

Nota

Lasius platythorax Seifert, 1991 (Hymenoptera, Formicidae) in Spain

Xavier Espadaler

CREAF Universitat Autònoma de Barcelona
08193 Bellaterra (Barcelona). Spain

Anthony Prince

6 Northgate, Wiveliscombe, Taunton, Somerset, TA4 2LE. Great Britain

Manuscript received in September 2001

Nine species of *Lasius* s.str. are known from the Iberian Peninsula; *Lasius alienus* (Förster, 1850); *L. brunneus* (Latreille, 1798); *L. cinereus* Seifert, 1992; *L. emarginatus* (Olivier, 1791); *L. grandis* Forel, 1909; *L. lasioides* (Emery, 1869); *L. neglectus* Van Loon, Boomsma & Andrásfalvy, 1990; *L. niger* (L. 1758) and *L. piliferus* Seifert, 1992. Here we add a tenth species from this group of ants to the Spanish list. With the superb revision of Seifert (1992) we have now an excellent taxonomical tool to deal with this difficult assemblage. It is to be expected that new species in this group will show up in the largely unexplored mountains of the Iberian Peninsula, or when samples corresponding to published data are revised using Seifert's work. *L. platythorax* is known from a majority of European countries: Czechoslovakia, France, Germany, Great Britain, Greece, Italy, Poland, Romania, Russia, Sweden (Seifert, 1992), Austria (Boer, 1999), Hungary (Gallé et al., 1998), The Netherlands (Glaser, 1998), Ireland (Collingwood *pers. comm.*, 1995), and Norway (Fox *pers. comm.*, 1998).

It is to be expected that it will be recorded in the remaining European countries when properly looked for or checked against the sibling species *L. niger*. The nesting habitat seems to be a useful clue to detect *L. platythorax* as it prefers a higher soil moisture level than *L. niger* or *L. grandis*, and it will readily nest in dead wood.

The Iberian material we have studied comes from five localities in Spain (figure 1).

1. Huesca: Pyrenees; 19 km west of Baliera campsite, on N260. Scots pine (*Pinus sylvestris*) and mixed deciduous woodland with herb rich meadows with stones and dead wood. 27 km west of Pont de Suert. 42°28'N, 0°33'E. 5 July 1995; workers (Prince leg.). Other ant species: *Myrmica* sp.; *M. schencki* Emery 1895; *M. specioides* Bondroit, 1918; *Leptothorax acervorum* (Fabr. 1793);

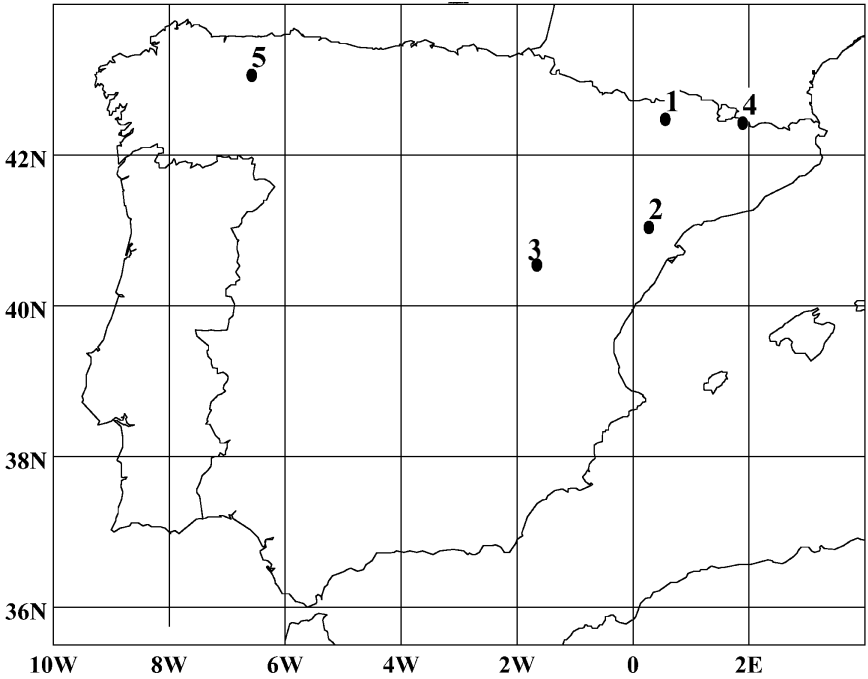


Figure 1. Distribution of *Lasius platythorax* Seifert in Spain.

- Tetramorium caespitum* (L. 1758); *Tapinoma erraticum* (Latreille, 1798); *L. piliferus* Seifert, 1992; *Camponotus vagus* (Scopoli, 1763); *Formica cunicularia* Latr. 1798; *F. pratensis* Retzius, 1783 and *F. rufibarbis* Fabr. 1793.
2. Tarragona/Teruel border on N420. 5km east of Calaceite. River flood plain and banks by road bridge. Poplar trees, dead wood, scrub bare earth, stones and reed areas. Found on dead wood and foraging on poplars. 41°2'N, 0°16'E. 7 July 1995; workers (Prince leg.). Other ant species: *Messor barbarus* (L. 1767); *M. bouvieri* Bondroit, 1918; *Crematogaster scutellaris* (Olivier, 1792); *Plagiolepis pygmaea* (Latr. 1798); *L. niger*; *Camponotus foreli* Emery, 1881; *C. lateralis* (Olivier, 1792); *C. sylvaticus* (Olivier, 1792); *Cataglyphis ibericus* (Emery, 1906) and *F. rufibarbis*. The *Messor* species were both on higher ground. Other insect of interest: nymph of *Empusa pennata* (Dictyoptera: Empusidae).
 3. Teruel: from Orihuela del Tremedal to Bronchales, 1650 m; poorly developed bog with *Pinus sylvestris* and a rich herb layer. Nesting on *Pine* stump with mosses and grasses at the base; also under stones. 40°32'N, 1°40'E. 23 May 2000; workers (Espadaler leg.). Other species present in the habitat were *Myrmica wesmaeli* Bondroit, 1918; *Leptothorax acervorum*, *Formica sanguinea* Latr. 1798; *F. lemani* Bondroit, 1917 and *Lasius distinguendus* (Emery, 1916).

Table 1. Morphological data of workers of *Lasius platythorax* and *Lasius grandis*, showing the arithmetic mean and standard deviation (HL: head length; HW: head width; SL: scape length; PNHL: length of longest standing hair on pronotum, as in Seifert, 1992). Data are from Spanish samples; *L. platythorax* 4 nests; data on *L. grandis* 8 nests).

	Lasius platythorax n=26		Lasius grandis n=24	
HL/HW**	1.027	0.031	1.071	0.032
SL/HL**	0.953	0.024	0.975	0.015
HW/SL**	1.021	0.039	0.958	0.037
PNHL/HL	0.134	0.013	0.129	0.007

** T test shows statistical differences at $P < 0.001$ level.

- Girona: Bolvir, 1145 m; foraging on *Populus nigra*, next to the road in a public garden. 42°25'N, 1°53'E. 12 July 2000; workers (Espadaler leg.). *Lasius fuliginosus* (Latr. 1798) were also foraging on poplar trees.
- Oviedo: Cangas de Narcea, bog. 43°3'N, 6°35'W. 20 July 2001; foraging workers (S. Monteserín leg.). Other species: *Formica lemani*.

The morphological distinction between *L. niger* and its sibling species *L. platythorax* is clear as the former species has a much denser clypeal pubescence (PDCL 13) than *L. platythorax* (PDCL 25.9; data from Seifert, 1992) and ventral head hair length and pronotal hair length are much shorter in *L. niger*. The morphological distinction between *L. platythorax* and its similar *L. grandis* in Spanish material is also a matter of relative body proportions: specifically, scape length is proportionately longer for a given head length in *L. grandis* and head length is also longer for given head width in *L. grandis* (table 1). Pronotum maximum hair length could not be detected as different in both species. It will be interesting to compare the male castes of the three species in Spanish material to check for similar differences as those found by Prince (1996). Preserved dry material (locality 3) has been deposited at the Museu de Zoologia de Barcelona.

Acknowledgments

Cedric A. Collingwood and Caspar Schöning made excellent companions on a couple of productive myrmecological trips. To Susana Monteserín for the loan of material.

References

- Boer, P. 1999. Additions to and a discussion about the ant fauna of The Netherlands (Hymenoptera: Formicidae). *Entomol. Ver. (Amsterdam)* 59: 141-144.
- Gallé, L.; Csösz, S.; Tartally, A.; Kovács, É. 1998. A check-list of hungarian ants (Hymenoptera: Formicidae). *Fol. Entomol. Hungar.* 59: 213-220.
- Glaser, F. 1998. The ant fauna of the Arzler Kalvarienberg near Innsbruck (Tyrol, Austria) (Hymenoptera, Formicidae). *Naturwissensch. Med. Ver. Innsbruck* 85: 257-286
- Seifert, B. 1992. A taxonomic revision of the Palaearctic members of the ant subgenus *Lasius* s.str. (Hymenoptera: Formicidae). *Abh. Ver. Naturkundemus. Görlitz* 66: 1-67.
- Prince, A. 1996. *Lasius platythorax* Seifert 1991 (Hym., Formicidae) on the Somerset Levels, with notes on distinguishing the male from that of *Lasius niger* (L.). *Entomologist's Monthly Magazine* 132: 299-303.