. 3 ♀♀, Ankara, Istanbul.

Tribe C R E M A T O G A S T R I N I .

Crematogaster (Orthocrema) sordidula Nylander, Ann. Soc. Sci. Fennicæ, iii, p. 44 (1849).

Known distribution : Basin of the Mediterranean and Central Asia. No. 44, 5 ♀♀, Armutlu, east coast of Marmara.

Crematogaster (Acrocaelia) scutellaris Olivier, Encycl. Méthod. Insect. vi, p. 497 (1791).

Known distribution : Central Europe and east of the Adriatic, Algeria, Tunis, Caucasus.

No. 42, 7 ♂♂, 10 ♀♀, Baltalimani, Istanbul. No. 138, 24 ♀♀, Bebek, Istanbul.

Tribe S O L E N O P S I D I N I .

Solenopsis fugax Latreille, Fourn. Fr., p. 46 (1798).

Known distribution : Southern and Central Europe, England, Sweden, Morocco, Asia, West and Central Japan.

No. 63, over 20 ♀♀, Kara, Istanbul. 5 ♀♀, Dinar, Layharah pinari. No. 165, 1 ♂, 1 winged ♀, and 1 deälated ♀, Yeşilkoy, Istanbul.

Monomorium (Holcomyrmex) glabrum E. André, Spec. Hym. Europe, ii, p. 345 (1883).

Known distribution : All India, Ceylon, Burma.

10 ♀♀, West Turkey, Vilayet, Bardur, Gulda Gölü, October, 1946.

Tribe P H E I D O L I N I .

Pheidole (Pheidole) megacephala Fabricius, Ent. Syst., ii, p. 361 (1793).

Cosmopolitan. In hothouses.

No. 370, West Turkey, Izmir, Denizli, 5 ♀♀. No. 256, 6 ♀♀, Araplarköyü, south coast of Anatolia.

Pheidole (Pheidole) pallidula Nylander, Act. Soc. Sci. Fennicæ, iii, p. 42 (1849).

Known distribution : West Basin of the Mediterranean in Europe and in Africa, limited in Europe by the Adriatic.

No. 443, 5 ♀♂, Ankara, August 2, 1945.
 No. 285, West Turkey, Cihanbeyli, Istanbul, 23 ♀♂.
 No. 222, 4 ♀♂, 4 ♀♀, Odemis, Izmir. No. 3, 1 ♀, 4 ♀♂,
 Ankara, Bursa. No. 78, 11 ♂♂, 6 ♀♂, 30 ♀♀, Bebek,
 Istanbul. No. 163, 18 ♀♀, Yesilköy, Istanbul. No. 211,
 1 ♀, 7 ♀♀, Antalya, Izmir. No. 203, 2 ♀♂, 7 ♀♀, ditto,
 ditto.

Tribe LEPTOTHORACINI.

Leptothorax bulgaricus Forel, subsp. *græca* Forel, Bull.
 Soc. Vaud. Sci. Nat., xlvi, p. 336 (1911).

Known distribution : Greece, Dalmatia.

No. 190, 5 ♀♀, Armutlu, east coast of Sea of Marmara.

Tribe TETRAMORINI.

Tetramorium cæspitum Linnæus, Syst. Nat. (ed. 10), i,
 p. 581 (1758).

Known distribution : The whole of Europe and north
 of Asia, Japan, imported into Africa and North America.

Common and widely distributed. We have specimens
 from Edremit, Adilcevaz, Isikli, Kars, Kopa, Uludağ,
 etc. Nos. 2, 9, 11, 20, 53, 61, 71, 220.

Tetramorium cæspitum L. var. *brevicornis* Emery, Bull. Soc.
 Ent. Ital., xlvi, p. 194 (1916).

Known distribution : Sardinia, Corsica.

No. 947, 1 ♀, Turkey, Black Sea coast, Zondulkak, May,
 1947

Tetramorium cæspitum L. subsp. *semilævis* E. André,
 Spec. Hym. Europe, ii, p. 286 (1882).

Known distribution : Basin of the Mediterranean,
 Central Asia.

9 ♀♀, very dark, but not quite as black as the var. *niger*,
 South-east Turkey, Gaziantep, August 25, 1947. 50 ♀♀,
 West Turkey, Aigol Gomic, October, 1946. No. 20, 8 ♀♀,
 Uludağ, 1900 m.

Subfamily DOLICHODERINÆ.

Tribe TAPINOMINI.

Tapinoma erraticum Latreille, Ess. Fourmis France, p. 24
 (1798).

Known distribution : Europe, middle and southern ;
 shores of the Mediterranean, Caucasus, Central Asia.

10 ♀♀, Gaziantep, Syrian frontier, August 25, 1947,
 2 ♀♀, Ahlat, June 30, 1947. No. 139, 17 ♀♀, West Turkey,
 Armutlu, east coast of Sea of Marmara. No. 39, many ♀♀,
 ditto, ditto. No. 31, 10 ♀♀, Ankara. No. 212, 12 ♀♀,
 Antalya, south coast of Anatolia.

Subfamily FORMICINÆ.

Tribe PLAGIOLEPIDINI.

Plagiolepis pygmæa Latreille, Ess. Fourmis, p. 45 (1798).

Known distribution: Temperate Europe, Italy and Italian Isles as far as the Balkans.

13 ♀♀, Gaziantep, Syrian frontier, August 12, 1947.
 No. 43, many ♀♀, Baltalimanı, İstanbul. No. 128, 7 ♀♀,
 Nurhakköyü, Elbistan.

Acantholepis frauendorfii Mayr, Verh. Zool. Bot. Ver. Wien,
 v. p. 378 (1855).

Known distribution: Dalmatia, etc.

7 ♀♀, coastlands Sogukoluk, February, 1946. No. 237,
 6 ♀♀, Armutlu, east coast of Sea of Marmara. No. 275,
 5 ♀♀, Mersin, south coast of Anatolia. No. 38, 35 ♀♀,
 Armutlu. No. 225, 1 deälated ♀, 60 ♀♀, Yeşilköy, İstanbul.
 No. 87, a deälated ♀, 40 ♀♀, Bebek, İstanbul. No. 164,
 9 ♀♀, Yeşilköy, İstanbul.

Tribe ACANTHOMYOPSINI.

Acanthomyops (Donisthorpea) niger Linnæus, Syst. Nat.
 (ed. 10), i, p. 580 (1758).

Known distribution: Europe, Caucasus, Siberia, Japan.
 60 ♀♀, Gaziantep, Syrian frontier.

Acanthomyops (Donisthorpea) alienus Forster, Hym. Stud.
 i, pp. 36, 71 (1850).

Known distribution: Europe, Central and Southern
 Asia, Japan. Common and widely distributed.

We have specimens from Ankara, Armutlu, Baltalimanı,
 Bebek, Hopa, Kars and Uludağ. Nos. 8, 10, 13, 18, 67,
 48, 42, 85, 219 and 229.

Acanthomyops (Donisthorpea) alienus Forster, var. *alieno-*
niger Forel, Fourmis Suisse, pp. 47, 49 (1875).

Known distribution: Europe.

No. 371, 2 ♀♀, Isikli, West Anatolia.

Acanthomyops (Donisthorpea) emarginatus Olivier, Encycl. Méth. Insect. vi, p. 494 (1791).

2 ♀♀, Black Sea coast, Zonhofkak, May 1947. No. 5,
3 ♀♀, Uludağ.

Acanthomyops (Donisthorpea) brunnens Latreille, Ess. Hist. Fourmis, France, p. 41 (1798).

No. 42, 3 ♀♀.

Acanthomyops (Donisthorpea) kosswigi Donisthorpe, Ann. Mag. Nat. Hist. (s. 12), iii, p. 640 (1950).

Aranthomyops (Chtonolasius) flavus Fabricius, Spec. Insect. i, p. 491 (1781).

No. 1, 19 ♀♀, Uludağ, Bursa.

Acanthomyops (Chtonolasius) bicornis Förster, Hym. Stud. i, p. 41 (1850).

No. 50, 3 ♂♂, Uludağ, Istanbul, 2000 m.

Acanthomyops (Chtonolasius) mixtus Nylander, Acta Soc. Sci. Fenn. ii, p. 1050 (1846).

7 ♀♀, Black Sea coast, May 1947.

Paratrechina (Nylanderia) vividula Nylander, Acta Soc. Sci. Fenn. ii, p. 900 (1846).

Known distribution : Antilles, etc., hothouses in Europe, Oceania, Congo, etc.

No. 107, 12 ♀♀, Malatya near Euphrates, and Yeşilköy, Istanbul.

Prenolepis nitens Mayr, Verh. Zool. Bot. Ver. Wien, ii, p. 144 (1852).

Known distribution : nearly to the Balkans, as far as the edges of Italy, Asia Minor, Caucasus.

No. 68, 3 ♀♀, 1 deälated ♀, Kars, on the Caucasian frontiers.

Tribe FORMICINI.

Formica rufa Linnæus, Syst. Nat. (ed. 10), i, p. 580 (1758).

Known distribution : Europe, north and middle as far as the Pyrenees and Alps, Caucasus, Siberia.

No. 17, 4 deälated ♀♀, Uludağ, 1900–2000 m.

Formica pratensis Retzius, Gen. Spec. Ins. de Geer, p. 75, (1783).

Known distribution : Europe, north and middle, Appennines, north of Asia, Isle of Satshalin.

No. 14, 4 ♀♀, Uludağ, 1900–2000 m. 5 ♀♀, East Turkey Nayik Gölü, July 2, 1947.

Formica rufibarbis Fabricius, Ent. Syst. ii, p. 355 (1793).

Known distribution : Europe, north of Asia, Himalayas.

11 ♀♀, 1 ♂, South-east Turkey, Gaziantep, August 25, 1947. No. 318, 1 ♀, Konya, coast of Anatolia. No. 12, 1 dealated ♀, Uludağ, Bursa, 1900 m. No. 32, 1 winged ♀, and 1 ♀, Ankara, Istanbul. No. 15, 5 ♀♀, Uludağ, 1700 m. No. 7, 3 ♀♀, Uludağ, 1900 m. No. 229, 4 ♀♀ Ankara, Istanbul.

Formica fusca Linnæus, Syst. Nat. (ed. 10), i, p. 580 (1758).

Known distribution : Europe and Asia, south and middle, in the Alps to 2400 m.

No. 51, 2 ♀♀, Uludağ, 1900 m. No. 8, 1 ♀ Uludag, 1900 m. No. 76, 1 large ♀, 5 small ♀♀, Uludağ, 1800 m.

Formica fusca L. var. *rubescens* Forel, Ann. Soc. Ent. Belg. xlviii, p. 423 (1904).

Known distribution : Europe, middle ; Italy.

No. 217, 26 ♀♀, Hopa, Haradeniz.

Cataglyphis albicans Roger subsp. *livida* E. André, Ann. Soc. Ent. France (6) i, p. 58 (1881).

Known distribution : Syria.

7 ♀♀, East Turkey, Ahlat, June 30, 1947.

Cataglyphis cursor Fonscolombe, Ann. Soc. Ent. France, (2), iv, p. 41, Bull. 69 (1846).

Known distribution : south of France.

No. 38, 2 ♀♀, Armutlu, east coast of Sea of Marmara. No. 221, 6 ♀♀, Odemis, Izmir. No. 37, 8 ♀♀, Ankara, Istanbul. No. 54, 30 ♀♀, Kars on the Causasian frontier.

Cataglyphis bicolor Fabricius, Ent. Syst. ii, p. 351 (1793).

19 ♀♀, South-east Turkey, Gaziantep, August 25, 1947. 7 ♀♀, East Turkey, Ahlat, June 30, 1947.

Cataglyphis bicolor F. var. *nodus* Brullé Exped. Sci. Morée Zool. ii, p. 326 (1832) (= *Myrmecocystus viaticus* Emery and Forel, var. *orientalis* Forel, and *M. viaticus desertorum* Emery, var. *orientalis* Emery).

11 ♀♀, South-east Turkey and Gaziantep, August 25, 1947.

Cataglyphis bicolor F. var. *laevior* Stitz, Mitt. Zool. Mus. Berlin, viii, p. 348 (1916).

Known distribution : Algeria.

16 ♀♀, West Turkey, Vilazet Burdar, Gulda Gölü, October 1946.

Cataglyphis bicolor F. subsp. *megalocola* Förster, Verh. Naturh. Ver. Preuss, Rheinl. vii, p. 790 (1850).

Known distribution : Algeria.

No. 160, 1 small and 2 large ♀♀, Bürücek near Boganti, Toros.

Tribe CAMPONOTINI.

Camponotus (*Camponotus*) *herculeanus* Linnæus, Syst. Nat. (ed. 10) i, p. 599 (1758).

Known distribution : Europe, north and middle (mountains).

No. 47, 1 deälated ♀, Uludağ, 2000 m.

Camponotus (*Camponotus*) *higniperda* Latreille, Fourmis, p. 88 (1802).

Known distribution : Europe, north and middle, in the mountains in South Europe.

No. 16, 9 ♀♀, Uludağ, 1600 m.

Camponotus (*Camponotus*) *vagus* Scopoli, Ent. Carniol, p. 312 (1763).

Known distribution : Europe, south, Isles of Mediterranean.

Nos. 8 and 11, 28 ♀♀, Uludağ, Bursa. No. 949, 4 ♀♀, Black Sea coast, Zondulkak, May 1947. 11 ♀♀, East Turkey, Tetvan Nemizut, June 31, 1947. No. 79, 17 ♀♀, Büyükada, Principio, Isle of Princes. No. 325, 7 ♀♀, Konya, coast of Anatolia.

Camponotus (*Tanæmyrmex*) *æthiops* Latreille, Ess. Fourmis France, p. 35 (1798).

Known distribution : Europe, south and parts of temperate central, Caucasus.

No. 4, 1 ♂, 2 ♀♀, Uludağ, Bursa.

Camponotus (Tanæmyrmex) compressus F. subsp. *thoracica*
Fabricius, Syst. Piez, p. 397 (1804).

Known distribution : Algeria and Tunis ; inhabits the oasis in sandy deserts.

No. 79, 1 ♀, Büyükkada. No. 406, 2 ♂♂, 2 ♀♀,
Narlicaköy, Antalya. No. 393, 1 ♂, Gökpınar, Denizli.

Camponotus (Tanæmyrmex) sylvaticus Olivier, Encyl.
Method. Ins., vi, p. 491 (1791).

Known distribution : south of France, Liguria, Spain.
No. 31, 1 ♂, Ankara, Istanbul.

Camponotus (Myrmentoma) lateralis Olivier, Encyl. Method,
Ins., vi, p. 477 (1791).

Known distribution : Europe, south coast of Barbary.
No. 88, 1 ♀, 5 ♀♀, Bebek, Istanbul. No. 80, 3 ♀♀, ditto.

Camponotus (Orthonotomyrmex) kosswigi, sp. n., Ent.
Record, Ixii, pp. 60-61 (1950).

8 ♀♀, West Turkey, Erbeyli, June 14, 1947.