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Lasius niger (L.) and *Lasius platythorax* SEIFERT (Hymenoptera, Formicidae) – a revolution in Polish myrmecological faunistics and zoocoenology?

Abstract. Data are presented on the distribution, in Poland, of *Lasius niger* (L.) and *L. platythorax* SEIFERT (the latter as a species new to Poland). These data were obtained from an inspection of the ant collection in the Museum and Institute of Zoology, PAS in Warsaw. It is confirmed that SEIFERT (1991) was correct when he separated the originally collective taxon «*Lasius niger*» into the above-mentioned sibling species. A simplified key for distinguishing these forms is provided.

Key words: ants, *Lasius niger*, *Lasius platythorax*, sibling species, faunistics, Poland, key

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For over two centuries after *Lasius (Lasius) niger* was first described by LINNAEUS (1758), it was considered to be one of the commonest Palaearctic ant species due to its abundance in a wide variety of habitats. These range from very dry to very wet, both wooded and open habitats including strongly anthropogenized sites (fields, orchards, gardens, towns, industrial areas). *L. niger* was considered to be eurytopic with an unusually wide ecological flexibility and a great biological plasticity which was emphasized by the variety of the ways in which it constructs its nests: in the ground (with or without soil mounds), under stones, in rotting tree stumps, in tussocks of grass and moss, in rock and wall crevices (e.g. PISARSKI 1975, COLLINGWOOD 1979). Consequently, in the faunistic and zoocoenological literature concerning the ants

from the central and northern Palaearctic, there is probably no paper without mentioning *L. niger* as an element of the local myrmecofauna or a member of a particular ant community.

In the first revision of the genus *Lasius* F. (WILSON 1955) which was made nearly two hundred years after *L. niger* had been first described by LINNAEUS, it retained its taxonomic status. It was only in a second revision (SEIFERT 1991), that this hitherto unquestioned species was separated into two sibling species: *L. niger* (LINNAEUS, 1758) and the new *L. platythorax* SEIFERT, 1991. According to SEIFERT, this surprising decision was made on the basis of morphological differences accompanied by distinct ecological differentiation between the forms. In eastern Germany, *L. niger* generally inhabits moderately xerothermal open habitats (dry and semi-dry grasslands), and it shows strong synanthropic tendencies (it is abundant in arable lands, in urban and suburban green); it avoids shaded woodland and undisturbed bogs and fens. *L. niger* nests in soil and any above-ground constructions are built of mineral particles. *L. platythorax*, on the other hand, clearly prefers more humid sites. It inhabits all types of forest as well as bogs and fens, and avoids open sites, especially anthropogenized ones. This species usually builds its nests in organic substrate, most frequently in dead wood, but also in vegetation pads, in grass tussocks with a humus root layer; it makes no above-ground mineral constructions (SEIFERT 1991, 1992, 1996).

After nearly a decade, it seems that the majority of myrmecologists still do not approve of SEIFERT's division of the "old" *L. niger*. However, the entire "*L. niger*" material from Poland present in the ant collection in the Museum and Institute of Zoology, PAS, in Warsaw, was revised in this respect, albeit not without scepticism. The result was surprisingly explicit: the Linnaean *L. niger* does include two species which are fairly easily distinguishable morphologically. Quantitative proportion of both forms in the collection of the MIZ PAS is close to 1:1 but paradoxically despite its widespread abundance, the available material is not rich. The following though comes to mind as an aside: who would ever have wanted to collect *L. niger* specimens when they could be identified in the field at first glance, without slightest doubt that a mistake was possible?!

Below is presented a list of the material divided according to the geographic regions of its origin (following the system adopted in Katalog Fauny Polski (A Catalogue of the Fauna of Poland; see PISARSKI 1975).

***Lasius niger* (LINNAEUS, 1758)**

Baltic Coast (Pobrzeże Bałtyku):

- Pieszno ad Strzelno, 23 V 1900 (♂, ♀), 16 IX 1911 (♂, ♀), leg. E. SCHMIDT;
- Międzyzdroje (island Wolin), 10 and 12 VII 1964, 24 VI 1965 (♀), leg.

A. DRABER-MOŃKO;

- Wapnica (island Wolin), 31 VIII 1966 (♀, ♀), leg. B. PISARSKI.

Pomeranian Lake District (Pojezierze Pomorskie):

- Szczecin and environs, 7 VI 1860 (♀), leg. SINDIKOP; 21 V 1914 (♀), leg. L. KRUEGER; 10 VI 1915 and 19 V 1917 (♀), leg. E. SCHMIDT; 10 VIII 1919 (♂♂, ♀♀), leg. G. SCHROEDER; 12 IV 1921 (♀), 16 VII 1921 (♀), leg. G. JOECKS; 20 V 1951 (♀), leg. B. PISARSKI;
- Knieja ad Choszczno, 27 XII 1892 (♀), 22 VI 1893 (♀), 15 VI 1896 (♂, ♀), 21 and 29 VI 1896 (♀), 22 VII 1896 (♂), 29 II 1897 (♀) – ex. coll. Mus. Stettin (no collectors' names);
- Szadowo ad Kwidzyn, 25 VII 1910 (♀; no collector's name);
- Trzebież, 23 VII 1912 (♀), leg. G. SCHROEDER;
- Mosty Wielkie ad Szczecin, 5 VII 1915 (♀), leg. HAHNE;
- Miedwiecko-Gryfino ad Szczecin, 10 VIII 1919 (♂, ♀♀), leg. BARKOFF;
- Słupsk, 15 V 1931 (♀), 16 VIII 1933 (♀), leg. O. KARL.

Masurian Lake District (Pojezierze Mazurskie):

- Kalednik ad Suwałki, 5 VII 1955 (♀), leg. H. SZEŁĘGIEWICZ;
- Kozaki ad Gołdap, 25 VII 1960 (♀♀), leg. A. RIEDEL;
- Wiżajny ad Suwałki, 6 IX 1960 (♀), leg. S. M. KLIMASZEWSKI.

Wielkopolsko-Kujawska Lowlands (Nizina Wielkopolsko-Kujawska):

- Ciechocinek, 15 VI 1955 (♀), leg. W. BAZYLUK;
- Poznań-Wilczy Młyn, 18 V 1956 (♀♀), leg. J. NAST.

Mazovian Lowlands (Nizina Mazowiecka):

- Brwinów ad Warszawa, 23 IV 1950 (♀♀), leg. A. RIEDEL;
- Podkowa Leśna ad Warszawa, 1 and 9 V 1950, 20 VII 1953 (♀♀), leg. B. PISARSKI; 18 VII 1952 (♂), leg. B. PISARSKI;
- Żwir (Ratajewo) ad Warszawa, 29 VII 1951 (♀♀), leg. B. KRECZMER;
- Kampinoska Forest (Puszcza Kampinoska), 3 VIII 1955 (♂♂, ♀), leg. P. TROJAN;
- Wiśniowa Góra ad Warszawa, 3 VI 1956 (♀), leg. W. BAZYLUK;
- Stanisławice ad Kozienice, 25 VIII 1956 (♂♂, ♀♀, ♀), leg. J. ZIMKO;
- Garbatka ad Kozienice, 24 VII 1959 (♀), leg. E. KIERYCH;
- Skierniewice, 11 and 12 VIII 1960 (♀♀), leg. P. TROJAN;
- Truskaw ad Pruszków, 27 VIII 1960 (♀), leg. E. KIERYCH;
- Warszawa, VI 1978 (♀), leg. L. MRÓZ;
- Cybulice ad Nowy Dwór Mazowiecki, 6 VII 1965 (♀♀), leg. group of IZ PAS¹;
- Dziekanów Leśny ad Warszawa, 19 VIII 1965 (♀♀), leg. B. PISARSKI.

Podlasie:

- Mikulicze, 28 VII 1909, 19 VIII 1909 (♀; no collector's name);
- Siedlce, 23 VI 1953 (♀), leg. R. BIELAWSKI.

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Krakowsko-Wieluńska Uplands (Wyżyna Krakowsko-Wieluńska):

- Ojców ad Olkusz, 6 VIII 1954 (♀), leg. A. RIEDEL;
- Kroczyce ad Zawiercie, 13 VIII 1960 (♀), leg. J. PRÓSZYŃSKI.

Małopolska Uplands (Wyżyna Małopolska):

- Bogucice ad Pińczów, 1 VII 1950 (♀♀), leg. A. KOSTROWICKI;
- Młodzawy ad Pińczów, 9 VI 1954 (♀), leg. Sz. NOWAKOWSKI;
- Skorocice ad Pińczów, 26 VIII 1954 (♀), leg. Sz. NOWAKOWSKI.
- Forest "Dębina" ad Pińczów, 18 VII 1956 (♀; no collector's name).

Świętokrzyskie Mts (Góry Świętokrzyskie; a subregion of the Małopolska Upland):

- Łysa Góra (Łysa Mt), 14 VIII 1947 (♂), 4 VIII 1948 (♀♀; no collectors' names).

Lubelska Uplands (Wyżyna Lubelska):

- Puławy (♀; no date or collector's name) – ex. coll. PINUG²;
- Kazimierz Dolny ad Puławy, 11–17 V 1950 (♂, ♀♀, ♀), 19 VIII 1950 (♀♀), 28–30 IX 1950 (♀♀), 21 and 22 VI 1951 (♀♀), 6–9 VII 1951 (♀, ♀♀), 14 VII 1951 (♂, ♀), 24 VII 1951 (♀♀), 6 IX 1951 (♀), 18 VII 1952 (♂), 1 IX 1966 (♀), leg. B. PISARSKI; 8 V 1966 (♀), leg. A. MOŃKO.

Roztocze:

Reserve "Rakowskie Bagno" ad Frampol, 5 IX 1958 (♀♀), leg. B. PISARSKI.

Sandomierska Lowlands (Nizina Sandomierska):

- Leżajsk ad Łańcut, 28 VII 1956 (♀♀), leg. W. BAZYLUK et E. KIERYCH.

Western Sudeten Mts (Sudety Zachodnie):

- Jelenia Góra, 30 IX 1960 (♀♀), leg. B. PISARSKI;
- Pilichowice ad Lwówek Śląski, 20 VII 1961 (♀), leg. B. PISARSKI; 21 VII 1961 (♀), leg. E. KIERYCH.

Eastern Sudeten Mts (Sudety Wschodnie):

- Bliszczyce ad Głubczyce, 8 VII 1957 (♀♀), leg. B. PISARSKI.

Nowotarska Valley (Kotlina Nowotarska; a subregion of the Western Beskidy Mts):

- Gubałówka Mt ad Zakopane, 2 IX 1965 (♂♂, ♀♀), leg. B. PISARSKI.

Bieszczady Mts:

- Wetlina, 19–23 VI 1960 (♀), leg. B. PISARSKI;
- Berezki ad Ustrzyki Dolne, 28 VIII 1961, 22 IV 1970 (♀♀), leg. B. PISARSKI;
- Smolnik, 30 VIII 1961 (♀, ♀♀), leg. B. PISARSKI;
- Cisna, 25 VII 1962 (♂♂, ♀♀), leg. B. PISARSKI;

²Państwowy Instytut Uprawy, Nawożenia i Gleboznawstwa (National Institute of Cultivation, Fertilization and Pedology).

- Komańcza, 20 VII 1962 (♀, ♀), leg. B. PISARSKI;
- Dwerniczek ad Ustrzyki Dolne, 5 IX 1962 (♀), leg. C. DZIADOSZ et W. STAREGA.

Pieniny Mts:

- Wąwoz Sobczański, 14 VIII 1955 (♀), leg. W. BAZYLUK;
- Sromowce Wyżne, 25 VI 1956 (♀), leg. B. PISARSKI;
- Czorsztyn, 2 V 1962 (♀), leg. A. LIANA.

***Lasius platythorax* SEIFERT, 1991**

Baltic Coast (Pobrzeże Bałtyku):

- Gdańsk-Wrzeszcz, 11 VII 1951 (♀), leg. R. BIELAWSKI;
- Gdynia-Redłowo, 8 VII 1954 (♀), leg. W. KULERSKI;
- Karsibór (island Wolin), 12 VI 1965 (♀), leg. B. PISARSKI;
- Przytorsi peninsula (Półwysep Przytorsi) ad Międzyzdroje, 26 VI 1971 (♀), leg. B. MAŁKIN;
- Wichłacz ad Koszalin (no date; ♀), leg. K. LATLER.

Pomeranian Lake District (Pojezierze Pomorskie):

- Knieja ad Choszczno, 15 V 1894 (♂, ♀) – ex. coll. Mus. Stettin (no collector's name);
 - Słupsk, 10 V 1931 (♀), leg. O. KARL;
 - Czarnogłów ad Rokita, 18 V 1951 (♀), leg. B. PISARSKI;
 - Żukowo ad Kartuzy, 2 VIII 1954 (♀), leg. B. PISARSKI;
 - Bielawskie Błota ad Wejherowo, 14 IV 1955 (♀), leg. R. BIELAWSKI.

Wielkopolsko-Kujawska Lowlands (Nizina Wielkopolsko-Kujawska):

- Mioty (Puszcza Notecka; Notecka Forest), 9 X 1951 (♀), leg. R. BIELAWSKI.

Mazovian Lowlands (Nizina Mazowiecka):

- Podkowa Leśna ad Warszawa, 24 X 1948, 2 X 1949, 1 and 8 V 1950 (♀), leg. B. PISARSKI;
 - Garbatka ad Kozienice, 24 VIII 1953 (♀), leg. E. KIERYCH;
 - Warszawa-Młociny, 2 VIII 1957 (♀), leg. B. PISARSKI;
 - Warszawa-Wawer, 3 IV 1960 (♀), leg. E. KIERYCH;
 - Kampinoska Forest (Puszcza Kampinoska), reserve "Roztoka", 23 IX 1960 (♀), leg. E. KIERYCH;
 - Kampinoska Forest, Dziekanów Leśny, 5 VIII 1961 (♀), leg. E. KIERYCH;
 - Kampinoska Forest, VII 1965 (♀), leg. group of IZ PAS.
 - Zabieżki ad Warszawa, 16 VII 1978 (♀), leg. B. MAŁKIN.

Podlasie:

- Mikulicze, 19 VIII 1909 (♀; no collector's name);
- Siedlce, 23 VI 1953 (♀), leg. R. BIELAWSKI.

Białowieska Forest (Puszcza Białowieska; a subregion of Podlasie):

- Białowieska Forest (Puszcza Białowieska) ad Hajnówka, 15 VI 1954 (♀), leg. B. PISARSKI;
- Białowieża ad Hajnówka, 21 VII 1954 (♀; no collector's name); 24 V 1957 (♀), leg. P. TROJAN; 25 V 1957 (♀), leg. B. PISARSKI;
- Białowieski National Park (Białowieski Park Narodowy), 25 VII 1960 (♀♀), leg. A. MOŃKO.

Krakowsko-Wieluńska Uplands (Wyżyna Krakowsko-Wieluńska):

- Ojców ad Olkusz, 11 V 1953 (♀♀), leg. B. PISARSKI; 5 VIII 1954 (♀), leg. B. PISARSKI; 7 VIII 1954 (♀), leg. A. RIEDEL.

Małopolska Uplands (Wyżyna Małopolska):

- Starachowice, 19 VIII 1948 (♀♀), leg. A. GOLJAN;
- reserve "Skowronno" ad Pińczów, 19 VIII 1954 (♀), leg. B. PISARSKI.

Świętokrzyskie Mts (Góry Świętokrzyskie; a subregion of the Małopolska Uplands):

- Łysogóry Mts, 19 VII 1950, 24 VII 1952 (♀♀), 14 VIII 1950 (♂♂, ♀♀), leg. B. PISARSKI;
- Święty Krzyż, 25 IX 1957 (♀), leg. J. STĘPKOWSKA.

Lubelska Uplands (Wyżyna Lubelska):

- Kazimierz Dolny ad Puławy, 10 V 1912 (♀), leg. N. ALEKSANDR; 16 V 1950 (♀♀), 17 V 1950 (♀, ♀♀), 11 VII 1950, 17 and 18 VIII 1950, 30 IX 1950, 21 VI 1951, 6 and 14 VII 1951 (♀♀), 7 VII 1952 (♂, ♀), leg. B. PISARSKI; 11 and 17 VII 1951 (♀♀), leg. A. RIEDEL;
- Puławy, 1 VI 1943 (♀♀), leg. KELER; 26 VI 1943, 24 VIII 1943, 7 IX 1943 (♀♀; no collectors' names) – ex. coll. PINUG.

Roztocze:

- Frampol, 26 IV 1957 (♀), leg. B. PISARSKI;
- Reserve "Rakowskie Bagno" ad Frampol, 5 IX 1958 (♀), leg. B. PISARSKI.

Sandomierska Lowlands (Nizina Sandomierska):

- Nisko, 26 VII 1956 (♀♀), leg. E. KIERYCH et W. BAZYLUK.

Western Sudeten Mts (Sudety Zachodnie):

- Stóg Izerski (Izerskie Mts), 3 X 1960 (♂♂, ♀♀), leg. B. PISARSKI;
- Pilichowice ad Lwówek Śląski, 20 VII 1961 (♀), leg. B. PISARSKI;
- Błędne Skały, 14 VII (♀♀, ♀♀), leg. B. PISARSKI.

Eastern Sudeten Mts (Sudety Wschodnie):

- Bliszczyce ad Głubczyce, 8 VII 1953 (♀), leg. B. PISARSKI.

Western Beskidy Mts (Beskidy Zachodnie):

- Cieszyn, Zamkowe Hills (Wzgórza Zamkowe), 2 VIII 1953 (♀), leg. B. PISARSKI;
- Zawoja ad Maków Podhalański, 5 VII 1955 (♀), leg. A. RIEDEL.

Nowotarska Valley (Kotlina Nowotarska; a subregion of the Western Beskidy Mts):

- Gubałówka Mt ad Zakopane, 2 IX 1965 (♀♀; no collector's name).

Eastern Beskidy Mts (Beskidy Wschodnie):

- Tuława Krzyżówki ad Krosno, 14 VI 1954 (♀), leg. B. PISARSKI;
- Międzygrodzie ad Karpacz, 18 VI 1954 (♀♀), leg. B. PISARSKI.

Bieszczady Mts

- Wetlina, 19–23 VI 1960 (♀♀), leg. B. PISARSKI;
- Smolnik, 30 VIII 1961 (♀♀), leg. B. PISARSKI;
- Dwernik, 22 V 1963 (♀), leg. B. PISARSKI;
- Ustrzyki Górnne, 27 VII 1966 (♀), leg. B. PISARSKI;
- Widelki ad Ustrzyki Dolne, 1 VII 1969 (♀), leg. E. KIERYCH.

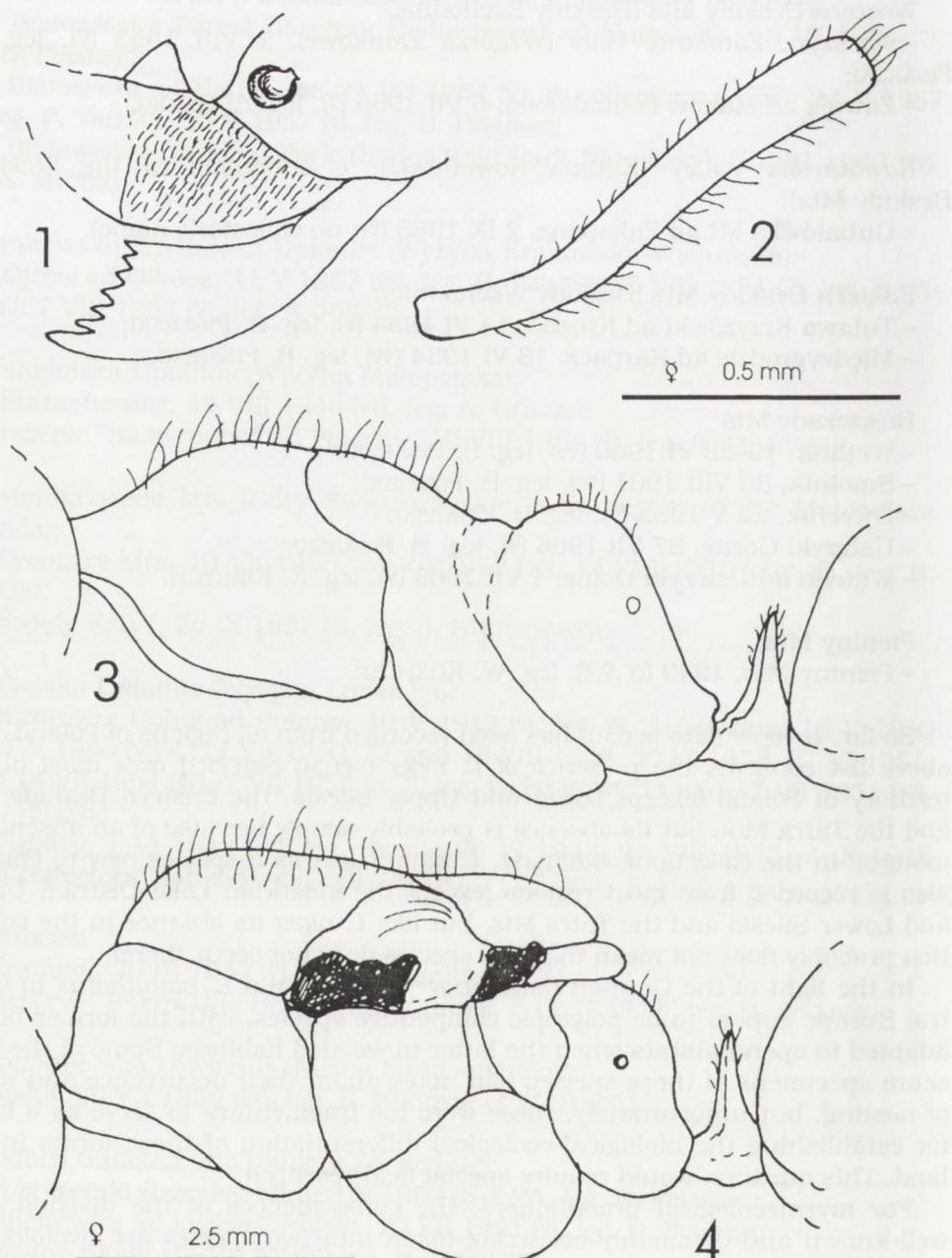
Pieniny Mts:

- Pieniny Mts, 1949 (♂, ♀, ♀), leg. W. KOEHLER.

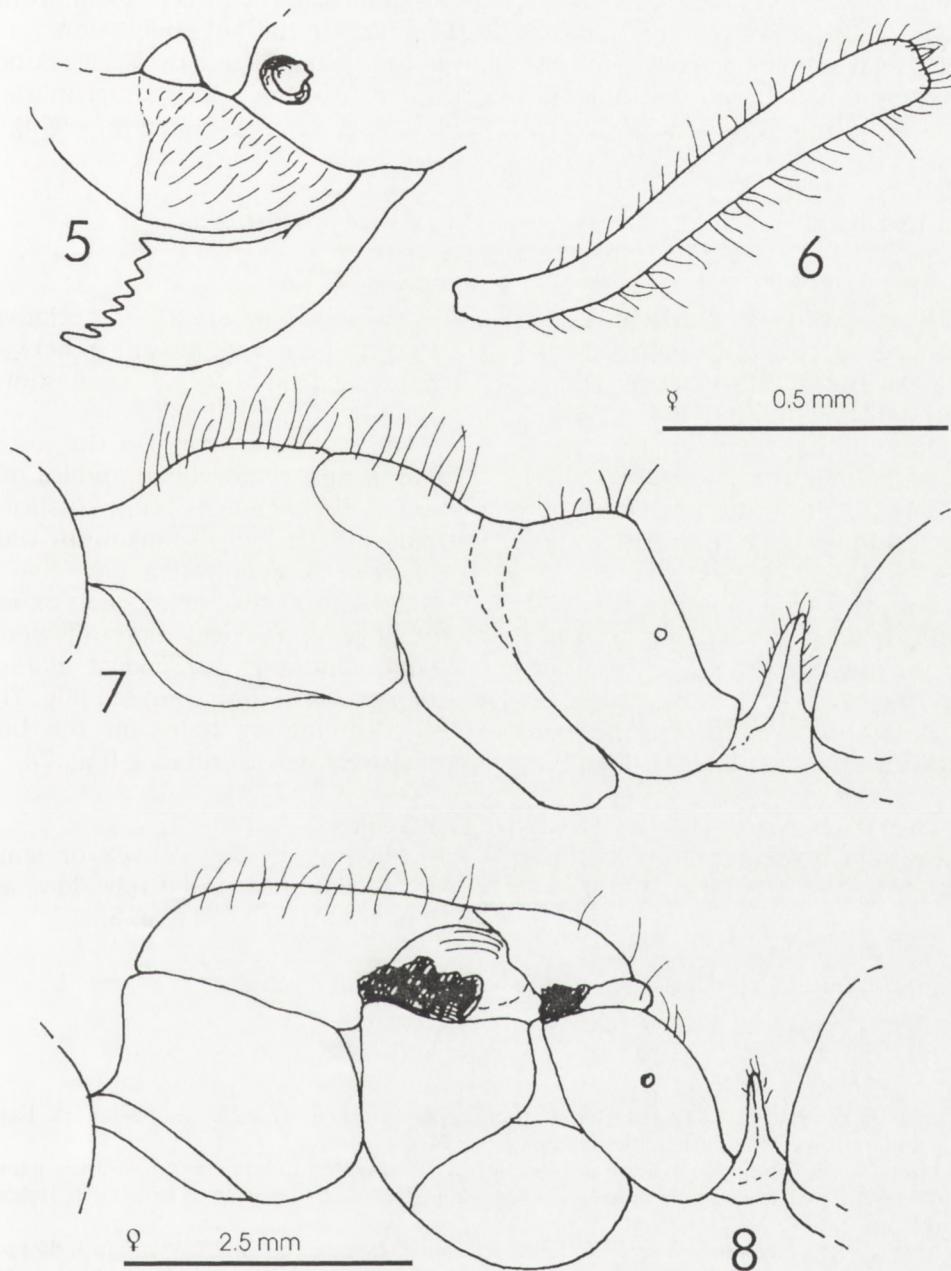
So far, *L. niger* (lato sensu) has been recorded from all regions of Poland. The above list confirms the presence of *L. niger* (sensu SEIFERT) over most of the territory of Poland (except Lower and Upper Silesia, the Eastern Beskidy Mts and the Tatra Mts, but its absence is probably simply because of an absence of material in the collection). Similarly, *L. platythorax* as a species new to Poland, also is recorded from most regions (except the Masurian Lake District, Upper and Lower Silesia and the Tatra Mts, but like *L. niger* its absence in the collection probably does not mean that this species does not occur there).

In the light of the German data (above) *L. niger* and *L. platythorax* in Central Europe appear to be polytopic competitive species, with the former better adapted to open habitats when the latter to wooded habitats. Some of the museum specimens of these species had notes about their occurrence and mode of nesting, but unfortunately, these were too fragmentary to serve as a basis for establishing the biological-ecological differentiation of these forms in Poland. This question would require special field research.

For myrmecological practitioners, the consequences of the division of a well-known and commonly occurring taxon into two species are twofold. On the one hand, it obviously renders previous faunistic and zoocoenological studies out of date in the least expected manner. On the other hand, such a pair of equally common and widespread sibling species may (and should) become a convenient indicator group for monitoring the state of the environment; especially in cases where human impact directly favours *L. niger* and simultaneously has the opposite effect on *L. platythorax*. We suggest that the



Figs 1–4. *Lasius niger*: 1 – pubescence of worker clypeus, 2 – pilosity of worker scapus, 3 – shape and pilosity of worker alitrunk, 4 – shape and pilosity of female alitrunk.



Figs 5–8. *Lasius platythorax*. 5 – pubescence of worker clypeus, 6 – pilosity of worker scapus, 7 – shape and pilosity of worker alitrunk, 8 – shape and pilosity of female alitrunk.

L. niger/L. platythorax pair may become a model subject in ecological studies of the development of ant communities in relation to habitat succession.

Below a simplified version of a key is given for distinguishing the species under discussion. It is based on the main diagnostic characters arranged according to their significance for determination (AL – alitrunk length; AH – alitrunk height).

Lasius niger

Workers:

1. Clypeus with very dense and short pubescence; distance between depressed hairs 3.5–4 times shorter than hair length (Fig. 1).
2. Outstanding hairs on the antennal scape relatively sparse and short, the longest hairs not longer (usually shorter) than half of maximum width of scape at its apex (Fig. 2).
3. Mesopropodeal impression usually relatively deep and abrupt, propodeal dorsum usually convex and rounded (Fig. 3).
4. Outstanding hairs on the body relatively sparse and short (Fig. 3).

Females:

- Alitrunk convex, relatively high and short ($AL:AH < 1.70$) (Fig. 4).

Lasius platythorax

Workers:

1. Clypeus with sparcere and relatively long pubescence; distance between depressed hairs 2.5–3 times shorter than hair length (Fig. 5).
2. Outstanding hairs on the antennal scape relatively abundant and long, the longest hairs distinctly longer than half of maximum width of scape at its apex (Fig. 6).
3. Mesopropodeal impression usually shallow, propodeal dorsum somewhat flattened, propodeal dorsum more conical than rounded (Fig. 7).
4. Outstanding hairs on the body relatively dense and long (Fig. 7).

Females:

- Alitrunk weakly convex or somewhat flattened, relatively low and long ($AL:AH > 1.75$) (Fig. 8).

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REFERENCES

- COLLINGWOOD C. A. 1979. The *Formicidae* (*Hymenoptera*) of Fennoscandia and Denmark. Fauna Entomologica Scandinavica, Klampenborg, 8, 174 pp.
- LINNAEUS C. 1758. Systema Naturae per Regna tria Naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. Editio decima, reformata. 1. Holmiae, 824 pp.
- PISARSKIB. 1975. Mrówki. *Formicoidea*. Katalog Fauny Polski (no. 23), 26, 1. Warszawa, 85 pp.
- SEIFERT B. 1991. *Lasius platythorax* n.sp., a widespread sibling species of *Lasius niger* (*Hymenoptera: Formicidae*). Entomol. gener., Stuttgart, 16: 69–81.
- SEIFERT B. 1992. A taxonomic revision of the Palaearctic members of the ant subgenus *Lasius* s.str. (*Hymenoptera: Formicidae*). Abh. Ber. Naturkundemus. Görlitz, Görlitz, 66: 1–67.
- SEIFERTB. 1996. Ameisen: beobachten, bestimmen. Naturbuch Verlag, Augsburg, 352 pp.
- WILSON E. O. 1955. A monographic revision of the ant genus *Lasius*. Bull. Mus. comp. Zool. Harvard, Cambridge, Ma, 113: 1–201.

STRESZCZENIE

[Tytuł: *Lasius niger* (L.) i *Lasius platythorax* SEIFERT (Hymenoptera, Formicidae) – rewolucja w polskiej faunistyce i zoocenologii myrmekologicznej?]

W wyniku niedawnej decyzji taksonomicznej SEIFERTA (1991) *Lasius niger* – jeden z najpospolitszych palearktycznych gatunków mrówek – został rozdzielony na dwa gatunki bliźniacze: *L. niger* (L.) i *L. platythorax* SEIFERT. Przeprowadzony pod tym kątem przegląd krajowych materiałów «*L. niger*» ze zbiorów Muzeum i Instytutu Zoologii PAN w Warszawie potwierdził zasadność tego rozwiązania. Praca przedstawia wykaz zawartych w kolekcji serii prób każdego z tych gatunków z rozbiciem na krainy geograficzne ich pochodzenia. Wyniki pozwalają sądzić, że obie formy występują na całym obszarze kraju. W przypadku *L. niger* w zbiorach MiŁZ PAN brak jest okazów tylko ze Śląska Dolnego i Górnego, Beskidu Wschodniego i Tatr. *L. platythorax* (który jest tu podawany jako gatunek nowy dla Polski) nie ma swojej reprezentacji z tych samych regionów i dodatkowo z Pojezierza Pomorskiego. Pracę zamyka uproszczony klucz do rozróżniania omawianych gatunków, oparty na najważniejszych cechach diagnostycznych.