

**New data on the distribution of *Peltis grossa* and *P. gigantea*  
(Coleoptera: Trogossitidae)**

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PROCHÁZKA J., KMENT P., NÉMETH T. & KOLIBÁČ J. 2017: New data on the distribution of *Peltis grossa* and *P. gigantea* (Coleoptera: Trogossitidae). *Acta Musei Moraviae, Scientiae biologicae* (Brno) **102(1):** 25–33. – New distributional data on the rare and endangered saproxylic beetle, *Peltis grossa* (Linnaeus, 1758), and its Eastern vicariant *Peltis gigantea* (Reitter, 1882) are provided. *Peltis grossa* is recorded from 21 European countries, with first or first exact records provided for Asian Turkey, Kosovo, Macedonia and Montenegro. In contrast, the species is known only in the form of subfossil remains in Great Britain, while there are no records from Hungary and Belgium, contrary to information contained in *Fauna Europaea*. *Peltis gigantea* is recorded from Kazakhstan for the first time.

**Key words:** Coleoptera, Trogossitidae, faunistics, new records, saproxylic insects, Europe, Kazakhstan, Palaearctic Region

### Introduction

*Peltis grossa* (Linnaeus, 1758) is a conspicuous, large (11–19 mm), dark brown to black beetle belonging to the family Trogossitidae. It is a remarkable representative of the saproxylic insects; its larvae live in the soft, decaying wood of standing trees, both coniferous and deciduous, infested with fungi, e.g. in the lower parts of old trees or their snags. Their development takes 2–3 years (EHNSTRÖM 2001, KOLIBÁČ 2013). According to our findings, larvae of *P. grossa* may also develop in fallen logs (KMENT *et al.* in press). They may be found in rotten wood at a late stage of decay (brown rot fungal decay), preferring logs of large diameter colonized by *Fomitopsis pinicola* (Polyporales: Fomitopsidaceae) or *Fomes fomentarius* (Polyporales: Polyporaceae) (NIKITSKY & SCHIGEL 2004) in sun-exposed habitats e.g. forest clearings and thinned forests (NILSSON *et al.* 2001, ZÁBRANSKÝ 2001, DJUPSTRÖM *et al.* 2012). SCHIGEL (2002) recorded individuals of *P. grossa* on *Piptoporus betulinus* (Polyporales: Fomitopsidaceae). After moulting, adult beetles create typical oval-shaped exit holes 5×12 mm in size (EHNSTRÖM 2001). In the montane, old-growth forests of central Europe, imagos are largely found under the bark of conifers, especially fir trees (*Abies alba*), while at lower altitudes there are also records from birch (*Betula* sp.) (KOLIBÁČ *et al.* 2005, TÝR 2011). In Scandinavia

and the Baltic states, *P. grossa* may be found also on pine (*Pinus* sp.), spruce (*Picea abies*) and grey alder (*Alnus incana*) (DJUPSTRÖM *et al.* 2012, MACHAČ pers. comm.). In the Caucasus, *P. grossa* has been recorded on birch, linden, aspen, alder, more rarely on spruce and fir (ZAMOTAJLOV & NIKITSKY 2010). Adults are active by night and feed on polypore fungi (EHNSTRÖM 2001). *Peltis grossa* is considered as an indicator species of natural forest habitats (TELNOV 2004, MÜLLER *et al.* 2005).

*Peltis gigantea* (Reitter, 1882) is known from eastern Asia and Siberia east of the Ural Mts. (Lafer 1992, Kolibáč 2013). Its body length is 13–19 mm (REITTER 1882). *P. gigantea* is a fungivorous species, with the adults living under the bark of dead or dying deciduous and coniferous trees. Larvae may be found in rotten or decaying wood, like other species of the genus *Peltis* (Kolibáč 2013). *P. gigantea* is a vicariant species to *P. grossa*, from which may be distinguished in particular by the size of the elytral carinae and elytral punctuation. The carinae are distinctly more elevated and the punctuation between them is relatively finer in *P. gigantea* (Kolibáč *et al.* 2016).

## Material and methods

The material examined is deposited in the following collections:

HMBC	.....	Hungarian National Museum, Budapest, Hungary
MMBC	.....	Moravian Museum, Brno, Czech Republic
NMPC	.....	National Museum, Prague, Czech Republic
OMOC	.....	Ostrava Museum, Czech Republic
SMLC	.....	Slovenian Museum of Natural History, Ljubljana, Slovenia

The simple quotation marks denote the spelling of original geographical names and their shortcuts.

## Results

### *Peltis grossa* (Linnaeus, 1758)

(Fig. 1)

**Material examined.** **ALBANIA/MACEDONIA:** ‘Serb. Albania, Jablanica Mont.’ [= Jabllanica / Jablanitsa Mt.], 2000 m a.s.l., vi.1930, 1 spec., Purkyně lgt. (NMPC). **AUSTRIA:** 1 spec. (HMBC); **Carinthia:** Kärnthen, 1 spec. (NMPC; ex coll. Hlisnikovský). **Lower Austria:** ‘Niederösterreich, Lunz’ [am See], 3 spec. (NMPC; ex coll. Hlisnikovský); ‘Lunz a./d. Ybbs’ [= Lunz am See], 1 spec., J. W. Nieder lgt. (NMPC; coll. Hlisnikovský). **Styria:** Styria, 1 spec. (NMPC). **BOSNIA HERZEGOVINA:** Bosnia, 1 spec., coll. Kambersky (NMPC); Bosnia, Glamoč, 1910, 1 spec., Obenberger det. (NMPC); Bosnia, Majevica [Mts.], 2 spec., Vl. Zoufal lgt. (NMPC), 1 spec., Vl. Zoufal lgt. (HMBC); Bosnia, Ostrelj, 1 spec. (NMPC); Bosna occ., Preodac, 1 spec. (NMPC); ‘Bos., Sar., Igman’ [= Bosnia, Sarajevo, Ihman Mts.], 1 spec. (NMPC); Herzegovina, ‘Igbar Thal’ [not identified], 1 spec., V. Zoufal lgt. (MMBC; ex coll. Zoufal); Herzegovina, 1 spec., Reitter (HMBC); Mostar, 1 spec., V. Zoufal lgt. (MMBC; ex coll. Zoufal); Sarajevo, 1 spec., Apfelbeck (HMBC). **BULGARIA:** Pirin [Mts.], v.–vi.1929, 1 spec., Mařan et Táborský lgt. (NMPC); Rila pl.[anina] [Mts.], vi.1929, 8 spec., Pfeffer lgt. (NMPC); Rila [Mts.], 1 spec., Exp. Mařan et Táborský lgt. (NMPC); Rila pl. [Mts.], Sitnjakovo, 13.viii.1909, 2 spec., Rambousek lgt. (NMPC). **CROATIA:** ‘Lončar’ [not identified], 1 spec., R. Schreitter (MMBC; ex coll. Zoufal); Jesenak [= Jasenak], 1 spec., Méhely lgt. (HMBC); Pakrac, 1 spec., Apfelbeck lgt. (HMBC). **FINLAND:** Finnland, 1911, 1 spec. (OMOC); Teisko, 1 spec., Székessy lgt. (HMBC); ‘(bor.) Tergola’ [not identified], 8.vii.1969, 1 spec., Pfeffer lgt. (NMPC). **FRANCE:** **Landes:** Peye [= Peyé], 2 spec. (NMPC); Ossau [valley], 1 spec. (HMBC); Savoie, 1 spec. (HMBC). **GEORGIA:** Kaukasus, Svanetien [= Svanetia], L. Reitter lgt. (HMBC). **GREECE:** Arkhadia env., 10km SE Levidi, 22.v.2011, 1 spec., A. Kotán, A. Márkus, T.

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Németh lgt. (HMBC); Central Gr., distr. Evrytania, Mt. Timfristos, 1,5 km NE Karpenissi, 11.V.2013., 4 spec., P. Nemes, T. Németh lgt. (HMBC), spruce-forest, 38°55'25.07"N; 21°48'33.45"E, 1451 m., from beneath bark; Grae. [= Graecia], 1 spec. (NMPC); [Tymfristos Mt.], Veluchi, 1 spec. (NMPC). **ITALY: Lombardy:** Brescia, 1 spec. (NMPC). **KOSOVO/MACEDONIA:** ‘Serb. Albania, Šara Mts., Ljuboten’ [= Sharr Mts., Luboten], vi.1930, 4 spec., Purkyně lgt. (NMPC). **LATVIA:** Curland, 1 spec. (NMPC); Curland, 1886, 2 spec., Dohrn (NMPC). **MONTENEGRO:** Žabljak Mts., Podgor, 1300 m a.s.l., 4.vii.1958, 1 spec., Mařan & Hoberlandt lgt. (NMPC). **POLAND/UKRAINE:** Galizia, Dornitz [not identified], 1 spec. (NMPC); Galizia, O. Ker. [?], 1 spec. (NMPC). **ROMANIA:** Argeș County: ‘Kimpuluinay’ [= Câmpulung], 19.vi.1909, 1 spec. (NMPC); ‘Kimpuluin’ [= Câmpulung], 20.vii.1910, 1 spec., Mazura lgt. (MMBC: ex coll. Mazura); ‘Kimpuluin’ [= Câmpulung], 9.ix.1915, 2 spec., Mazura lgt. (MMBC: ex coll. Matoušek). **Băcău County:** Kászon [= Caşin], 1 spec., dr. Székessy lgt. (HMBC). **Bihor County:** Bihari Hg. [= Munții Bihorului], Mócock [= Tara Motilor], 13.vii.1955, 1 spec., J. Papp lgt. (HMBC); ‘Hungaria, Com. Bihar’, 1 spec., Fleischer lgt. (NMPC); Com. Bihar, 1 spec., Formánek lgt. (MMBC: ex coll. Formánek); Detonáta [= Detunata, Munții Bihorului], 1 spec., I. Nagy lgt. (HMBC). **Bistrița-Năsăud County:** Radnai Hg. [= Rodna Mountains], ‘Borbere’, 1942, 3 spec., J. Fodor lgt. (HMBC); Radnai Hg. [= Rodna Mountains], 1 spec., Csiki (HMBC). **Caraș-Severin County:** Baile Herculane [= Băile Herculane], 1 spec., Jureček lgt. (NMPC); Herkulesbad [= Băile Herculane], Damoglet, 1 spec., von Bodenmeyer lgt. (NMPC); Herkulesfürdő [= Băile Herculane], 2 spec., V. Stiller lgt. (HMBC); Cerna valley 10 km SW from Cerna Sat, 2.vii.2007, 7 spec., A. Kotán, A. Márkus, T. Németh lgt. (HMBC); Cerna valley 5 km SW from Cerna Sat, 24.v.2009, 5 spec., A. Kotán, A. Márkus, T. Németh lgt. (HMBC); ‘Süd-Ungarn, Neu Bogsán’ [= Németbogsán = Bocsa], 2 spec., E. Merkl lgt. (NMPC: ex coll. Hlisnikovský); Ferencfalva [= Văliug], 4 spec., Kanabé lgt. (HMBC). **Gorj County:** Paring havasok, Izvorul völgy [= Munții Parângului, Izvor valley], 9.viii.1956, 2 spec., Endrődy lgt. (HMBC), 600–800 m a.s.l.; Paring havasok, Bülen völgy [= Munții Parângului, Bülen valley], 12.viii.1956, 1 spec., Endrődy lgt. (HMBC), 800 m a.s.l. **Harghita County:** Balánbányai Hg. Egyeskö [= Bălan, Piatra Singurătică], 8.vi.1942, 1 spec., Csiki lgt. (HMBC); Borszék [= Borsec], Fuss lgt. (HMBC); Gyergyói-havasok [= Munții Giurgeu], Gyilkos-tó [= Lacul Rosu], 11.vii.1956, 1 spec., N. Cohard lgt. (HMBC); Szent-Anna-tó [= Lacul Sfânta Ana], 1 spec., Kolozsváry lgt. (HMBC); Tusnádfürdő [= Băile Tușnad], 4.vii.1943, 1 spec., Z. Szabó lgt. (HMBC). **Sălaj County:** Szurduk [= Surduc], 1 spec., Csiki lgt. (HMBC). **Transylvania:** Transsilvania, 5 spec., Mazura lgt. (2 spec. NMPC; 1 spec. MMBC: ex coll. Matoušek; 2 spec. MMBC: ex coll. Mazura); Transylvania, 1 spec., Z. Fleischer lgt. (NMPC). **RUSSIA: SOUTH EUROPEAN TERRITORY:** Orenburg oblast: ‘Gub. Samara, Tockoe’ [= Totskoe], 1917, 3 spec., Jureček lgt. (NMPC). **SLOVAKIA:** Bansko bystrický kraj: Badín, 23.vi.1987, 3 spec., Sv. Bílý lgt. (NMPC); Bánská Bystrica, 1920, 1 spec., Roubal lgt. (NMPC); Bánská Bystrica, 1950, 1 spec., Olexa lgt. (NMPC); Detvanská Huta [= Detvianská Huta], 30.vi.1936, 1 spec., Kottland lgt. (NMPC); Harmanec, v.1950, 2 spec., coll. Pradáč (NMPC); Harmanec, 7.xii.1975, 1 spec., J. Jelinek lgt. (NMPC); Nízké Tatry Mts.: Bystrá, 25.vi.1991, 1 spec., E. Hudeček lgt. (OMOC: coll. Hudeček); Čertovica, vii.1948, 2 spec., J. Bechyně lgt. (NMPC); Donovaly, 1947, 1 spec., Smetana lgt. (NMPC); Donovaly, 14.vii.1974, 6 spec., 27.vii.1986, 2 spec., Sv. Bílý lgt. (NMPC); Jasenie, 2 spec., Roubal lgt. (NMPC); Körmöcbánya [= Kremnica], 1936, 8 spec., Dudich lgt. (HMBC); Lomnistá dolina, 14.vii.1974, 5 spec., Sv. Bílý lgt. (NMPC); Mlyná dolina, 13.x.1977, 1 spec., Sv. Bílý lgt. (NMPC). Poľana, 9.vii.1988, 1 spec., Sv. Bílý lgt. (NMPC); Poľana, Hrončecáký Grúň, 16.vii.1987, 1 spec., Sv. Bílý lgt. (NMPC); Špan.[ia] Dolina, 1947, 6 spec., Smetana lgt. (NMPC). **Bratislavský kraj:** Malé Karpaty: Piský [= Modra-Piesok], 13.v.1934, 1 spec., O. Kavan lgt. (NMPC); Modra, 1 spec. Fritsch [lgt.] (NMPC: ex coll. J. Havelka); Modra, iii.1976, 1 spec. (NMPC). **Košický kraj:** Kassa [= Košice], 1 spec., Mócsár lgt. (HMBC); Michalovce, v.1939, 2 spec., Štursa lgt. (NMPC); Michalovce, v.1939, 2 spec., Táborský lgt. (NMPC). Slovenský raj: Čingov, 15.vii.1979, 1 spec., P. Štourač lgt. (OMOC: ex coll. Štourač); Szádloľ [= Zádiel], 1 spec., Streda lgt. (HMBC); Podleský [= Podlesok], 1.vi.1996, 2 spec., Jiří Hájek lgt. et det. (NMPC). **Nitranský kraj:** Topoľčianky, 1 spec., A. Ružička (MMBC: ex coll. Mazura). **Prešovský kraj:** Bardejov, iii.1976, 4 spec., J. Jelinek lgt. (NMPC); Bardejov, Magura, vii.1984, 1 spec., Sv. Bílý lgt. (NMPC); Bardejov.[ské] Kupele, 1.–4.xii.1975, 2 spec., Exp. Mus. Nat. Prag (NMPC); Habura, vii.–viii.1938, Kodym & Matějka lgt. (NMPC). Poloniny NP: Nová Sedlica, vii.1964, 3 spec., Žirovnický lgt. (NMPC); Nová Sedlica, 5.vii.1986, 12 spec., Sv. Bílý lgt. (NMPC). Sp[říšská] Magura, Kamenka, 1 spec. (NMPC). Vysoké Tatry Mts.: Vysoké Tatry, 1 spec., O. Kavan lgt. (NMPC); Vysoké Tatry, 4 spec., Pfeffer lgt. (NMPC); Kotlina, 25.vi.1936, 1 spec., O. Kavan lgt. (NMPC); Vysoké Tatry, Šalvěj. Pramen [= Šalviový pramen], 30.vi.1938, 2 spec., coll. Šticha (NMPC); Vyšné Hágy, 1 spec., Matoušek (lgt.) (MMBC, ec coll. Matoušek). **Trenčianský kraj:** Remata, 2 spec., J. Brožík lgt. (NMPC). **Trnavský kraj:** Piešťany, 1 spec., M. Kudla lgt. (NMPC).

**Žilinský kraj:** Fenyőháza [= Lubochňa], 1 spec., Gurányi lgt. (HMBC); Gombás [= Hubová], 27.vii.[19]27, 4 spec. (HMBC); Lubochňa, vi.1933, 9 spec., O. K. (NMPC). Malá Fatra [Mts.], vi.1950, 1 spec., J. Strejček lgt. (NMPC); Zázrivá, Fatra [Malá Fatra Mts.], vii.1956, 6 spec., Lencyz lgt. (HMBC). Nízké Tatry Mts.: Nízké Tatry, 4 spec., O. Kavan lgt. (NMPC); Nízké Tatry, vii., 4 spec., Novickij lgt. (NMPC); Nízké Tatry, vii.1984, 3 spec., Sv. Biľý lgt. (NMPC); Nízké Tatry, Svarín, 9.vi.1991, 1 spec., T. Kovács lgt. (HMBC); Čierny Váh, 1 spec. (NMPC: ex coll. Jar. Baumert); Čierny Váh, 9.vii.1967, 5 spec., O. Marek lgt. (OMOC: ex coll. Marek); Liptovský Hrádok, 12.vii.1970, 2 spec., O. Marek lgt. (OMOC: coll. Vondřejc). Ružomberok, vii.1933, 1 spec., A. M. (NMPC); Rózsa-hegy [= Ružomberok], Liptó [= historical Liptov County], 1 spec., Pavel lgt. (HMBC); Liptó [= historical Liptov County], 2 spec., Pavel lgt. (HMBC); Trebosztó [= Trebostovo], Turóc [= historical Turóc County], 1 spec., Langhoffer lgt. (HMBC); Velká Fatra Mts.: Velká Fatra, 20.vii.1985, 1 spec., Sv. Biľý lgt. (NMPC); Blatnická dolina, 14.vii.1985, 2 spec., Sv. Biľý lgt. (NMPC); Gader dol.[ina], 1 spec., Syrovátky lgt. (NMPC). Turček p.[rope] H.[orná] Štubňa, vii.1956, 2 spec., J. Brožík lgt. (NMPC). Hor. Bradla [not identified], 1 spec. (NMPC); **SLOVENIA:** Carniola, Jezersko, 10.vii.1936, 4 spec., O. Kodym lgt. (NMPC); Kočevje, Mestni vrh, 12.vii.1948, 2 spec. (SMLC, ex coll. S. Brelih); Pohorje, 6 spec. (SMLC, ex coll. Peyer).

**TURKEY:** Asia Minor, 1911, Bodemeyer (MMBC: ex coll. Mazura). **UKRAINE: Zakarpattia:** Bagolyháza [= Bilaszovica], 6.7.vii.1943, 1 spec., Hommonay lgt. (HMBC); Russia Karpat., Jasňa [= Yasinya] – Apšinec [ridge], 23.vi.1938, Kodym lgt. (NMPC); Kuzy [= 5 km W of Dilove, Kuzy stream], 1 spec. (NMPC); Kuzy, 1 spec., Mikán lgt. (NMPC); Kuzy, 2 spec., Štěrba lgt. (NMPC); Kuzy, Slovensko [= error], 3 spec., Štícha lgt. (NMPC); Kuzy, 3.vii.1928, 1 spec. (NMPC); Kuzy, 19.vii.1929, 2 spec. (NMPC); Kuzy, vii.1931, 3 spec., Pfeffer lgt. (NMPC); Kuzy, vi.1932, 1 spec., B. Štícha lgt. (NMPC); Kuzy, V. Bočkov, VII.1931, 1 spec., Klička lgt. (NMPC); Ung-völgy [= Uh valley], 1 spec., Elmann lgt. (HMBC); Žernava [= Zhernava], 1 spec., Mazura lgt. (MMBC, ex coll. Mazura). Diana Lak [not identified], 1 spec., Táborský lgt. (NMPC).

**Note:** A detailed distribution for the Czech Republic is to be addressed in a separate communication (KMENT *et al.* in press).

**Distribution.** Albania (HORION 1960); Asian Turkey (new record); Austria (HORION 1960, ZÁBRANSKÝ 2001, ECKELT & KAHLEN 2012); Armenia (KRASUTSKIY 2005); Azerbaijan (KRASUTSKIY 2005); Belarus (ALEXANDROVITCH *et al.* 1996); Bosnia Herzegovina (HORION 1960); Bulgaria (HORION 1960); Croatia (HORION 1960); Czech Republic (KOLIBÁČ 1993, KMENT *et al.* in press); Denmark (SILFVERBERG 2004); Estonia (SEIDLITZ 1891, LAKSCHEWITZ 1927, SILFVERBERG 2004); Finland (SAALAS 1917, HORION 1960, SILFVERBERG 2004); France (ACLOQUE 1896, HORION 1960); Georgia (KRASUTSKIY 2005); Germany (HORION 1960, MÜLLER *et al.* 2005); Greece (APFELBECK 1930); Italy (PORTA 1929); Kosovo (new record); Latvia (SEIDLITZ 1891, LAKSCHEWITZ 1927, SILFVERBERG 2004, TELNOV 2004); Lithuania (SEIDLITZ 1891, LAKSCHEWITZ 1927, PILECKIS. & MONSEVIČIUS 1995, SILFVERBERG 2004); Macedonia (new record); Moldova (KRASUTSKIY 2005); Montenegro (new record); Norway (HORION 1960, SILFVERBERG 2004); Poland (GERHARDT 1910, BYK *et al.* 2006, PAPIS & MOKRZYCKI 2015); Romania (LIEBMAN 1920, MERKL & NÉMETH 2008); Russia: North European Territory (BORCHERT 1938, HORION 1960, SILFVERBERG 2004), Central European Territory (NIKITSKY & SCHIGEL 2004, EGOROV 2009, EGOROV & RUCHIN 2012), South European Territory (MEYSEL' 1940, ZAMOTAJLOV & NIKITSKY 2010), Western Siberia (EFIMOV 2014); Slovakia (KOLIBÁČ 1993); Slovenia (KOLIBÁČ 2007); Spain (LÓPEZ-COLÓN 2004); Sweden (HORION 1960, SILFVERBERG 2004); Switzerland (STIERLIN 1898–1900); Ukraine (KRASUTSKIY 2005).

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Figs 1–2. 1 – *Peltis grossa* (Linnaeus, 1758), Czech Republic, Ščúrnica, 18.2 mm (NMPC); 2 – *Peltis gigantea* (Reitter, 1882), Kazakhstan, Dzhambul vill., 15 mm (NMPC).

*Peltis gigantea* (Reitter, 1882)

(Fig. 2)

**Material examined.** KAZAKHSTAN: steppes near Buchtarma river, above Dzhambul village, 49°12'04"N, 86°42'17"E, 1440m, I.H. Tuf leg, 30.vi.2006' (NMPC). RUSSIA: EASTERN SIBERIA: Krasnoyarsk kray: 'Transbaik., Beresowka' [= Berezovka], 1 spec. (NMPC: ex coll. Sprenger).

**Distribution.** Japan; Russia: eastern Siberia, Far East; China: north-eastern territory (KOLIBÁČ 2007, KOLIBÁČ 2013, LAFER 1992).

### Conclusion

In Europe, five fossil specimens of the genus *Peltis* O. F. Müller, 1764 are known from Cenozoic material and one species has recently been described from the Pliocene (KOLIBÁČ *et al.* 2016). However, only *Peltis grossa* is known from the area in recent times. It is a mainly European species occurring from Spain to western Siberia and from Scandinavia to Turkey and Transcaucasia. The authors gathered literature records from 10 countries (Albania, Azerbaijan, Bosnia Herzegovina, Bulgaria, Croatia, Denmark, Georgia, Greece, Italy and Moldavia) and one region (western Siberia in Russia), that were not mentioned in the *Catalogue of Palaearctic Coleoptera* (KOLIBÁČ 2007). This paper also presents new records of *P. grossa* from 21 countries gathered by examining a number of museum collections. From four of the countries (Kosovo, Macedonia, Montenegro, Turkey), the occurrence of *P. grossa* has not been published previously. *Fauna Europaea* (PASQUAL *et al.* 2013) mentions this species as present in Great Britain, Hungary and Belgium. In Great Britain *P. grossa* is known only from 3000-year-old subfossil material (BUCKLAND & KENWARD 1973) and the species has long been extinct in the area (DUFF 2012). Older records from Hungary actually belong to the present territory of Romania (e.g. KUTHY 1897) and there are no literature records or specimens in museums from Belgium (A. Thomaes, pers. comm.).

From the conservation point of view, the population of *P. grossa* is considered of least concern in Europe and near-threatened in the 27 countries that constituted the EU at the time of reference (NIETO & ALEXANDER 2010). According to the literature, *P. grossa* is still present in most of its former area. Most of our records are located in the Carpathians, where *P. grossa* is still locally abundant. However, in some countries the species has become extinct or is known from only a few sites (e.g. DUFF 2012, LÓPEZ-COLÓN 2004) and requires attention from the conservation point of view.

Older records of *P. grossa* from eastern Siberia (HEYDEN 1880, SAALAS 1917) probably belong to *Peltis gigantea*, which occurs in this area (KOLIBÁČ 2007). We present records of *P. gigantea* from Russia (eastern Siberia) and newly for Kazakhstan, from which country the occurrence of this species has not previously been published.

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### References

- ACLOQUE A. 1896: *Faune de France: contenant la description des espèces indigènes disposées en tableaux analytiques; et illustrée de figures représentant les types caractéristiques des genres*. Paris, J.-B. Bailliére, 466 pp.

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- ALEXANDROVITCH O. R., LOPATIN I. K., PISANENKO A. D., TSINKEVITCH V. A. & SNITKO S. M. 1996: *A catalogue of Coleoptera (Insecta) of Belarus*. Fund of Fundamental Investigations of the Republic of Belarus, Minsk, 103 pp.
- APFELBECK V. 1930: Fauna Insectorum Balcanica, VII. Teil: Clavicornia. *Beilage zur Zeitschrift der Wissenschaftliche Insektenbiologie* **25**: 1–78.
- BORCHERT W. 1938: *Die Verbreitung der Käfer Deutschlands. Tatsachen u. Folgeungen*. Schoenebeck (Elbe), 137 pp.
- BUCKLAND P. C. & KENWARD H. K. 1973: Thorne Moor: a palaeoecological study of a Bronze Age site. *Nature* **241**: 405–407.
- BYK A., MOKRZYCKI T., PERLIŃSKI S. & RUTKIEWICZ A. 2006: Saproxylic beetles – in the monitoring of anthropogenic transformations of Białowieża Primeval Forest. Pp. 325–397. In: SZUJECKI A. (ed.): *Zooindication-based monitoring of anthropogenic transformations in Białowieża Primeval Forest*. Warsaw Agricultural University Press, Warsaw, 443 pp.
- DJUPSTRÖM L. B., WESLIEN J., HOOPEN J. TEN & SCHROEDER L. M. 2012: Restoration of habitats for a threatened saproxylic beetle species in a boreal landscape by retaining dead wood on clear-cuts. *Biological Conservation* **155**: 44–49.
- DUFF A. G. 2012: Checklist of Beetles of the British Isles. *Pemberley Books, United Kingdom*, 171 pp.
- ECKELT A. & KAHLEN M. 2012: Die holzbewohnende Käferfauna des Nationalpark Kalkalpen in Oberösterreich (Coleoptera). *Die Beiträge zur Naturkunde Oberösterreichs* **22**: 3–57.
- EFIMOV D. A. 2014: New data on the fauna of the beetles (Coleoptera) from Kuznetsk-Salair Mountain area. *Amurian Zoological Journal* **6**: 18–21.
- EGOROV L. V. 2009: Zhestokrylye (Insecta, Coleoptera) gosudarstvennogo prirodного zapovednika «Prisurskiy» I ego okhrannoy zony: sovremennoe sostoyanie izuchennosti. [Beetles (Insecta, Coleoptera) of the state nature reserve «Prisurskiy» and its protection zone: the current state of knowledge. *Nauchnye Trudy Gosudarstvennogo Prirodnoho Zapovednika «Prisurskiy»* **22**: 12–33 (in Russian).
- EGOROV L. V. & RUCHIN A. B. 2012: Materialy k poznaniyu koleopterofauny Mordovskogo gosudarstvennogo prirodного zapovednika. [Materials for the knowledge of coleopterofauna of the Mordovian State Nature Reserve]. *Trudy Mordovskogo Gosudarstvennogo Prirodnoho Zapovednika Imeni P. G. Smidovicha* **10**: 4–57 (in Russian).
- EHNSTRÖM B. 2001: *Faktablad: Peltis grossa – Stor Flatbagge*. ArtDatabanken, SLU, Uppsala. <http://artfakta.artdatabanken.se/taxon/101520> (accessed on Dec. 10, 2016).
- GERHARDT J. 1910: *Verzeichnis der Käfer Schlesiens preussischen und österreichischen Anteils, geordnet nach dem Catalogus coleopterorum Europae vom Jahre 1906. Dritte, neubearbeitete Auflage*. Julius Springer, Berlin. XVI + 431 pp.
- HORION A. 1960: *Faunistik der Mitteleuropäischen Käfer, Bd. VII, Clavicornia, 1. Teil, (Sphaeritidae bis Phalacridae)*. Kommissionsverlag Buchdruckerei, Überlingen-Bodensee, 346 pp.
- KMENT P., HORSÁK M., PROCHÁZKA J., SYCHRA J. & MALENOVSKÝ I. (in press): Rozšíření podkornice Aradus obtectus (Hemiptera: Heteroptera: Aradidae) a kornatce Peltis grossa (Coleoptera: Trogossitidae) v České republice a jejich první nálezy v Bílých Karpatech. (Distribution of the flat bug Aradus obtectus (Hemiptera: Heteroptera: Aradidae) and the beetle Peltis grossa (Coleoptera: Trogossitidae) in the Czech Republic and their first records in the White Carpathians). *Acta Carpathica Occidentalis* (in Czech, English summary).
- KOLIBÁČ J. 1993: Trogossitidae. In: JELÍNEK J. (ed.): Check-list of Czechoslovak Insects IV (Coleoptera). Seznam československých brouků. *Folia Heyrovskyana, Supplementum* **1**: 89–90.
- KOLIBÁČ J. 2007: Family Trogossitidae Latreille, 1802. Pp. 364–366. In: LÖBL I. & SMETANA A. (eds): *Catalogue of Palaearctic Coleoptera. Vol. 4*. Apollo Books, Stenstrup, 935 pp.
- KOLIBÁČ J. 2013: Trogossitidae: A review of the beetle family, with a catalogue and keys. *ZooKeys* **366**: 1–194.
- KOLIBÁČ J., MAJER K. & ŠVIHLA V. 2005: *Cleroidea. Brouci nadčeledi Cleroidea Česka, Slovenska a sousedních oblastí. Beetles of the superfamily Cleroidea in the Czech and Slovak republics and neighbouring areas*. Clarion, Praha, 186 pp (in Czech and English).
- KOLIBÁČ J., ANDROIT B., GRÖNING E., BRAUCKMANN C. & WAPPLER T. 2016: First record of the family Trogossitidae (Insecta, Coleoptera) in the Late Pliocene deposits of Willershausen (Germany). *Paläontologische Zeitschrift* **90**: 681–689.

- KONVIČKA O. in prep.: *Trogossitidae (kornatcoviti)*. In: Červený seznam ohrožených druhů České republiky. *Bezobratlí. Red list of threatened species in the Czech Republic. Invertebrates*. Agentura ochrany přírody a krajiny ČR (in Czech and English).
- KRASUTSKIY B. V. 2005: *Mitsetofil'nye zhestkokrylye Urala i Zaural'ya. Vol. 2. Sistema «Griby-nasekomye».* [Mycetophilic coleopterans of the Urals and Transural regions. Volume 2. System «Fungi-insects»]. Chelyabinsk, 213 pp (in Russian).
- KUTHY D. 1897: *Ordo. Coleoptera*. In: *A magyar birodalom állatvilága. (Fauna Regni Hungariae). III. Arthropoda. (Insecta. Coleoptera.)*. Királyi Magyar Természettudományi Társulat, Budapest, 213 pp.
- LAFER G. Sh. 1992: Peltidae (Lophocateridae). Pp 82–86. In: Keys to the identification of insects of the Soviet Far East. 3 – Coleoptera, or beetles. Part 2. Nauka, Saint-Petersburg. 704 pp.
- LAKSCHEWITZ T. 1927: Zur Koleopterenfauna des Ostbaltischen Gebietes I. Zur Koleopterenfauna des Ostbaltischen Gebietes I. *Korrespondenzblatt für Naturforum* **59**: 12–14.
- LIEBMANN W. 1920: Ein Beitrag zur Coleopterenfauna Rumäniens. *Entomologische Blätter* **16**: 1–10, 102–115.
- LÓPEZ-COLÓN J. I. 2004: La familia Trogossitidae Latreille, 1802 en la península Ibérica (Coleoptera, Cleroidea). *Estudios del Museo de Ciencias Naturales de Álava* **18–19**: 127–152.
- MEYZEL' E. D. 1940: *Predvaritel'nyy spisok nasekomykh Kavkazskogo zapovednika. [A preliminary list of insects of the Caucasian Reserve]*. KGPBZ Archive, Vol. 132, (in Russian).
- MERKL O. & NÉMETH T. 2008: Trogossitidae. In: Data to the knowledge of the beetle fauna of Maramureş, Romania (Coleoptera). *Studia Universitatis Vasile Goldis Arad, Seria Stiintele Vietii* **18 (Supplement)**: 243–311.
- MÜLLER J., BUSSLER H., BENSE U., BRUSTEL H., FLECHTNER G., FOWLES A., KAHLEN M., MÖLLER G., MÜHLE H., SCHMIDL J. & ZÁBRANSKÝ P. 2005: Urwald relict species – Saproxylic beetles indicating structural qualities and habitat tradition. *Waldeökologie Online* **2**: 106–113.
- NIETO A. & ALEXANDER K. N. A. 2010: *European Red List of Saproxylic Beetles*. Publications Office of the European Union, Luxembourg, 45 pp.
- NIKITSKY N. B. & SCHIGEL D. S. 2004: Beetles in polypores of the Moscow region: checklist and ecological notes. *Entomologica Fennica* **15**: 6–22.
- NILSSON S.G., HEDIN J. & NIKLASSON M. 2000: Biodiversity and its assessment in boreal and nemoral forests: Structures or species or both. *Scandinavian Journal of Forest Research* **16**: 10–26.
- PAPIS M. & MOKRZYCKI T. 2015: Chrząszcze saproksyliczne (Coleoptera) obszaru ochrony ścisłej Bukowa Góra w Roztoczańskim Parku Narodowym. [Saproxylic beetles (Coleoptera) of the strictly protected area Bukowa Góra in the Roztoczański National Park]. *Leśne Prace Badawcze* **76**: 229–239 (in Polish).
- PASQUAL C., KOVÁŘ I., KOLIBÁČ J. & VONDEL B. J. VAN 2013: *Fauna Europaea: Trogositidae*. In: AUDISIO P. (ed.): *Fauna Europaea: Coleoptera, Beetles*. Fauna Europaea version 2.6. <http://www faunaeu org> (Last access: December 10, 2016).
- PILECKIS, S. & MONSEVIČIUS, V. 1995: *Keršvabalinių (Cleroidea)*. pp. 271–281. In: *Lietuvos Fauna. Vabalai I.* Vilnius, Mokslo ir enciklopedijų leidykla. 304 pp.
- PORTA A. 1929: *Fauna Coleopterorum Italica. Voll. III Diversicornia*. Stailmente Tipographico Piacentino, Piacenza, 466 pp.
- REITTER E. 1882: Bestimmungs-Tabellen der europäischen Coleopteren. VI. Enthaltend die Familien Colydiidae, Rhysodidae, Trogositidae. *Verhandlungen des naturforschenden Vereines in Brünn* **20**: 141–149.
- SAALAS U. 1917: *Die Fichtenkäfer Finnlands I*. Annales Academiae Scientiarum Fennicae, Helsinki, 547 pp.
- SEIDLITZ G.C.M. 1891: *Fauna Baltica. Die Käfer der Ostseeprovinzen Rußlands*. 2. auflage, Königsberg, 818 pp.
- SCHIGEL D. S. 2002. Assemblages of Coleoptera in polypore fungi in East European Plain and Crimea. *Bulletin of Moscow Society of Naturalists* **107**: 8–21 (in Russian).
- SILFVERBERG, H. 2004: *Enumeratio nova Coleopterorum Fennoscandiae, Daniae et Baltiae*. [A revised checklist is presented of the Coleoptera of northern Europe (Finland, Sweden, Norway, Denmark, Estonia, Latvia, Lithuania and the Fennoscandian parts of Russia)]. *Sahlbergia* **9**: 1–111.
- STIERLIN G. 1898–1900: *Die Käferfauna der Schweiz nach der analytischen Methode. I. Teil*. Schaffhausen, 698 pp.
- TELNOV D. 2004: *Checklist of Latvian Beetles (Insecta: Coleoptera)*. In: TELNOV D. (ed.): *Compendium of Latvian Coleoptera I*, pp 1–113.

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- TÝR V. 2011: Brouci (Coleoptera) Žihle a okolí. 3.část. Trogositidae, Cleridae, Dasytidae, Malachiidae. *Západoceské Entomologické Listy* 2: 1–4 (in Czech). [Accessible online: <http://www.zpcse.cz/entolisty/entolisty.html>, 1-2-2011]
- ZÁBRANSKÝ P. 2001: *Xylobionte Käfer im Wildnisgebiet Dürrenstein*. In: *LIFE-Projekt Wildnisgebiet Dürrenstein, Forschungsbericht*. Amt der Niederösterreichischen Landesregierung, St. Pölten, 179 pp.
- ZAMOTAJLOV A. S. & NIKITSKY N. B. 2010: *Coleopterous insects (Insecta, Coleoptera) of Republic of Adygheya (annotated catalogue of species). (Fauna conspecta of Adygheya. No 1)*. Adyghei State University Publishers, Maykop, 404 pp.