

## Protected Insects of Latvia – *Lasius fuliginosus* (LATREILLE, 1798) (Hymenoptera: Formicidae)

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**Abstract:** The Jet ant *Lasius fuliginosus* (LATERILLE, 1798) is protected in Latvia (Regulations... 2000). *L. fuliginosus* can be found in the most Palaearctic, except southern part. The data collected during the project „Analysis of the Specially Protected Nature Territories in Latvia and Establishing of EMERALD/Natura 2000 Network” in 2001-2002 and material collected by Latvian entomologists until 2007 have been used in the analysis. Distribution of *L. fuliginosus* was mapped using a basic grid of 5x5 km squares of the Baltic grid system on a Transverse Mercator projection (TM-1993) of Latvia. For preparing the *L. fuliginosus* distribution map the data from database, made by authors, were used (179 records). Majority of nests of Latvian population of *L. fuliginosus* has been recorded in oak tree, lime-tree, maple and ash-tree. Other *L. fuliginosus* habitats are spruce, birch, white poplar, elm, pine, bird-cherry tree, cherry tree, grey alder, black alder and soil.

**Key words:** Formicidae, *Lasius fuliginosus*, protected species, habitats, distribution, Latvia.

### Introduction

The aim of the article is to summarize all available information about the Jet ant distribution and preferred habitats in Latvia. Despite of lack of exact data evaluation species is protected in Latvia (Regulations... 2000). *L. fuliginosus* (LATREILLE, 1798) can be found in the most European countries – Austria, Belarus, Belgium, Bosnia and Herzegovina, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Great Britain, Hungary, Italy, Latvia, Lithuania, Moldova, The Netherlands, Norway, Poland, Portugal, Russia (Central and Southern part of Europe and Russian part of far East), Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, as well as in the Asian countries – Armenia, Azerbaijan, Kazakhstan (only northern part), north –eastern China, Korea and Japan (Czechowski 2002).

In Latvia, the species had been first mentioned in a newspaper article as a pest in the houses (Jons 1927). The first faunistic notes were from the neighbourhoods of Lake Kaņieris (Jacobson 1936). The species depends on

presence trees in its habitats. It usually lives in mixed forests and parks, and is rare along riverbanks and in the meadows with a single tree. They never present in the vast coniferous forests. *L. fuliginosus* avoids dry and sun exposed patches (Jacobson 1939). Spuris (1974) wrote that this species makes their nest in the dry wood in tree hollows. *L. fuliginosus* is recorded in Rīga in the Forest Cemetery and Prokrova Cemetery (Stiprais 1973).

### Methods

Published data, individuals from the collections of the Department of Zoology and Animal Ecology of the Faculty of Biology of the University of Latvia, collections of the Natural History Museum of Latvia, collection of the Institute of Biology of the University of Latvia, the data collected during the project „Analysis of the Specially Protected Nature Territories in Latvia and Establishing of EMERALD/Natura 2000 Network” in 2001-2002 and material collected by Latvian entomologists until 2007 have been used in the analysis of the distribution of this species. Ants

were searched by direct observations and captured by hand. The species distinguishes well from the other ant species and usually no individual was collected. The data presented in this article was collected from 1965 to 2007. All data were included in the database (totally 174 records). The data from the database were used to prepare the distribution map. Distribution of *L. fuliginosus* was mapped using a basic grid of 5x5 km squares of the Baltic grid system on a Transverse Mercator projection (TM-1993) of Latvia.

**Explanations:** d. – district; env. – environment; par. – parish; NP – National Park; NR – nature reserve; PPNT – particularly protected nature territory; vill. – village. The number of observed nests and tree species is given in brackets after the date of collection. A list of localities was sorted by administrative districts.

## Results

### List of localities

**Aizkraukle d.**, Koknese env., near road, 15.08.2006 (1 in *Tilia cordata*), leg. A.Napolov, I.Roma; Rīteri, Baltā Gliemežnīca park, 21.07.2006 (1 in *Quercus robur*), leg. A.Napolov, I.Roma; 31.05.2006 (1 in dead *Quercus robur*), leg. M.Kalniņš; Stukmaņu muiža, alley, 21.07.2006 (1 in *Fraxinus excelsior*, 1 in *Quercus robur*), leg. A.Napolov, I.Roma; Taurupe, ~26 km N from Koknese, park, 15.08.2006 (1 in *Quercus robur*, 1 in *Fraxinus excelsior*), leg. A.Napolov, I.Roma; Vecbebri, 6.4 km to Jaunbebri direction, before Jaunbebri park, tree near road, 15.08.2006 (1 in *Quercus robur*), leg. A.Napolov, I.Roma; Vecbebri muiža, park, 15.08.2006 (1 in *Quercus robur*), leg. A.Napolov, I.Roma.

**Alūksne d.**, Bundzene, 11 km NEE from Alūksne, 20.08.2006 (1 in *Acer platanoides*), leg. A.Napolov, I.Roma; Bundzene, road to E from Pededze to Alūksne, alley, 20.08.2006 (1 in *Acer platanoides*), leg. D.Telnov; Gaujiena, near parish court, park, 26.08.2006 (1 in *Fraxinus excelsior*), leg. D.Telnov; Gaujienas muiža, park, 27.08.2006 (1 in *Fraxinus excelsior*), leg. M.Kalniņš; PPNT Ziemeļgauja, Zvārtava, alley between Zvārtava and Kaģuciems, 26.08.2006 (3 in *Quercus robur*), leg. D.Telnov; alley between Zvārtava and Kaģuciems, 27.08.2006 (1 in *Quercus robur*),

leg. M.Kalniņš; Ziemeļgauja PPNT, Vireši env., Lejasžagatas, 04.05.2007, leg. M.Kalniņš.

**Balvi d.**, PPNT Gruzdovas meži, 16.06.2003, leg. V.Spuņgis; River Sita near bridge of Gubene-Balvi road, 22.07.2006 (1 in *Quercus robur*), leg. D.Telnov.

**Bauska d.**, Bauska, park, 12.08.2006 (1 in *Tilia cordata*), leg. A.Napolov, I.Roma; PPNT Bauska env., Jumprava, park, 25.06.2006, leg. D.Telnov; Dzimtmisa, alley, 09.08.2006 (1 in *Tilia cordata*, 2 in *Acer platanoides*), leg. A.Napolov, I.Roma; Iecava, 09.08.2006, tree near bridge (1 in *Populus alba*), Ozolu iela, alley, (1 in *Quercus robur*), Upes iela, alley, (1 in *Tilia cordata*), park, (1 in *Tilia cordata*), leg. A.Napolov, I.Roma; Iecava, 3 km to NW, tree near road, 09.08.2006 (1 in *Acer platanoides*), leg. A.Napolov, I.Roma; Jaunsale, alley near church, 13.05.2006 (1 in *Quercus robur*), leg. A.Napolov; Mežotne, 9 km NWW from Bauska, park, 09.08.2006 (1 in *Tilia cordata*), leg. A.Napolov, I.Roma; Mežotne church (near Ozoldārzs), 17.05.2006 (1 in *Ulmus glabra*), leg. A.Napolov, I.Roma; PPNT Ozoldārzs, 07.06.2002, leg. J.Dreimanis; Svitene (Bērstele) park, 17.05.2006 (1 in *Fraxinus excelsior*), leg. A.Napolov, I.Roma.

**Cēsis d.**, Lake Bānūzis env., alley near Skujene road, 24.08.2006 (1 in *Acer platanoides*, 1 in *Tilia cordata*, 1 in *Quercus robur*), leg. M.Kalniņš; Cēsis env., Līvi alley, Gauja NP 26.08.2001 (1 in *Tilia cordata*), leg. M.Kalniņš; Cēsis env., Ramātu klintis, Gauja NP, forest, 26.06.2003 (1), leg. M.Kalniņš; Līgatne, Gauja NP, 03.07.2005 (tree unknown), leg. J.Dreimanis; Līgatne env., Tītmaņu iezis, Gauja NP, forest on slope, 16.06.2002 (tree unknown), leg. M.Kalniņš; Raiskums alley, Gauja NP, 26.08.2001 (1 in *Tilia cordata*), leg. M.Kalniņš; Raiskums alley, Gauja NP, 30.07.2005 (1 in *Tilia cordata*, 1 in *Quercus robur*), leg. D.Telnov; Raiskums env., Ungurmuiža park, Gauja NP, 24.03.2007 (2 in *Quercus robur*, 1 in *Acer platanoides*), leg. M.Kalniņš, J.Dreimanis.

**Daugavpils d.**, Ambeļi, 26 km NE from Daugavpils, 05.06.2006 (3 in *Tilia cordata*, 1 in *Populus alba*), leg. A.Napolov, I.Roma; Červonka, manor park, 11.10.2006 (1 in *Tilia cordata*), leg. M.Kalniņš; Daugavpils env., Laucesas manor alley (2 km long), 09.07.2006

(1 in *Tilia cordata*), leg. A.Napolov, I.Roma; Jaunborne, road near cemetery, PPNT Daugavas loki, 10.07.2006 (1 in *Populus alba*), leg. A.Napolov, I.Roma; Juzepovas park, PPNT Daugavas loki, 05.06.2006 (1 in *Quercus robur*, 1 in *Tilia cordata*, stump), 2 in *Acer platanoides*), leg. A.Napolov, I.Roma; Lielborne, alley near bus stop, 13 km SWW from Krāslava, PPNT Daugavas loki, 10.07.2006 (1 in *Tilia cordata*), leg. A.Napolov, I.Roma; Lielbornes manor, 13 km SWW from Krāslava, tree near road, PPNT Daugavas loki, 10.07.2006 (1 in *Pinus sylvestris*), leg. A.Napolov, I.Roma; Lubasts PPNT, Lake Lubasts, near Rīga highway, 29.06.2006 (2 in *Picea abies*), leg. D.Telnov; PPNT Medumu ezeraine, near Lake Šķirstiņu, 11.08.2002, leg. R.Cibuškis; Naujene, PPNT Daugavas loki, Jezupovas ravine, 30.06.2006 (1 in *Alnus incana*, 1 in *Padus avium*), leg. D.Telnov; Ūziņkrogs, NW from Dviete, tree near road, 06.06.2006 (1 in *Tilia cordata*), leg. A.Napolov, I.Roma; PPNT Dvietes paliene, Putnusala vill., Atāli, 27.04.2007 (1 in *Betula* sp.), leg. M.Kalniņš.

**Gulbene d.**, PPNT Pededzes lejtece, River Pededze near bridge, road Gulbene-Rēzekne, mixed forest, 12.07.2006 (1 in *Quercus robur*, fallen tree), leg. D.Telnov; PPNT Pededzes lejtece, right bank of River Pededze, Silenieki, 18.05.2003 (1 in *Quercus robur*), leg. D.Telnov; PPNT Pededzes lejtece, near Silenieki and River Audīle, wooded meadow, 05.07.2006 (1 in *Quercus robur*, fallen wood) leg. D.Telnov; PPNT Pededzes lejtece, Silenieki env., bridge on river Pededze near Lubāna-Balvu highway, woodland meadow, 11.05.2002, 18.05.2003 (1 in *Quercus robur*), leg. D.Telnov.

**Jēkabpils d.**, Atašiene, at recreation centre, tree near road, 22.05.2006 (1 in *Acer platanoides*), leg. A.Napolov, I.Roma; Birži, trees near church, 25.07.2006 (1 in *Populus alba*), leg. A.Napolov, I.Roma; Dignāja 13.06.2006 (1 in *Fraxinus excelsior*), leg. A.Napolov, I.Roma; Elkšņu par., Mazgribtāni 10.08.2002, leg. R.Cibuškis; Jēkabpils vicinity, Rogāļu stone, ravine forest, 23.08.2006 (1 in *Quercus robur*, 1 in *Acer platanoides*), leg. M.Kalniņš; Sēlpils, trees at ruins of church, 25.07.2006 (1 at *Betula* sp.), leg. A.Napolov, I.Roma; Vecsēlpils, avenue, 25.07.2006 (1 in

*Tilia cordata*), leg. A.Napolov, I.Roma; Vecsēlpils, 6 km SW Pļaviņas, 24.09.2006 (1 in *Tilia cordata*), leg. D.Telnov.

**Jelgava d.** Sesava river valley between Sūnas and Rotkalni, 29.07.2003, (2 in *Quercus robur*), leg. D.Telnov; Vilce PPNT, walley slope of river Vilce 25.06.2006 (1 in fallen *Quercus robur*), leg. D.Telnov.

**Krāslava d.** Kondraši, 2 km SWW from Andzeļi, 15.06.2006 (1 in *Acer platanoides*), leg. A.Napolov, I.Roma; Dridzis lake PPNT, 07.06.2003, leg. R.Cibuškis; Ezernieki, Rāzna NP, 21.07.2002, leg. R.Cibuškis; Ezernieki parish, 3 km SE from Dubuļi, Rāzna NP, 17.07.2002, leg. R.Cibuškis; Kombuļi park, 8 km N from Krāslava, 04.06.2006 (1 in *Acer saccharinum*), leg. A.Napolov, I.Roma; PPNT Daugavas loki, Saproģu ravine, woodland/ravine forest, 11.10.2006 (1 in *Betula* sp.), leg. M.Kalniņš; Strodi, 15 km E from Aglona, 04.06.2006 (1 in *Tilia cordata*), leg. A.Napolov, I.Roma.

**Kuldīga d.** PPNT Gudenieki, mixed forest, 14.05.2005 (1 in *Salix alba*), leg. D.Telnov.

**Liepāja d.** PPNT Medze, 24.07.2001, leg. V.Spuņģis; Nīca forestry, 10.08.2001, leg. D.Telnov; Strante park, 07.09.2006 (3 in *Fagus sylvatica*), leg. M.Kalniņš; Strante env., Maznodupi, 20.04.2007 (1 in *Quercus robur*), leg. M.Kalniņš.

**Limbaži d.** Bīriņi venue, 30.04.2006 (1 in *Fraxinus excelsior*), leg. D.Telnov; Braslava, Braslava park, 28.06.2006 (2 in *Tilia cordata*, 1 in *Acer platanoides*), leg. D.Telnov; N from Ežurga vicinity 15.08.2003 (1 in *Quercus robur*), leg. I.Salmane; Ķurmraga vicinity, 0,5 km N, PPNT Vidzemes akmeņainā jūrmala, 15.08.2003 (1 in *Quercus robur*), 21.08.2003 (1 in *Quercus robur*), leg. I.Salmane; Vilcēni, valley river Salaca PPNT, left bank between Mērnieki un Rozēni, 05.07.2003 (1 *Acer platanoides*) leg. D.Telnov; Liepupe parish, Jaunzemi, 28.07.2002, leg. A.Skuja; Staicele forestry, 01.06.2002 (tree undetermined), leg. V.Spuņģis.

**Ludza d.** Mežvidi 10 km SW from Kārsava, park, 23.07.2006 (1 in *Betula* sp., 1 in *Acer platanoides*, dying) leg. A.Napolov, I.Roma; Istras pauguraine PPNT, deciduous wood, 04.08.2002, leg. R.Cibuškis; Kugriņu

bog, 18.07.2003 (tree undetermined), leg R.Cibuļskis; Kugriņu bog, 08.06.2005 (tree undetermined), leg. J.Dreimanis; Malnava, Kārsavas vicinity, avenue, 23.07.2006 (2 in *Acer platanoides*), leg. A.Napolov, I.Roma; Pasiene manor, trees at boarder of parish, 25.05.2006, leg. A.Napolov, I.Roma; Lake Pilda PPNT, on islands, 19.06.2002, leg. A.Karpa; Zvirdzene parish, PPNT Gulbinka bog, 10.06.2002 (tree undetermined), leg. A.Karpa.

**Madona d.** Lazdona, avenue, 11.05.2002 (1 in *Acer platanoides*), leg. D.Telnov; Lubāna, meadow, 10.06.2006 (1 in *Quercus robur*) leg. D.Telnov; Prauliena, park of manor, 23.08.2006 leg. M.Kalniņš; Sāviņa, avenue, 27.05.2006 (1 in *Quercus robur*, 1 in *Tilia cordata*, 1 in *Acer platanoides*), leg. D.Telnov.

**Ogre d.** Glāžšķūnis, right bank of river Ogre near bridge, valley of river, 30.07.2005 (1 in *Quercus robur*), leg. D.Telnov; Ogre, Pārogre, mixed forest 01.05.2004 (1 on broken *Picea abies*), leg. I.Salmane; Ogre, Pārogre, 09.07.2005 (1 in *Quercus robur*), leg. J.Dreimanis; Bizgales parish, train station Lāčplēsis, 30.08.2005 (1 in *Picea abies*), leg. J.Dreimanis; Taurupe, near pond 24.05.2003 (1 in *Quercus robur*), leg. D.Telnov; Vērene, park 24.06.2003 (1 in *Quercus robur*), leg. D.Telnov; Vērenes vicinity, 8 km SE Madliena, 1,4 km NWW Vērene, avenue, 15.08.2006 (1 in *Tilia cordata*), leg. A.Napolov, I.Roma.

**Preiļi d.** Aglona, 10 km to E, Krastini, avenue, 04.06.2006 (1 in *Tilia cordata*, 1 in *Fraxinus excelsior*), leg. A.Napolov, I.Roma; Aizkalne, Jasmuiža, park, 07.07.2006 (1 in *Tilia cordata*), leg. A.Napolov, I.Roma; Feimaņi, 16 km N from Aglona, avenue of municipality, 16.06.2006 (1 in *Tilia cordata*), leg. A.Napolov, I.Roma; Vecvārkava manor house, 17 km WS Preiļi, Upmala, tree near road, 03.06.2006 (1 in *Fraxinus excelsior*), leg. A.Napolov, I.Roma.

**Rēzekne d.** Strūžāni, 2.5 km to NEE, tree near road, 23.07.2006 (2 in *Acer platanoides*, 1 in *Pinus sylvestris*), leg. A.Napolov, I.Roma; Kaunatas parish, Lielais Liepu kalns, 20.07.2002, leg. R.Cibuļskis.

**Rīga d.** Rīga, 2. cemetery Meža, 04.07.1967, leg. M.Stiprais; PPNT Ādaži, Lake Lieluikas un Mazuikas env., 19.05.2002, ants in two places, leg. V.Spuņģis; PPNT Ādaži, left bank of river Puska, 1 km to E from mouth,

valley of river, 10.04.2002, (1 in *Tilia cordata*), leg. M.Kalniņš; Bajāri, cornfield, 16.05.1979, leg. M.Stiprais; PPNT Dole, 05.05.2001, leg. V.Spuņģis; Dole island,—Taurītes, forest, 05.05.2001 (1 in *Quercus robur*) leg. M.Kalniņš; PPNT Dole, park at museum, 05.05.2001, (1 in *Tilia cordata*), leg. M.Kalniņš; Garupe, dunes, 30.06.1980, leg. M.Stiprais; PPNT Jaunciems, deciduous wood, 19.05.2002, leg. V.Spuņģis; Krimulda church, Gauja NP, park, 26.08.2001 (1 in *Acer platanoides*), leg. M.Kalniņš; Līči, near Jaunceltnes, mixed forest, 04.09.2004 (1 in *Quercus robur*), leg. D.Telnov; PPNT Mežmuižas avoti, meadow, 08.04.2006 (1 in *Quercus robur*), leg. D.Telnov; Mārupe, near pond Mārupe, 07.06.1981 (1 on *Salix* sp.), leg. M.Stiprais; Piņķi, at church Piņķi, park, 19.08.2006 (1 in *Tilia cordata*), leg. D.Telnov; Rīga, Jaunciems PPNT, Ozolkalni, bank of lake, 01.05.2006 (1 in *Quercus robur*, 1 in *Alnus glutinosa*), leg. D.Telnov; Rīga, Jugla, Brekši, bank of Lake Jugla near Juglas/Murjānu road, 12.11.2006 (2 in *Quercus robur*), leg. A.Napolovs; Rīga, Jugla, Pakalnieša Street, park, 19.08.2006 (1 in *Tilia cordata*), leg. D.Telnov; Rīga, Mežaparks, Kokneses prospekts at Hamburgas street, avenue, 01.05.2006 (1 in *Tilia cordata*), leg. D.Telnov; Rīga, Mežaparks, park Saulesdārzs, 17.07.2006 (3 in *Tilia cordata*), leg. D.Telnov; Saulkrasti, Pēterupes valley, at church, mixed forest, 21.05.2004 (1 in *Pinus sylvestris*, 1 in *Populus tremula*), leg. I.Salmane; Saulkrasti, at railway, mixed forest 12.05.1981, leg. M.Stiprais; Saulrieši-Cekule, meadow, 10.05.2003 (1 in *Quercus robur*, 1 in *Betula* sp.) leg. D.Telnov; Sēja, park, 21.05.2006 (1 in old *Quercus robur*, 1 in *Fraxinus excelsior*), leg. D.Telnov; Sigulda, hill Paradīzes, Gauja NP 13.06.2003, leg. D.Telnov; Stīveri W env., oak at farm Dziedoņi in meadow, 08.04.2006 (1 in *Quercus robur*), leg. D.Telnov; PPNT Mežmuižas avoti, forest, 18.04.2007 (1 in *Picea abies*, 1 in *Populus tremula*), leg. M.Kalniņš; Stīveri env., Černausku old oak, 18.04.2007 (1 in *Quercus robur*), leg. M.Kalniņš; Stopiņi parish, Dzidriņas vill., near Sāveļi, 22.05.2007 (1 in *Quercus robur*), leg. D.Telnov; PPNT Piejūra, Vakarbuļļi, 21.09.2007, leg. M.Kalniņš; PPNT Ādaži, Lake Lieluikas un Mazuikas env., 11.08.2007, (1 in dead *Betula* sp.), leg. D.

Telnovs; PPNT Ādaži, banks of river Melnupe, 29.07.2007 and 04.08.2007, (1 in *Pinus sylvestris*, 1 in *Populus tremula*, 1 in *Alnus glutinosa*, 1 in soil), leg. D.Telnov.

**Talsi d.** Laidzes parish, Baloži 07.06.2002, leg. V.Spuņģis; PPNT Pāces meadows, 31.07.2003, V.Spuņģis; Slītere NP, spruce wood, 29.08.1967, leg. M.Stiprais; Slītere NP, 10.07.1965, leg. L.Danka; Slītere NP, spruce wood, 29.07.1967, leg. M.Stiprais; Upesgrīva vill., Zeltiņi, 19.05.2007 (1 in *Cerasus* sp.), leg. M.Kalniņš; Slītere NP, Zilie kalni slope near Šlītere, 30.05.2007, leg. M.Kalniņš.

**Tukums d.** Kaive, Senču oak, secular tree, 22.09.2007, (1 in *Quercus robur*), leg. M.Kalniņš.

**Valka d.** Aumeisteri estate, park 27.08.2006 (1 in *Quercus robur*), leg. M.Kalniņš; PPNT Sedas purvs, 07.06.2001, leg. M.Kalniņš; Trikāta, road at and around church Trikāta, park, 29.07.2006 (1 in *Quercus robur*, 1 in *Tilia cordata*), leg. D.Telnov; Trikāta, Rūtiņu old maple in farmstead, 29.07.2006 (1 in *Acer platanoides*), leg. M.Kalniņš; Trikāta, Rūtiņi, 30.07.2006 (2 in *Quercus robur*), leg. M.Kalniņš; PPNT Ziemeļgauja, Cirgaļu vicinity, ~800 m from house Lejzemnieki, alluvial land, 26.08.2006 (5 in *Quercus robur*), leg. D.Telnov; Cirgaļu vicinity, alluvial land, 11.09.2005 (1 in *Quercus robur*), leg. D.Telnov; Lejzemnieki, alluvial land, 27.08.2006 (in several *Quercus robur*), leg. M.Kalniņš; PPNT Ziemeļgauja, Marsi deciduous forest, 29.05.2005 (in several *Quercus robur*), leg. D.Telnov; Ziemeļgauja near Zvārtavas castle, park, 11.09.2005 (1 in *Tilia cordata*), leg. D.Telnov; Ziemeļgauja PPNT, Pulksteņkalni ox-bow, 30.07.2006 (1 in *Quercus robur*), leg. D.Telnov; PPNT Ziemeļgauja, Vecrāmnieku klintis slope forest, 14.09.2006 (1 in *Quercus robur*), leg. M.Kalniņš; Ziemeļgauja PPNT, Pirtsīcīš forest, leg. I. Ence; Ziemeļgauja PPNT, Anņi, 06.05.2007 (in *Betula* sp.) leg. M.Kalniņš.

**Valmiera d.** Bauņi, Bauņu avenue, 20.05.2006 (1 in *Quercus robur*, 1 in *Tilia cordata*), leg. D.Telnov; vicinity of church Burtnieki, at house Igaši, avenue, 03.06.2006 (1 in *Quercus robur*) D.Telnov; Lizdēni, park, 06.05.2003 (1 in *Tilia cordata*) leg. M.Kalniņš; Valmiera, Elku saliņa in a park, 08.06.2006 (1

in *Pinus sylvestris*), leg. M.Kalniņš.

**Ventspils d.** Ances parish, Tārgales parish, PPNT Ances purvi un meži, 22.07.2001, leg. V.Spuņģis; Blāzma N vicinity, near Viekiņi, mixed forest, 08.07.2006, leg. D.Telnov; Blāzma road to Virpe, vicinity of house Dīriņi, clear-cut, 07.08.2004 (1 in *Betula* sp.), leg. D.Telnov; PPNT Klāņu bog, 01.08.2001, leg. D.Telnov; Muižnieku vicinity, road from Ventspils to Ance, at Dižvalka, mixed forest, 08.07.2006, leg. D.Telnov; Piešdanga PPNT, 21.06.2002, leg. V.Spuņģis; Puzenieku road to Puizes church, avenue, 07.08.2004 (1 in *Tilia cordata*), leg. D.Telnov; PPNT Raķupe, Pāces valley at Kuikas, near river Raķupe, alluvial land, 06.05.2006 (1 in *Tilia cordata*), leg. D.Telnov.

## Discussion

According to Czechowski (2002) the species nests are in the cavities under the tree trunk and roots or in holes at the base of usually living trees (Figure 1) of different species (deciduous and coniferous ones), occasionally in the walls of wooden buildings and in dunes (Collingwood, 1979). Colonies of *Lasius fuliginosus* (Figure 2) consist of many workers, nests are with many queens and many nests can occupy one tree (Czechowski 2002).

Latvia is situated within the main distribution range of the species in its northern part. So far assessment of the population of *L. fuliginosus* indicates that species occurs in 24 of 26 Latvian districts. There are no records available from Saldus and Dobele districts. In general, *L. fuliginosus* is recorded from 129 squares in Latvia (Figure 3). A total number of localities where species occurs are likely to be much higher. The majority of known localities are situated in the Northwestern, Central and the Southeastern part of Latvia. This partially is a result of differences in the frequency of visiting protected territories in different regions. The main part of known records is from the last decade. This is a result of focused studies of protected nature territories during the last years.

Majority of nests of *L. fuliginosus* in Latvia has been recorded in oak trees (56 records), lime-tree (37 nests), maple (17 nests) and ash-tree (10 nests). Other *L. fuliginosus*

habitats are birch (7), white poplar (4), pine tree (6), spruce (4), willow (2), bird-cherry tree (2), aspen (3), beech (1), cherry tree (1), black alder (2) grey alder (1), elm (1), silver maple (1), soil (1). The earliest record of imago in the season is 8-th April, the latest 12-th November. Mating flight of species was observed three times: 07.06.1981 in Riga, 03.06.2006 in Preiļi district and 05.06.2006 in Daugavpils district.

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### Kopsavilkums

Spožā skudra *Lasius fuliginosus* (LATEREILLE, 1798) ir īpaši aizsargājamā kukaiņu suga Latvijā. Suga ir sastopama visā Palearktikā, izņemot pašus tās dienvidus. Datu analīzē izmantoti publicētie dati, kolekciju materiāli, projekta "Latvijas īpaši aizsargājamo teritoriju sistēmas saskaņošana ar EMERALD/NATURA 2000 aizsargājamo teritoriju tīklu" dati un Latvijas entomologu ievāktais materiāls. *L. fuliginosus* izplatības attēlošanai izmantots 5x5 km kvadrātu tīkls Baltijas koordinātu sistēmā. Visi dati apkopoti autoru datu bāzē (kopā 174 ieraksti). Lielākā daļa Latvijas populācijas konstatēta vecos

kokos, visbiežāk ozolos (55), liepās (37), kļavās (17), parastajā osī (10 ligzdas), bērzos (6) un eglēs (4 ligzdas).

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Figure 1. Habitats of *Lasius fuliginosus* – lime tree alley (left) and secular maple (right).  
Photo: M.Kalniņš.



Figure 2. *Lasius fuliginosus* together with *Amphotis marginata* (FABRICIUS, 1781) (Coleoptera: Nitidulidae) (left) and nest in oak hollow (right). Photo: D.Telnov (left), M.Kalniņš (right)

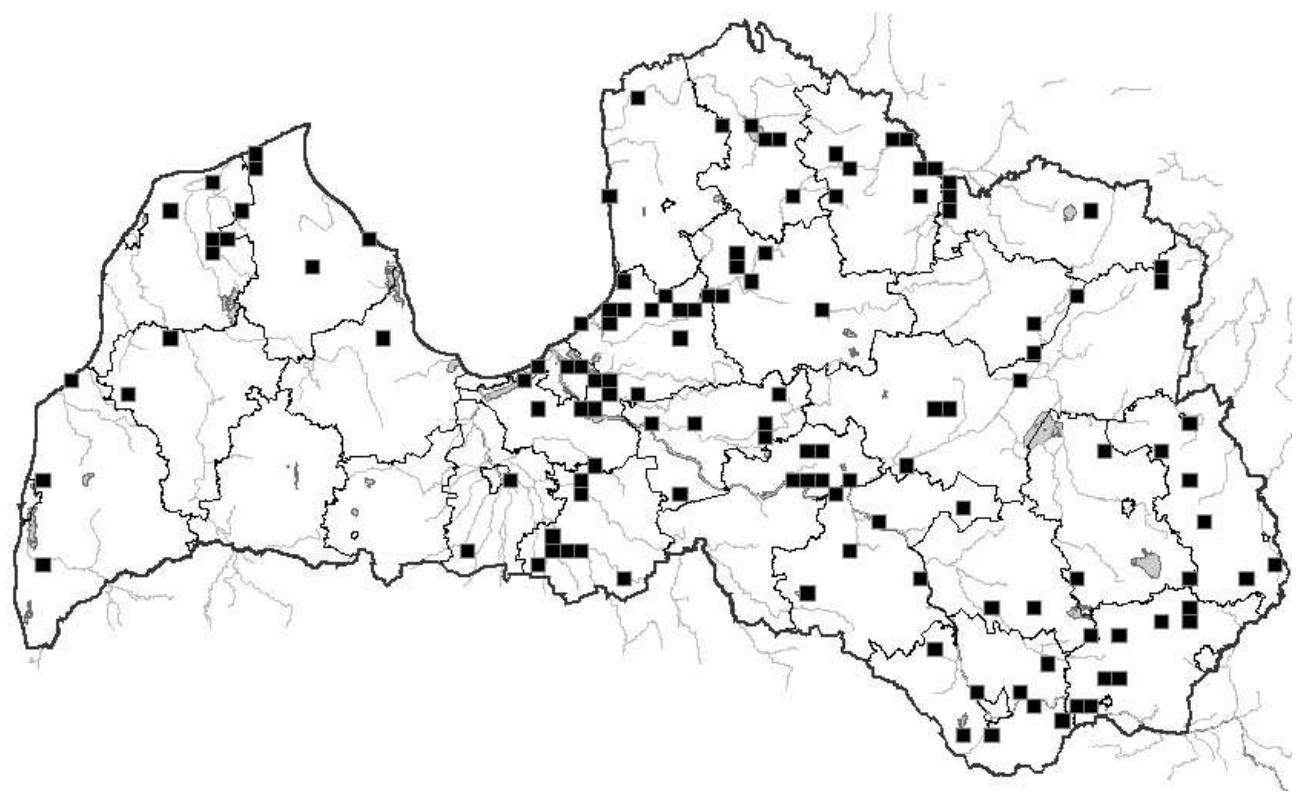


Figure 3. The distribution of *Lasius fuliginosus* (LATREILLE, 1798) in Latvia until October 2007  
(n=129 squares).