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# Notes on ants (Hymenoptera: Formicidae) from Western Greece

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**Abstract:** In total, 77 ant species collected from 40 sampling sites were recorded from the Western Greece administrative region, including 76 from the Achaia regional unit of Peloponnese and 31 from the Aetolia-Acarnania regional unit of Sterea Ellas. *Myrmecocystus cursor* var. *hellenicus* FOREL, 1886 is restored from synonymy with *Cataglyphis aenescens* (NYLANDER, 1849) and proposed as *Cataglyphis hellenica* (FOREL, 1886) **bona species**. *Crematogaster lorteti* FOREL, 1910, *Lasius jensi* SEIFERT, 1982, *Temnothorax tauricus* (RUZSKY, 1902) and *Tetramorium chefketi* FOREL, 1911 are recorded as new for Peloponnese, while presence of *Ponera testacea* EMERY, 1895, *Temnothorax morea* CSÖSZ, SALATA & BOROWIEC, 2018 and *Temnothorax tauricus* (RUZSKY, 1902) was confirmed for Sterea Ellas. We found eight morphospecies not assigned to any formally described taxon which require further investigation as they can represent undescribed species. An updated list of ant species known from the Peloponnese province and Aetolia-Acarnania unit is given.

**Key words**: ants, Greece, Peloponnese, Sterea Ellas, Achaia, Aetolia-Acarnania, faunistics, taxonomy.

## **INTRODUCTION**

This paper is a continuation of a series of papers focused on faunistic investigation of Greek regions. So far, the project has covered Greek islands: Cephalonia (BOROWIEC & SALATA 2014), Corfu (BOROWIEC & SALATA 2021), Crete (SALATA *et al.* 2020), Euboea (BOROWIEC & SALATA 2018e), Samos (BOROWIEC & SALATA 2018c), Zakynthos (BOROWIEC & SALATA 2018d), and continental provinces: Epirus (BOROWIEC & SALATA 2018a), Peloponnese (BOROWIEC & SALATA 2017a), Thrace (BRAČKO *et al* 2016) and Thessaly (BOROWIEC & SALATA 2018b). Numerous new faunistic data were also given in several faunistic and taxonomic papers (BOROWIEC & SALATA 2012, 2013, SALATA & BOROWIEC 2017, 2018, 2019a, 2019b, 2019c, SALATA *et al.* 2018a, b, SALATA *et al.* 2019).

The Western Greece administrative region was established in 1987 as a result of new administrative reform. It was created from three regional units belonging to two former geographical provinces: Peloponnese (northwestern units Achaia and Elis) and Sterea Ellas

(western unit Aetolia-Acarnania). In a paper on ants of Peloponnese (BOROWIEC & SALATA 2017a), Achaia and Elis provinces were clearly undersampled, as we managed to collect material only from six and one sampling sites, respectively. The myrmecofauna of the western part of Sterea Ellas province is also poorly known, and the only available study lists 27 species from Aetolia-Acarnania (BOROWIEC & SALATA 2017b). This paper is based on new material collected by the senior author in June 2021 in Achaia and Aetolia-Acarnania units. Most sampling localities were located in mountains, as potential sites hosting endemic species. Achaia is known as terra typica for two species: *Proformica chelmosensis* LEBAS & GALKOWSKI, 2019 and *Temnothorax graecus* (FOREL, 1911), and occurrence of these two species in this region has been confirmed. Elis is a terra typica for *Cataglyphis hellenica* FOREL, 1886 which species status is restored, thanks to newly collected material confirming conclusions presented by KUHN *et al.* (2019).

## **MATERIAL AND METHODS**

The main method, applied at all sites, was direct sampling (hand collecting). Ant nests and individual specimens were collected on the ground, in leaf litter, under stones, in dead wood, on tree trunks and twigs. Ants were brushed off to the sweep net on the roadsides and forest. Nests were searched in rocks cracks and on cracked rocks using a chisel. All specimens were preserved in pure 75% and 96% ethanol. Images of ant specimens were taken using a Nikon SMZ 1500 stereomicroscope, Nikon D5200 photo camera and Helicon Focus software. Distribution in Greece refers to BOROWIEC (2014), SALATA and BOROWIEC (2018) and unpublished data from the Database and Collection of Greek Ants (DCGA), preserved at the University of Wrocław. Geographical coordinates are given in the decimal system. Material is deposited in the Museum of Natural History, University of Wrocław (in temporary deposit by DBET – Department of Biodiversity and Evolutionary Taxonomy, University of Wrocław, Poland – coll. L. Borowiec).

## LIST OF LOCALITIES

## **Coastal area of Achaia**

- 1. Longos, 9 m, 16 VI 2021, 38.294 / 22.02173, rural sites in urban area;
- Selianitika, 1 m, 16 VI 2021, 38.2834 / 22.03284, small park with eucalyptus trees close to beach;
- 3. Strofilias National Park, 4 m, 27 VI 2021, 38.15394 / 21.37122, pine forest;

## Aroania Mountains

- 4. Mt. Helmos loc. 1, 1700 m, 18 VI 2021, 38.00551 / 22.19859, alpine pastures;
- 5. Mt. Helmos loc. 2, 1750 m, 18 VI 2021, 38.02814 / 22.21864, alpine pastures;
- Helmos loc. 3, 1619 m, 18 VI 2021, 38.01464 / 22.18998, border between pasture and fir forest;
- 7. Mt. Helmos loc. 4, 1440 m, 18 VI 2021, 38.01787 / 22.17706, humid fir forest;
- Mt. Helmos loc. 5, 1247 m, 18 VI 2021, 38.00797 / 22.14933, young mixed forest with limestone rocks;

## Erimanthos Mountains and surrounding area

9. Goumenissa, 840 m, 23 VI 2021, 38.02737 / 22.03776, mediterranean bush along roadsides;

10. Flampoura, 644 m, 23 VI 2021, 38.04458 / 21.99947, stream valley with plane trees;

- 11. Neochori, 695 m, 23 VI 2021, 38.04889 / 21.99822, rest area with large plane tree;
- 12. 500 m NW of Neochori, 846 m, 23 VI 2021, 38.05214 / 21.98311, mediterranean oak forest;
- 870 m NW of Neochori, 908 m, 23 VI 2021, 38.054326 / 21.98038, high-growing oak forest;
- 14. 1.25 km m NW of Neochori, 913 m, 23 VI 2021, 38.05346 / 21.97405, high-growing oak forest;
- 15. Korfes, 949 m, 23 VI 2021, 38.08503 / 22.03395, stream valley with plane trees;

#### Panahaiko Mountains and surroundings

- 16. Road Kounina-Rakita loc. 1, 977 m, 17 VI 2021, 38.17381 / 21.980373, fir forest;
- 17. Road Kounina-Rakita loc. 2, 1010 m, 17 VI 2021, 38.17171 / 21.97527, stream valley with plane trees inside coniferous forest;
- 18. Road Kounina-Rakita loc. 3, 1043 m, 17 VI 2021, 38.17393 / 21.996657, mixed forest;
- 19. Road Kounina-Rakita loc. 4, 1056 m, 17 VI 2021, 38.17058 / 21.96326, fir forest;
- 20. Road Kounina-Rakita loc. 5, 1088 m, 17 VI 2021, 38.16671 / 21.95254, fir forest;
- 21. Road Kounina-Rakita loc. 6, 1123 m, 17 VI 2021, 38.16134 / 21.94786, fir forest;
- 22. Mirali, 554 m, 21 VI 2021, 38.10585 / 21.80838, pasture;
- 23. 1.1 km NE of Mirali, 780 m, 21 VI 2021, 38.115294 / 21.82449, pasture with oaks;
- 24. Veteika, 1016 m, 21 VI 2021, 38.14462 / 21.909, stream valley with deciduous trees;
- 25. Veteika-Golemi rd., 1070 m, 21 VI 2021, 38.14367 / 21.91425, fir forest;
- 26. Rakita, 1165 m, 21 VI 2021, 38.1531 / 21.94737, fir forest;
- 27. Alpine zone loc. 1, 1566 m, 26 VI 2021, 38.23622 / 21.85913, alpine pastures;
- 28. Subalpine zone, 1240 m, 26 VI 2021, 38.26096 / 21.87148, mountain pastures;

## **Surroundings of Mount Skolis**

- 29. 1.14 km S of Charavagi, 380 m, 19 VI 2021, 37.9757 / 21.58649, pastures with mediterranean oaks;
- 30. 2.9 km S of Charavagi, 483 m, 19 VI 2021, 37.96003 / 21.58319, mediterranean shrubs with limestone rocks;
- 31. 4.8 km S of Charavagi, 374 m, 19 VI 2021, 37.9434 / 21.583348, pine forest;
- 32. 1.9 km NW of Portes, 254 m, 19 VI 2021, 37.9527 / 21.555934, mediterranean shrubs;
- 33. Santomeri, 389 m, 19 VI 2021, 37.99567 / 21.57583, mediterranean oak forest;

## Aetolia-Acarnania (west of Vardousia Mountains)

- 34. Reresi, 198 m, 25 VI 2021, 38.50798 / 21.99851, stream valley with plane trees;
- 35. 3 km N of Limnitsa, 711 m, 25 VI 2021, 38.55037 / 21.97316, deciduous oak and chestnut forest;
- 36. Elatou, 1002 m, 25 VI 2021, 38.57836 / 21.97571, mixed chestnut and fir forest;
- 37. West of Elatou, 1077 m, 25 VI 2021, 38.58249 / 21.97418, fir forest;
- 38. Elatou-Ano Chora road loc. 1, 1290 m, 25 VI 2021, 38.58664 / 21.95837, mountain pasture;
- 39. Elatou-Ano Chora road loc. 2, 1214 m, 25 VI 2021, 38.58344 / 21.9436, fir forest;
- 40. 7 km S of Ano Chora, 1310 m, 25 VI 2021, 38.57608 / 21.92736, fir forest.

## LIST OF SPECIES

#### Aphaenogaster balcanica (EMERY, 1898)

**Localities:** 1, 2, 3, 5, 6, 7, 8, 9, 11, 12, 16, 17, 18, 19, 22, 23, 24, 25, 26, 28, 30, 31, 32, 33, 34, 35, 36, 38.

**Note:** Widely spread species recorded from most of the Greek provinces, except Crete, Thessaly and Thrace. It is one of the most common ants in Achaia and Aetolia-Acarnania. Nests were found in the ground or under stones. In general, the species prefers sunny and warm open habitats and luminous forests.

## Aphaenogaster peloponnesiaca Salata, Karaman, Kiran & Borowiec, 2021

#### Localities: 15, 30, 31.

**Note:** It is a recently described species, probably vicariant to *Aphaenogaster ovaticeps* (EMERY, 1898). So far, noted from Argolida, Arkadia, Lakonia and Messinia units of Peloponnese, and Aetolia-Acarnania and Beotia units of Sterea Ellas (SALATA *et al.* 2021). In general, the species prefers dark forest habitats, its workers were collected on stones in a stream valley overgrown with plane trees, on rocks located inside mediterranean oak forest, and on rocks inside pine forest.

#### Aphaenogaster subterranea (LATREILLE, 1798)

Localities: 10, 13, 14, 19, 21, 26, 34, 37.

**Note:** It is a very common species so far noted from all Greek provinces except Crete. Its nests were observed under stones in shadowy places inside both, deciduous and coniferous forests.

## Bothriomyrmex communista SANTSCHI, 1919

#### Localities: 18, 38.

**Note:** It is a common species, so far noted from most of Greek provinces except Crete and Cyclades. It is a very thermophilous species, and its nests were noted under stones on road side inside luminous mixed forest and in a mountain pasture.

## Camponotus aethiops (Latreille, 1798)

#### Localities: 3, 4, 9, 17, 30, 36.

**Note:** It is a common species, known from all Greek provinces. Nests were observed under stones in warm pine forest, mixed chestnut and fir forest, plane forest close to a stream, inside mediterranean shrubs, and in alpine pastures. Its workers were also brushed off from mediterranean shrubs along roadsides.

## Camponotus boghossiani FOREL, 1911

### Localities: 17, 26.

**Note:** It is a southern and eastern species in Greece, known from Aegean Islands, Crete, Cyclades and Dodecanese, from mainland Greece known only from Peloponnese. Usually, it is associated with warm mediterranean habitats. Nest was observed in cracked rock on sunny border of fir forests.

*Camponotus dalmaticus* (NyLANDER, 1849)

Localities: 2, 9, 10, 12, 16, 29, 30, 31, 32, 33, 34, 35, 36.

**Note:** It is a northern and western species in Greece, known from all mainland provinces, and Aegean and Ionian islands. In Achaia and Aetolia-Acarnania it is a common species most often associated with warm borders of deciduous and mixed forests, mediterranean shrubs, and herbs growing along roadsides. It was also noted from a park in an urban area. Nests were observed under stones, in rock crevices, and inside dry and empty stems of large herbs.

#### Camponotus gestroi EMERY, 1878

## Localities: 9, 16, 22, 30, 32, 33.

**Note:** Populations from Achaia have characters of nominotypical subspecies so far noted from Aegean and Ionian Islands, and almost all mainland provinces except Epirus. It is a thermophilous species, associated with warm mediterranean habitats, such like shrubs along roadsides, borders of deciduous and coniferous forests and pastures. Nests were located under stones or inside dry and empty stems of shrubs or large herbs.

## Camponotus kiesenwetteri (Roger, 1859)

#### Locality: 3.

**Note:** The species was recorded from most of Greek provinces except Epirus and Thessaly. It is strongly associated with pine forests, a single nest located under stone was observed inside a *Pinus pinea* L. forest in Strofilias National Park.

#### Camponotus laconicus EMERY, 1820

## Localities: 1, 8, 16, 17.

**Note:** It is an endemic Greek species so far noted only from Peloponnese and Sterea Ellas. It is an extremely thermophilous species. Its nests were observed under large stones in the rural site of an urban area, and on sunny roadsides inside mixed and fir forests.

## Camponotus lateralis (OLIVIER, 1792)

Localities: 1, 2, 3, 23, 26, 31, 33, 34, 36.

**Note:** A very common species known from all Greek provinces. Observed in urban areas on various bushes and herbs, deciduous and coniferous forests, but it is most common on mediterranean bushes growing along roadsides. Nests were observed under small stones, cracked clay slopes, rock crevices, and inside dry stems of bushes.

## Camponotus ligniperda (LATREILLE, 1802)

Localities: 4, 7.

**Note:** In Greece, this species is known only from mountains of mainland provinces except Thrace, and was also noted from Ionian Islands. It prefers coniferous forests and rocky alpine pastures. Nests were observed in a decaying fir trunk.

#### Camponotus oertzeni Forel, 1889

Localities: 5, 6, 7, 8, 12, 14, 16, 18, 23, 25, 28, 31.

**Note:** It is a common species, previously commonly confused with *Camponotus aethiops*. *Camponotus oertzeni* is known from all Greek provinces, and is more thermophilous than *C. aethiops*. Additionally, in contrast to *C. aethiops*, it is rarely observed in agricultural habitats. It prefers open habitats like pastures, roadsides, mountain meadows but was occasionally collected also in luminous deciduous and coniferous forests. Nests were located under large stones.

#### Camponotus piceus (LEACH, 1825)

## Localities: 9, 18, 24, 26, 28, 32, 33, 40.

**Note:** It is a common species, known from all Greek provinces. Ants were collected mostly from shrubs on mountain pastures and along roadsides, also on shrubs along borders of deciduous, mixed and fir forests.

## Camponotus vagus (SCOPOLI, 1763)

#### Localities: 1, 2, 25.

**Note:** It is a common species in Greek mainland, and in islands it is known only from Aegean and Ionian Islands. *Camponotus vagus* was observed in urban areas and in a fir forest. In coastal areas, workers were collected while penetrating trunks of eucalyptus trees, in a single locality in mountains specimens were observed on trunks of fir.

#### Cardiocondyla dalmatica Soudek, 1925

#### Locality: 3.

**Note:** It is a moderately common species, so far recorded from three mainland and three island provinces. Several nests were observed along a sandy path in a pine forest.

#### Cataglyphis hellenica (FOREL, 1886) bona species

*Myrmecocystus cursor* var. *hellenicus* FOREL, 1886: 204; BOROWIEC & SALATA 2013: 384 (as synonym of *Formica aenescens* Nylander, 1849).

## Localities: 4, 27.

Note: Based on the morphological characters and available resources, BOROWIEC and SALATA (2013) suggested that Cataglyphis cursor and its infraspecific taxa described and recorded from Greece represented Cataglyphis aenescens (NYLANDER, 1849), a member of the cursor species-group recorded from the estern Mediterranean, characterized by lack of erected setae on scape and mostly reduced number of erect setae on mesosoma. Consequently, Myrmecocystus cursor var. hellenicus FOREL, 1886 (described from Peloponnese), and Myrmecocystus cursor var. cretica FOREL, 1910 (described from Crete) were synonimized under Cataglyphis aenescens. Later, SALATA and BOROWIEC (2018), based on studies on previously unavailable type specimens, supported with a vast material collected on Crete, concluded that Cretan populations represented a distinct species and restored the name Cataglyphis cretica to the species rank. This hypothesis was also confirmed by KUHN et al. (2019) based on molecular studies. The same authors noted also that populations known from Greek mainland are not conspecific with Cataglyphis aenescens (NyLANDER, 1849), which was described from the southern part of European Russia. However, they did not propose any formal restoration of the species status for Cataglyphis hellenica. After investigation of syntypes of Myrmecocystus cursor var. hellenicus FOREL, 1886 collected in Pyrgos and several samples recently collected from Cyclades: Naxos, Macedonia: Halkidiki, Peloponnese: Achaia and Korinthia, Sterea Ellas: Attica, Euboea and Phthiotis, and Thessaly: Magnesia we agree with KUHN et al. (2019) that these populations are distinct from both C. aenescens and C. cretica. Consequently, we propose to consider the name C. hellenica (FOREL, 1886) as a bona species. Its exact redescription will be given in forthcoming first volume of the monograph of ants of Greece.

In Achaia this species was collected in two mountain localities placed in alpine area on mountain pastures overgrown with poor vegetation. Nests were observed directly in the gravel ground.

### Cataglyphis nodus (BRULLÉ, 1833)

Localities: 1, 3, 16, 18, 23, 24, 25, 31, 32, 33, 35.

**Note:** It is a common species known from all Greek provinces except Cyclades and Crete (single record from Crete is probably an error or based on an introduced specimen). It is an extremely termophilous species, active midday on sandy roads, roadsides with Mediterranean shrubs, urban rural areas and pastures. Nests located in the ground.

## Crematogaster lorteti FOREL, 1910

Locality: 33.

**Note:** It is a rare species, known from Aegean Islands, Macedonia, Sterea Ellas and Thrace and now recorded for the first time from Peloponnese. It prefers warm habitats overgrown with mediterranean herbs and shrubs. Nests located in ground or under stones.

### Crematogaster schmidti (MAYR, 1853)

Localities: 1, 2, 3, 10, 12, 13, 15, 17, 18, 19, 20, 22, 23, 24, 25, 30, 31, 32, 33, 34, 36.

**Note:** It is one of the commonest Greek ants, known from all provinces. *Crematogaster schmidti* is a dendrophilous species, nesting inside dry trunks and branches of various shrubs and trees from where it penetrates the entire shrub or tree and its surroundings.

## Crematogaster sordidula (NyLander, 1849)

Localities: 22, 31, 32.

**Note:** It is a common species, known from all Greek provinces. It prefers warm mediterranean habitats such as pastures, mediterranean shrubs and roadsides. Nests located under stones or directly in ground.

#### Dolichoderus quadripunctatus (LINNAEUS, 1771)

Localities: 1, 11.

**Note:** It is a moderately common species, known from most Greek provinces except Cyclades. *Dolichoderus quadripunctatus* prefers shadow habitats, close to streams and rivers. In Achaia, it was observed in rural sites in urban areas and on a large plane tree.

#### Formica cunicularia LATREILLE, 1798

Localities: 11, 13, 14.

**Note:** *Formica cunicularia* is common in northern mainland provinces, moderately common in southern mainland, on islands noted only from Aegean Islands and Crete. In northern provinces it was noted mostly from pastures, agricultural areas and rural sites in tourist resorts. In Achaia, it was observed in a rest area around a large pine tree and in high-growing oak forest.

Formica fusca LINNAEUS, 1758

## Localities: 5, 6, 25, 39.

**Note:** *Formica fusca* is a mountain species noted from all mainland provinces, on islands reported only from Ionian Islands: Ainos Mts. of Cephalonia. In Greece, it prefers shadow mountain coniferous forests. In Achaia and Aetolia-Acarnania, its nests were observed under stones on mountain pasture, fir forest and border area between pasture and fir forest.

## Formica gagates LATREILLE, 1798

## Localities: 13, 16, 19, 20, 21, 26, 38.

**Note:** Common in mainland Greece, on islands noted only from Aegean Islands and Ionian Islands. It prefers deciduous forests but in Achaia and Aetolia-Acarnania noted mostly from fir forests and from mountain pasture.

#### Formica sanguinea LATREILLE, 1798

#### Localities: 6, 7.

**Note:** In Greece noted only from mainland provinces except Epirus. It prefers mountain coniferous forests. In Achaia observed inside humid fir forest and in border of mountain meadows, pastures and fir forest.

## Lasius alienus (Förster, 1850)

## Localities: 2, 4, 6, 18, 20, 21, 24, 25, 28, 36, 38, 39.

**Note:** It is a common species, known from all Greek provinces. In Achaia and Aetolia-Acarnania, it was observed in rural sites in tourist resorts, mixed and fir forests and mountain pastures. Nests were located under stones.

## Lasius bombycina Seifert & Galkowski, 2016

## Localities: 7, 10, 25.

**Note:** It is a recently described species, common in mainland Greece, recorded also from Aegean Islands and Ionian Islands. In Achaia, it was observed only in mountain, shadow forests. Nests were located under stones.

#### Lasius brunneus (LATREILLE, 1798)

Localities: 19, 20, 39, 40.

**Note:** In Greece, it is a rare species although it is known from all mainland provinces, also from Aegean Islands and Ionian Islands. It prefers mountain forests growing on high altitudes. In Achaia and Aetolia-Acarnania, it was observed exclusively in fir forests.

## Lasius flavus (FABRICIUS, 1782)

### Localities: 7, 20, 21, 25, 26, 36, 37, 38, 39.

**Note:** In Greece, it is a rare species but known from all mainland provinces, also from Aegean Islands and Ionian Islands. It prefers shadow mountain forests growing on high altitudes. In Achaia and Aetolia-Acarnania, it was observed mostly in fir forests; single records come from mixed chestnut and fir forest and mountain pasture.

#### Lasius illyricus Zimmermann, 1935

Localities: 5, 6, 8, 17, 19, 25, 26, 39.

**Note:** *Lasius illyricus* is common in mainland Greece and Ionian Islands, rare in Aegean Islands and Crete, and so far not recorded from Cyclades and Dodecanese. It prefers warm deciduous forests and mediterranean bushes, but in Achaia and Aetolia-Acarnania, it was noted also from mountain pastures and fir forests.

#### Lasius jensi SEIFERT, 1982

Locality: 18.

**Note:** It is a rare species, noted only from Macedonia, Thessaly and Thrace, and now for the first time recorded from Peloponnese. Its workers were collected under stone in a mixed forest.

#### Lasius lasioides (EMERY, 1869)

## Locality: 27.

**Note:** It is a common species, known from all Greek provinces. It prefers warm habitats, such as pastures, mediterranean bushes, luminous deciduous forests. In Achaia, a single nest was reported under a stone in a mountain pasture.

#### Lasius turcicus SANTSCHI, 1921

## Locality: 11.

**Note:** It is an uncommon species, recorded from all Greek provinces except Thessaly. In Achaia, its workers were observed in a rest area around a large plane tree.

## Lepisiota frauenfeldi (MAYR, 1855)

## Localities: 1, 2, 3, 30, 31, 32.

**Note:** It is a common species, recorded from all Greek provinces except Cyclades. *Lepisiota frauenfeldi* is a very thermophilous species, noted from rural sites in urban areas, pine forest in coastal areas and mediterranean shrub. Nests were located under stones.

#### *Liometopum microcephalum* (PANZER, 1798)

## Locality: 14.

**Note:** It is an uncommon species, recorded from mainland Greece, Aegean Islands and Ionian Islands. In Achaia, a large column of thousands of workers was observed on ground and trees inside high-growing oak forest.

### Messor hellenius Agosti & Collingwood, 1987

## Locality: 30.

**Note:** It is a species common in mainland Greece, rare on islands but known from all provinces except Ionian Islands. *Messor hellenius* is thermophilous, noted from mediterranean shrubs and pastures with limestone rocks.

Messor ibericus SANTSCHI, 1931

Localities: 1, 4, 5, 6, 11, 19, 28.

**Note:** It is a common species but still not recorded from Aegean Islands, Cyclades and Sterea Ellas. It prefers warm open habitats, in Achaia was observed in rural sites in urban areas, mountain pastures and luminous fir forest.

### Messor structor (LATREILLE, 1798)

## Localities: 5, 27.

**Note:** *Messor structor* is less common than *M. ibericus*, and is known only from all mainland provinces. It prefers mountain open habitats, in Achaia it was observed only on alpine pastures.

Messor wasmanni KRAUSSE, 1910

Localities: 1, 8, 9, 22, 29.

**Note:** It is a common species, known from all Greek provinces. It prefers open habitats of low and mid altitude. In Achaia, it was observed in a rural site of an urban area, along roadside with mediterranean bushes, in luminous young mixed forest, and pastures.

## Monomorium monomorium Bolton, 1987

#### Localities: 29, 33.

**Note:** It is a tramp species noted from Aegean Islands, Crete, Ionian Islands, Epirus and Peloponnese. Most records are from tourist resorts or suburban and urban areas. It prefers warm habitats, in Achaia it was observed on limestone rocks inside mediterranean oak forest and on warm pasture with mediterranean oaks.

#### Myrmica scabrinodis Nylander, 1846

## Locality: 6.

**Note:** It is an uncommon species, recorded from all mainland provinces and Ionian Islands. In northern Greece it is known from lowland and mountain habitats, in southern Greece only in mountains. In Achaia, numerous nests were observed in the border area between fir forest and pasture at an altitude 1619 m.

## Pheidole pallidula complex

## Localities: 1, 2, 3, 8, 12, 16, 17, 22, 23, 29, 30, 31, 32, 33, 34.

**Note:** Mediterranean populations of the taxon named *Pheidole pallidula* (NYLANDER, 1849) have recently been divided into four species, three of them recorded in Greece (SEIFERT 2016), but this revision is still under discussion owing to the great local variability of this very common Mediterranean ant. SEIFERT (2016) noted from Peloponnese *Pheidole balcanica*. SEIFERT, 2016 and *P. koshewnikovi* RUZSKY, 1905 but from Achaia only *Pheidole balcanica*.

Members of the *Pheidole pallidula* complex belong to the most common Greek ants, recorded from all provinces. They prefer warm, open habitats such as rural sites in anthropogenic habitats, roadsides, pastures, mediterranean shrubs and forests. Members of this complex are pioneering species, as one of the first to inhabit disturbed habitats resulting from human activity, such as road investments, extensive excavations, but also areas after fires.

## Plagiolepis pallescens FOREL, 1889

## Localities: 1, 27, 34.

**Note:** It is a common species, recorded from all Greek provinces except Epirus. It is a thermophilous species that prefers open and warm habitats. In Achaia and Aetolia-Acarnania, its nests were observed under stones in rural sites in urban areas, alpine pastures and stream valleys with plane trees.

## Plagiolepis perperamus Salata, Borowiec & Radchenko, 2018

## Localities: 2, 3, 23, 34.

**Note:** It is species uncommon but recorded from all Greek provinces. It prefers warm habitats, often collected in anthropogenic habitats in tourist resorts and cities. In Achaia and Aetolia-Acarnania, its nests were observed in urban park, pine forest, pasture with mediterranean oaks and stream valley with plane trees.

## Plagiolepis pygmaea (LATREILLE, 1798)

Localities: 1, 2, 5, 9, 12, 13, 16, 17, 18, 23, 24, 26, 29, 31, 32, 34, 35, 36, 40.

**Note:** It is the most common and ubiquistic species of the genus *Plagiolepis*, known from all Greek provinces. So far, it was recorded from various habitats: from sea coast to mountains up to 2000 m a.s.l. It prefers warm sites, and next to members of the *Pheidole pallidula* complex is often a pioneering species in areas disturbed by human activity.

## Ponera coarctata (LATREILLE, 1802)

Localities: 10, 13.

**Note:** It is a common species in mainland Greece, in islands noted only from Aegean Islands and Ionian Islands. It prefers shadow forest habitats, especially oak forests. In Achaia, its nests were located under stones in a stream valley with plane trees, and in a high-growing oak forest.

#### Ponera testacea EMERY, 1895

Localities: 12, 35.

**Note:** It is a rare species, recorded from Macedonia, Peloponnese, Thessaly, Thrace and in islands only from Aegean Islands and Ionian Islands. *Ponera testacea* is more thermophilous than *P. coarctata* and prefers luminous mediterranean oak forests. In Aetolia-Acarnania, it was collected in luminous oak and chestnut forest. Nests were located under stones.

Locality: 17.

**Note:** It is an uncommon species, known from all mainland provinces, Aegean Islands and Ionian Islands. It prefers deciduous and mixed forests. In Achaia, it was collected in a stream valley with plane trees inside coniferous forest.

### Proformica chelmosensis LEBAS & GALKOWSKI, 2019

Locality: 4.

**Note:** It is a recently described species, probably endemic to the alpine zone of Mt. Helmos. Its numerous nests were observed in the ground on an alpine pasture with sparse vegetation, between fine gravel. Workers were active in the middle of the day at an air temperature of around  $35^{\circ}$  C.

Proformica striaticeps (FOREL, 1911)

## Locality: 5.

**Note:** It is a rare species, recorded only from the highlands of Halkidiki in Macedonia and mountains of north-western Peloponnese. Its numerous nests were observed in a mountain pasture along a clay-gravel road.

## Solenopsis cf. lusitanica\_sp 1

Locality: 25.

**Note:** The status of most European species of the genus *Solenopsis* requires extensive revision. GALKOWSKI *et al.* (2010) redescribed *Solenopsis fugax* and suggested that four distinct species groups occur in Europe and the Mediterranean region. They also suggested that several taxa proposed by BERNARD (1950) are probably synonyms, but they did not take

any formal decisions regarding the nomenclature. Our sample from Achaia, characterized by short and sparse hairs on the mesosoma belong to the *Solenopsis lusitanica* group as proposed by GALKOWSKI *et al.* (2010). A nest was observed under stone in a fir forest.

## Solenopsis cf. lusitanica\_sp 2

#### Locality: 14.

**Note:** See note under *Solenopsis* cf. *lusitanica*\_sp 1. The sample from locality 14 also belongs to the *Solenopsis lusitanica* group as proposed by GALKOWSKI *et al.* (2010) but slightly differs from specimens of the sample of *S*. cf. *lusitanica*\_sp 1 in color and morphological details. Single nest was observed under stone in a high-growing oak forest.

## Tapinoma cf. erraticum\_BALC

## Localities: 1, 4, 5, 6, 7, 9, 18, 22, 27, 34, 38.

**Note:** According to B. SEIFERT's note in WAGNER *et al.* (2018), populations of *Tapinoma erraticum* in south-eastern Europe consist of a complex of two similar species easily separated by the morphology of male genitalia. They suggested that the true *T. erraticum* is common only in northern parts of the Balkan Peninsula. In the Greek material, we found only morphospecies identified by WAGNER *et al.* (2018) as *Tapinoma* cf. *erraticum*\_BALC. Examined specimens come from Crete, the Cyclades, the Dodecanese, the East Aegean Islands, Epirus, the Ionian Islands., Macedonia, the Peloponnese, Sterea Ellas, Thessaly and Thrace.

It is a thermophilous species, and prefers open habitats. In Achaia and Aetolia-Acarnania, it was observed in a rural site of an urban area, roadsides in various types of forests, pastures and stream valleys.

## Temnothorax cf. albipennis

## Localities: 7, 25.

**Note:** Greek species of the *Temnothorax albipennis-tuberum-unifasciatus* complex need an extensive revision. At first glance, specimens from localities 7 and 15 are very similar to *Temnothorax albipennis*, but they have heads less sculptured than populations from outside of Greece. Until revision of this complex, we consider Greek populations as belonging to the taxon of unclear status.

## Temnothorax brackoi SALATA & BOROWIEC, 2019

## Locality: 30.

**Note:** It is a recently described species, known from Ionian Islands and mainland provinces except Thrace. In western Greece it is very common with occurence decreasing towards the east. It is associated with warm lowland habitats, especially with mediterranean shrubs, and is probably nesting inside dry stems of bushes and large herbs.

## Temnothorax bulgaricus (FOREL, 1892)

## Localities: 13, 23, 24, 30, 31, 32, 33.

**Note:** It is a moderately common species, known from most of Greek provinces except Crete and Cyclades. It prefers shadow habitats, such as oak forests, especially with stones and rocks, stream valleys in deciduous forests, on limestone rocks inside mediterranean bushes and in pine forests. Its nests were found in dry branches of shrubs.

### Temnothorax crasecundus Seifert & Csösz, 2015

Localities: 10, 19, 20, 21, 24, 25, 26, 37, 40.

**Note:** It si a recently described eastern species, probably vicariant to *Temnothorax crassispinus* (KARAVAIEV, 1926). From Greece it was recorded only from mainland provinces except Epirus. It prefers mountain forests of all types. Workers were observed on stones and dry branches of trees in leaf litter. Nests were located inside dry branches of trees, in rock crevices or under moss on stones.

#### Temnothorax crassispinus (KARAVAIEV, 1926)

#### Locality: 39.

**Note:** It is a northern species, in Greece uncommon, recorded from Epirus, Macedonia, Peloponnese and Sterea Ellas. *Temnothorax crassispinus* shares habitat and nest preferences with *T. crasecundus*. In Aetolia-Acarnania, a single nest was found in a dry branch of fir inside a fir forest.

## Temnothorax cf. exilis

#### Localities: 8, 16, 32.

**Note:** The *Temnothorax exilis* complex from Greece needs extensive revision. There are at least 7 morphospecies of unclear taxonomic status collected in this country. Specimens from Peloponnese belong to the morphospecies with mostly shiny surface of head and pronotum, and bicolored body. Such colored morphospecies was usually identified as *Temnothorax leviceps* EMERY, 1898 described from Italy but, due to great variability of *Temnothorax exilis* EMERY, 1869, status of this taxon is unclear. This morphospecies is common in Greece, recorded from all regions.

It is a thermophilous species, and prefers sunny rocky habitats. In Achaia, it was collected in a young mixed forest with limestone rocks, luminous fir forest and in mediterranean shrubs. Nests were located inside cracked stones and rocks, especially limestone rocks.

#### Temnothorax graecus (FOREL, 1911)

#### Locality: 30.

**Note:** *Temnothorax graecus* was described from Achaia, Patras, and so far it was recorded from the whole Peloponnese, Ionian Islands, Macedonia and Sterea Ellas. It prefers warm habitats with limestone rocks, but was noted also from urban parks, pine forests, mixed forest, limestone quarries, and roadsides with mediterranean shrubs and limestone stones.

#### Temnothorax helenae Csösz, Heinze & Mikó, 2015

Localities: 13, 16, 17, 19, 20, 25, 26, 36, 39.

**Note:** It is a recently described species (Csösz *et al.* 2015) widespread in Greece, noted from all mainland provinces except Epirus and from Crete and Cyclades. It prefers forest habitats, especially coniferous forests but was observed also in deciduous and mixed forests and pastures with oak trees and stones. Nests were located in cracked rocks and stones or under moss.

Temnothorax laconicus Csösz, Seifert, Müller, Trindl, Schulz & Heinze, 2013

#### Localities: 6, 15, 19, 26, 34, 40.

**Note:** It is a recently described sister species to *Temnothorax lichtensteini* (BONDROIT, 1918) (Csösz *et al.* 2013). It is endemic to Greece, common in Peloponnese, but noted also

from Ionian Islands and western part of Sterea Ellas. It prefers shadow places inside forests, both deciduous and coniferous. Nests were located in cracked rocks and stones, under moss or inside dry branches of trees.

## Temnothorax messiniaensis Salata & Borowiec, 2019

#### Localities: 8, 25, 30, 32, 33.

**Note:** It is a recently described species (SALATA & BOROWIEC 2019 a) endemic to Greece, and common in Ionian Islands and Peloponnese. It prefers warm habitats as roadsides with mediterranean shrubs and sunny forest edges. Nests were located inside dry stems of shrubs and large herbs.

#### Temnothorax morea Csösz, Salata & Borowiec, 2018

#### Localities: 15, 26, 35.

**Note:** It is a recently described species related to *Temnothorax interruptus* (SCHENCK, 1952) (Csösz *et al.* 2018). It was recorded from Epirus, Ionian Islands, Macedonia and Peloponnese, and now from Sterea Ellas. It was noted from luminous forests, stream valleys, especially with limestone stones and rocks, mediterranean shrubs and olive plantation. Nests were located in cracked stones or under moss on stones.

## Temnothorax cf. nigriceps

#### Locality: 6.

**Note:** Our study of various Greek samples of the *Temnothorax nigriceps* complex showed that there are at least three morphospecies and probably none of them is conspecific with true *T. nigriceps* (MAYR, 1855). This problem will be clarified in a forthcoming revision of this group of species. All morphospecies of this group were noted from alpine parts of various mountains. Nests were placed in cracked rocks and stones.

#### Temnothorax recedens (NyLANDER, 1856)

Localities: 3, 30, 35.

**Note:** It is a common species known from all Greek provinces from various habitats but usually it prefers shadow stream valleys and rocks located inside various types of forests. Workers were usually observed on stones and rocks. Nests were located in cracked rocks.

#### Temnothorax rogeri Emery, 1869

#### Locality: 33.

**Note:** It is a western species, recorded from Epirus, Ionian Islands, Peloponnese and western Sterea Ellas. It prefers shaded areas inside various forests and mediterranean shrubs, noted also from urban green areas, the its most preferred habitats are stream valleys and gorges. Workers were collected on stones and rocks, nests were found in cracked rocks.

#### Temnothorax semiruber (André, 1881)

## Localities: 18, 26, 28, 35.

**Note:** It is an uncommon species although recorded from all Greek provinces except Ionian Islands. It prefers open rocky habitats, especially in mountains, it was noted also on rocks inside luminous forests and bushes. Workers were collected on stones and rocks, especially limestone rocks, and nests were found in cracked stones and rocks.

## Temnothorax tauricus (RUZSKY, 1902)

#### Localities: 16, 36.

**Note:** Status of this species is still under discussion (BOROWIEC & SALATA 2019a), as it can be only a dark form of *T. turcicus* (SANTSCHI, 1934). It was noted from the Ionian Islands and Macedonia, and now form the Peloponnese. Nests were observed in cracked rocks inside mixed and fir forests.

#### Temnothorax cf. tuberum

## Localities: 9, 18, 25, 27.

**Note:** The Greek taxa belonging to the *Temnothorax albipennis-tuberum-unifasciatus* complex require revision. Our material from various parts of Greece suggests that more than two species related to *T. tuberum* (FABRICIUS, 1775) occur in this area, but probably none of them is conspecific with true *T. tuberum*.

#### Temnothorax turcicus (SANTSCHI, 1934)

## Locality: 9.

**Note:** It was recorded from Aegean Islands, Macedonia, Peloponnese, Sterea Ellas and Thessaly. It prefers warm habitats such as sunny edges of forests, mediterranean bushes or luminous oak and pine forests. Nests were found in dead wood inside dry tree branches.

## Tetramorium caespitum (LINNAEUS, 1758)

## Localities: 27, 28, 40.

**Note:** A recent revision of the *Tetramorium caespitum* complex (WAGNER *et al.* 2017) showed that the group contains several cryptic species, thus all old Greek records of *Tetramorium caespitum* need confirmation. BOROWIEC & SALATA (2019c) confirmed its occurrence in Epirus, Macedonia, Peloponnese and Thessaly, and in this paper its presence is confirmed from Sterea Ellas. In Peloponnese and Aetolia-Acarnania, its nests were observed in mountain pastures and fir forest.

## Tetramorium chefketi Forel, 1911

## Locality: 6.

**Note:** It is a moderately common species, recorded from three mainland and three island provinces, and now from the Peloponnese. Workers were collected under stone at the border area between mountain pasture and fir forest.

#### Tetramorium immigrans SANTSCHI, 1927

## Locality: 1.

**Note:** It is a tramp species of subcosmopolitic distribution. In Greece, it was noted from most provinces except Cyclades and Epirus. It is known almost exclusively from anthropogenic habitats, urban grasses, parks, and tourist resorts. Only in one site from Crete, it was collected from natural habitat.

#### Tetramorium impurum (Förster, 1850)

## Localities: 4, 5.

**Note:** In Greece it is a mountain species, noted from Epirus, Ionian Islands, Macedonia, Peloponnese Sterea Ellas and Thrace. It prefers mountain and alpine pastures, nests in ground.

## Tetramorium kephalosi SALATA & BOROWIEC, 2017

### Localities: 1, 18, 29, 34.

**Note:** It is a common species, known from all Greek provinces. *Tetramorium kephalosi* is thermophilous, and prefers open habitats such as pastures and roadsides but was noted also from luminous forests and olive plantations. Nests were found in the ground.

#### Tetramorium cf. punicum

#### Localities: 3, 16, 24, 25.

**Note:** This very small, uniformly yellow with only darkened first gastral tergite morphospecies, probably new to science, is similar to *Tetramorium punicum* (SMITH, 1861) which was described from Israel. We have samples from the East Aegean Is., the Ionian Is., the Peloponnese, Sterea Ellas and Thessaly. It prefers luminous forests, roadsides and mountain pastures. Nests were located under small stones.

## Updated list of ants recorded from Peloponnese

- 1. Acropyga paleartica MENOZZI
- 2. Aphaenogaster balcanica (EMERY)
- 3. Aphaenogaster epirotes (EMERY)
- 4. Aphaenogaster finzii Müller
- 5. Aphaenogaster muelleriana WOLF
- 6. Aphaenogaster peloponnesiaca Salata, Karaman, Kiran & Borowiec
- 7. Aphaenogaster subterranea (LATREILLE)
- 8. Aphaenogaster cf. subterranea sp. 1
- 9. Bothriomyrmex communista SANTSCHI
- 10. Bothriomyrmex corsicus Santschi
- 11. Camponotus (Camponotus) ligniperda (LATREILLE)
- 12. Camponotus (Camponotus) vagus (Scopoli)
- 13. Camponotus (Myrmentoma) atricolor (NyLANDER)
- 14. Camponotus (Myrmentoma) boghossiani Forel
- 15. Camponotus (Myrmentoma) dalmaticus (NyLANDER)
- 16. Camponotus (Myrmentoma) fallax (NYLANDER)
- 17. Camponotus (Myrmentoma) gestroi EMERY
- 18. Camponotus (Myrmentoma) kiesenwetteri (ROGER)
- 19. Camponotus (Myrmentoma) lateralis (OLIVIER)
- 20. Camponotus (Myrmentoma) nitidescens FOREL
- 21. Camponotus (Myrmentoma) piceus (LEACH)
- 22. Camponotus (Tanaemyrmex) aethiops (LATREILLE)
- 23. Camponotus (Tanaemyrmex) ionius EMERY
- 24. Camponotus (Tanaemyrmex) laconicus Emery
- 25. Camponotus (Tanaemyrmex) oertzeni FOREL
- 26. Camponotus (Tanaemyrmex) samius FOREL

- 27. Cardiocondyla dalmatica Soudek
- 28. Cardiocondyla stambuloffii Forel
- 29. Carebara oertzeni Forel
- 30. Cataglyphis hellenica (FOREL)
- 31. Cataglyphis nodus (BRULLÉ)
- 32. Chalepoxenus muellerianus (FINZI)
- 33. Colobopsis truncata (SPINOLA)
- 34. Crematogaster ionia FOREL
- 35. Crematogaster lorteti FOREL
- 36. Crematogaster schmidti (MAYR)
- 37. Crematogaster sordidula (NyLANDER)
- 38. Cryptopone ochracea (MAYR)
- 39. Dolichoderus quadripunctatus (LINNAEUS)
- 40. Formica (Raptiformica) sanguinea LATREILLE
- 41. Formica (Serviformica) clara FOREL
- 42. Formica (Serviformica) cunicularia LATREILLE
- 43. Formica (Serviformica) fusca LINNAEUS
- 44. Formica (Serviformica) gagates LATREILLE
- 45. Formica (Serviformica) rufibarbis FABRICIUS
- 46. Hypoponera eduardi (FOREL)
- 47. Lasius (Austrolasius) carniolicus MAYR
- 48. Lasius (Austrolasius) reginae FABER
- 49. Lasius (Cautolasius) flavus (FABRICIUS)
- 50. Lasius (Cautolasius) myrmidon MEI
- 51. Lasius (Chthonolasius) bicornis (FÖRSTER)
- 52. Lasius (Chthonolasius) distinguendus (EMERY)
- 53. Lasius (Chthonolasius) jensi SEIFERT
- 54. Lasius (Chthonolasius) mixtus (NyLANDER)
- 55. Lasius (Chthonolasius) viehmeyeri Emery
- 56. Lasius (Lasius) alienus (Förster)
- 57. Lasius (Lasius) bombycina Seifert & Galkowski
- 58. Lasius (Lasius) brunneus (LATREILLE)
- 59. Lasius (Lasius) emarginatus (OLIVIER)
- 60. Lasius (Lasius) illyricus Zimmermann
- 61. Lasius (Lasius) lasioides (EMERY)
- 62. Lasius (Lasius) neglectus Van Loon, Boomsma & Andrasfalvy
- 63. Lasius (Lasius) turcicus Santschi
- 64. Lepisiota frauenfeldi (MAYR)
- 65. Lepisiota melas (EMERY)

- 66. Lepisiota nigra (DALLA TORRE)
- 67. Linepithema humile (MAYR)
- 68. *Liometopum microcephalum* (PANZER)
- 69. Messor hellenius Agosti & Collingwood
- 70. Messor ibericus Santschi
- 71. *Messor structor* (LATREILLE)
- 72. Messor wasmanni KRAUSSE
- 73. Monomorium monomorium BOLTON
- 74. Myrmecina graminicola (LATREILLE)
- 75. Myrmica hellenica FINZI
- 76. Myrmica hirsuta Elmes
- 77. Myrmica pelops SEIFERT
- 78. Myrmica scabrinodis Nylander
- 79. Myrmoxenus adlerzi (Douwes, Jessen & Buschinger)
- 80. Myrmoxenus stumperi (KUTTER)
- 81. Nylanderia jaegerskioeldi (MAYR)
- 82. *Pheidole balcanica* SEIFERT
- 83. Pheidole indica MAYR
- 84. Pheidole koshewnikovi Ruzsky
- 85. *Pheidole pallidula* (NyLANDER)
- 86. Plagiolepis perperamus SALATA, BOROWIEC & RADCHENKO
- 87. Plagiolepis pygmaea (LATREILLE)
- 88. Plagiolepis pallescens FOREL
- 89. Ponera coarctata (LATREILLE)
- 90. Ponera testacea Emery
- 91. Prenolepis nitens (MAYR)
- 92. Proceratium algiricum FOREL
- 93. Proceratium melinum (ROGER)
- 94. Proformica chelmosensis LEBAS & GALKOWSKI
- 95. Proformica striaticeps (FOREL)
- 96. Solenopsis cf. lusitanica sp. 1
- 97. Solenopsis cf. lusitanica sp. 2
- 98. Stenamma debile (Förster)
- 99. Stigmatomma denticulatum Roger
- 100. Stigmatomma impressifrons Emery
- 101. Strongylognathus huberi dalmaticus BARONI URBANI
- 102. Strongylognathus silvestrii MENOZZI
- 103. Tapinoma cf. erraticum\_BALC
- 104. Tapinoma simrothi KRAUSSE

- 105. Temnothorax cf. albipennis
- 106. Temnothorax angulinodis Csősz, Heinze & Mikó
- 107. Temnothorax cf. anodontoides sp. 1
- 108. Temnothorax cf. anodontoides sp. 2
- 109. Temnothorax brackoi SALATA & BOROWIEC
- 110. Temnothorax bulgaricus (FOREL)
- 111. Temnothorax crasecundus Seifert & Csősz, Heinze & Mikó
- 112. Temnothorax crassispinus (KARAVAIEV)
- 113. Temnothorax dessyi (MENOZZI)
- 114. Temnothorax exilis (EMERY)
- 115. Temnothorax flavicornis (EMERY)
- 116. Temnothorax graecus (FOREL)
- 117. Temnothorax helenae Csősz, Heinze & Mikó
- 118. Temnothorax laconicus Csösz, Seifert, Müller, Trindl, Schulz & Heinze
- 119. Temnothorax cf. melanocephalus
- 120. Temnothorax messiniaensis SALATA & BOROWIEC
- 121. Temnothorax morea Csősz, SALATA & BOROWIEC
- 122. Temnothorax cf. nigriceps sp. 1
- 123. Temnothorax cf. nigriceps sp. 2
- 124. Temnothorax parvulus (SCHENCK)
- 125. Temnothorax recedens (NyLANDER)
- 126. Temnothorax rogeri EMERY
- 127. Temnothorax semiruber (ANDRÉ)
- 128. Temnothorax strymonensis Csősz, SALATA & BOROWIEC
- 129. Temnothorax subtilis Csősz, Heinze & Mikó
- 130. Temnothorax tauricus (RUZSKY)
- 131. Temnothorax tergestinus (FINZI)
- 132. Temnothorax cf. tuberum
- 133. Temnothorax turcicus (SANTSCHI)
- 134. Temnothorax unifasciatus (LATREILLE)
- 135. Tetramorium caespitum (LINNAEUS)
- 136. Tetramorium chefteki Forel
- 137. Tetramorium diomedeum Emery
- 138. Tetramorium hippocratis Agosti & Collingwood
- 139. Tetramorium immigrans SANTSCHI
- 140. Tetramorium impurum (Förster)
- 141. Tetramorium kephalosi SALATA & BOROWIEC
- 142. Tetramorium moravicum KRATOCHVÍL
- 143. Tetramorium cf. punicum sp. 1

## Updated list of ants recoreded from Aetolia-Acarnania

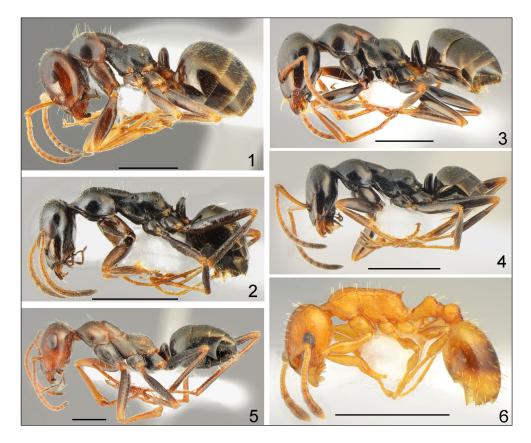
- 1. Aphaenogaster balcanica (EMERY)
- 2. Aphaenogaster peloponnesiaca Salata, Karaman, Kiran & Borowiec
- 3. Aphaenogaster subterranea (LATREILLE)
- 4. Bothriomyrmex communista SANTSCHI
- 5. Camponotus (Myrmentoma) dalmaticus (NyLANDER)
- 6. Camponotus (Myrmentoma) lateralis (OLIVIER)
- 7. Camponotus (Myrmentoma) nitidescens Forel
- 8. Camponotus (Myrmentoma) piceus (LEACH)
- 9. Camponotus (Tanaemyrmex) aethiops (LATREILLE)
- 10. Camponotus (Tanaemyrmex) oertzeni FOREL
- 11. Carebara oertzeni FOREL
- 12. Cataglyphis nodus (BRULLÉ)
- 13. Crematogaster schmidti (MAYR)
- 14. Dolichoderes quadripunctatus (LINNAEUS)
- 15. Formica (Serviformica) fusca LINNAEUS
- 16. Formica (Serviformica) gagates LATREILLE
- 17. Lasius (Cautolasius) flavus (FABRICIUS)
- 18. Lasius (Chthonolasius) nitidigaster SEIFERT
- 19. Lasius (Lasius) alienus (Förster)
- 20. Lasius (Lasius) brunneus (LATREILLE)
- 21. Lasius (Lasius) illyricus Zimmermann
- 22. Lasius (Lasius) lasioides (EMERY)
- 23. Lepisiota frauenfeldi (MAYR)
- 24. *Liometopum microcephalum* (PANZER)
- 25. Messor wasmanni KRAUSSE
- 26. Myrmoxenus gordiagini Ruzsky
- 27. Pheidole pallidula complex
- 28. Plagiolepis pallescens FOREL
- 29. Plagiolepis perperamus SALATA, BOROWIEC & RADCHENKO
- 30. Plagiolepis pygmaea (LATREILLE)
- 31. Ponera testacea Emery
- 32. Prenolepis nitens (MAYR)
- 33. Solenopsis cf. lusitanica sp. 1
- 34. Tapinoma cf. erraticum BALC
- 35. Temnothorax brackoi SALATA & BOROWIEC
- 36. Temnothorax bulgaricus (FOREL)
- 37. Temnothorax crasecundus SEIFERT & CSÖSZ
- 38. Temnothorax crassispinus (KARAVAIEV)

- 39. Temnothorax cf. exilis (EMERY)
- 40. Temnothorax helenae Csösz, Heinze & Mikó
- 41. Temnothorax laconicus Csösz, Seifert, Müller, Trindl, Schulz & Heinze
- 42. Temnothorax morea Csösz, Salata & Borowiec
- 43. Temnothorax recedens (NyLANDER)
- 44. Temnothorax rogeri Emery
- 45. Temnothorax semiruber (ANDRÉ)
- 46. Temnothorax tauricus (RUZSKY)
- 47. Temnothorax cf. unifasciatus
- 48. Tetramorium caespitum (LINNAEUS)
- 49. Tetramorium kephalosi SALATA & BOROWIEC

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Figs. 1–6. Two species characteristic for alpine zone of mountains of Achaia: 1, 2 – Proformica chelmosensis LEBAS & GALKOWSKI, endemic to Aroania Mountains, major and minor worker lateral, 3, 4 – Proformica striaticeps (FOREL), major and minor worker lateral, 5 – Cataglyphis hellenica (FOREL), species described from Achaia, worker lateral, 6 – Temnothorax graecus (FOREL), species described from Elis, worker lateral. Scale bar= 1 mm.