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Distributional records of carrion beetles (Coleoptera: Silphidae) from China, Part II

Údaje o rozšíření mrchožroutovitých brouků (Coleoptera: Silphidae) z Číny, část II

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Distribution, Coleoptera, Silphidae, China, Palaearctic region, Oriental region

Abstract. Records of 52 species of Silphidae, collected mostly by Czech and German entomologists in China during 1990-2002, are presented. First distributional records from China are provided for *Aclypea turkestanica* (Ballion, 1871), *Nicrophorus humator* (Gleditsch, 1767), *N. reichardti* Kieseritzky, 1930, *N. satanas* Reitter, 1893, *N. sepultor* Charpentier, 1825 (all from Xinjiang Uygur autonomous region), and *Diamesus osculans* (Vigors, 1825) (from Chongqing municipality). First distributional records from the respective Chinese provinces, regions and municipalities are provided for *Aclypea daurica* (Gebler, 1832) (Hubei and Shaanxi provinces), *Necrodes littoralis* (Linnaeus, 1758) (Beijing municipality; Fujian, Gansu, Heilongjiang, Jiangxi and Shaanxi provinces), *Necrodes nigricornis* Harold, 1875 (Heilongjiang and Hubei provinces), *Nicrophorus antennatus* (Reitter, 1884) (Xinjiang Uygur autonomous region), *N. argutor* Jakovlev, 1890 (Nei Mongol autonomous region), *N. basalis* Faldermann, 1835 (Beijing municipality), *N. concolor* Kraatz, 1877 (Guangdong, Liaoning and Shaanxi provinces), *N. dauricus* Motschulsky, 1860 (Jilin province), *N. investigator* Zetterstedt, 1824 (Hebei, Shaanxi, Shandong, Shanxi and Sichuan provinces; Xinjiang Uygur autonomous region), *N. japonicus* Harold, 1877 (Beijing, Shanghai and Tianjin municipalities; Fujian, Heilongjiang, Hebei, Hubei, Jilin, Liaoning and Shandong provinces), *N. maculifrons* Kraatz, 1877 (Shanghai municipality; Fujian, Gansu and Jiangsu provinces), *N. morio* Gebler, 1817 (Xinjiang Uygur autonomous region; Gansu and Hebei provinces), *N. nepalensis* Hope, 1831 (Nei Mongol and Guangxi autonomous regions; Anhui, Guangdong, Hainan, Hunan, Jiangsu and Jiangxi provinces), *N. quadripunctatus* Kraatz, 1877 (Jiangxi province), *N. smefarka* Háva, Schneider et Růžička, 1999 (Hubei and Shaanxi provinces), *Phosphuga atrata atrata* (Linnaeus, 1758) (Beijing municipality; Nei Mongol and Xinjiang Uygur autonomous regions; Hebei, Heilongjiang, Qinghai and Shaanxi provinces), *Ptomascopus morio* Kraatz, 1877 (Shaanxi province), *P. plagiatus* (Ménétries, 1854) (Beijing, Shanghai and Tianjin municipalities; Nei Mongol autonomous region; Fujian, Gansu, Hubei and Liaoning provinces), *Silpha carinata* Herbst, 1783 (Xinjiang Uygur autonomous region), *S. perforata* Gebler, 1832 (Beijing municipality; Nei Mongol autonomous region; Hebei, Heilongjiang and Shanxi provinces), *S. qinlinga* Schawaller, 1996 (Hubei province), *Thanatophilus dentigerus* (Semenov, 1891) (Xizang autonomous region), *T. latericarinatus* Motschulsky, 1860 (Heilongjiang province), *T. roborowskyi* Jakovlev, 1887 (Xizang autonomous region), *T. rugosus* Linnaeus, 1758 (Beijing municipality; Shaanxi province) and *T. sinuatus* (Fabricius, 1775) (Beijing municipality; Shaanxi province). Furthermore, *Nicrophorus vestigator* Herschel, 1807 is removed from the list of Chinese fauna, as the record of Růžička & Schneider (1996) was based on a misidentified specimen of *N. dauricus*.

INTRODUCTION

Silphidae is a small family of beetles, with approximately 200 mostly necrophagous species worldwide (Newton 1991). Limited information is available on the distribution of this group throughout China. In total, 58 species of Silphidae have been reported from the continental China (with 31 species of Silphinae and 27 species of Nicrophorinae) by Portevin (1926), Zhang (1992a,b, 1993a,b, 1995, 1997), Háva et al. (1999), Nikolaev & Kozminykh (2002), and Sikes et al. (2002). Růžička & Schneider (1996), Háva et al. (1999) and Sikes et al. (2002) published faunistic and taxonomic studies that contain further references concerning the distribution of Chinese carrion beetles.

This paper presents additional data based on more than 2240 specimens of carrion beetles representing 52 species that were collected by various Czech and German entomologists in different parts of China during 1990-2002. For several species, J. Růžička and D. S. Sikes have studied older material with exact locality data in several European and North American museums. It is our hope that by expanding the distributional information for these species, entomologists will be enabled to conduct detailed investigations of their reproductive strategies, phoretic associates, and general ecology.

MATERIAL AND METHODS

The following collection acronyms are used throughout the text (according to Arnett et al. 1993):

AMNH – American Museum of Natural History, New York (L. H. Herman);
BMNH – Natural History Museum, London (M. J. D. Brendell);
CASC – California Academy of Sciences, San Francisco (D. Kavanaugh);
CUIC – Cornell University, Ithaca, USA (E. R. Hoebeke);
DEIC – Deutsches Entomologisches Institut, Eberswalde (L. Zerche);
DKRC – private collection of David Král, Praha;
DSSC – private collection of Derek S. Sikes, Storrs;
DWWC – private collection of David W. Wrase, Berlin;
EIHU – Hokkaido University, Sapporo (M. Ohara);
FMNH – Field Museum of Natural History, Chicago (P. Parrillo);
HNHM – Magyar Természettudományi Múzeum, Budapest (O. Merkl);
JCOC – private collection of Jonathan Cooter, Hereford, England;
JHAC – private collection of Jiří Háva, Praha;
JMAC – private collection of Josef Mašek, Žlutice, Czech Republic;
JRUC – private collection of Jan Růžička, Praha;
JSCC – private collection of Jan Schneider, Praha;
MNHN – Muséum national d'Histoire naturelle, Paris (Nicole Berti);
MNIC – private collection of Masaaki Nishikawa, Ebina, Japan;
MPEC – private collection of Michel Perreau, Paris;
MSCC – private collection of Michael Schülke, Berlin;
MTRC – private collection of Miloš Trýzna, Děčín, Czech Republic;
MULC – private collection of Mike Ulyshen, Athens, Georgia, USA;
MVMA – Museum of Victoria, Abbotsford, Victoria (K. Walker);
NHMW – Naturhistorisches Museum, Wien (H. Schönmann);
NHRS – Naturhistoriska riksmuseet, Stockholm (B. Viklund);
NKUM – Nankai University, Tianjin (L.-Y. Zheng);
NMPC – Národní muzeum, Praha (J. Jelínek);
SBPC – private collection of Stewart B. Peck, Ottawa;
SMFD – Forschungsinstitut Senckenberg, Frankfurt am Main (Andrea Vesmanis);

SMNS – Staatliches Museum für Naturkunde, Stuttgart (W. Schawaller);
SMTD – Staatliches Museum für Tierkunde, Dresden (O. Jäger);
USNM – National Museum of Natural History, Washington (Gloria House);
WBAC – private collection of Wolfgang Barries, Wien;
ZFMK – Zoologische Forschungsinstitut und Museum "Alexander Koenig", Bonn (M. Schmitt);
ZMAN – Zoologisch Museum, Instituut voor Taxonomische Zoologie, Universiteit van Amsterdam, Amsterdam (B. Brugge);
ZMAS – Russian Academy of Sciences, Zoological Institute, St. Petersburg (A. G. Kireitshuk);
ZMHB – Museum für Naturkunde, Humboldt-Universität, Berlin (B. Jaeger, M. Uhlig);
ZMUC – Zoological Museum, University of Copenhagen, Kř benhavn (O. Martin);
ZSMC – Zoologische Staatssammlung, München (M. Baehr);
ZZNC – private collection of Zdeněk Znamenáček, Praha.

The following abbreviations are used throughout the text: coll. – collection of (i.e. not collected by!); det. – identified by; env. – environs of; leg. – collected by; loc. – locality; mt. – mountain; mts – mountains; nr. – near; spec. – specimen(s); vill. – village.

Species within the subfamilies Silphinae and Nicrophorinae are sorted alphabetically; the same system is used for the arrangement of Chinese provinces, autonomous regions and municipalities under the material examined for each species. Within provinces, material is sorted chronologically.

Chinese material of *Calosilpha* Portevin, 1920, *Oiceoptoma* Leach, 1815 and *Eusilpha* Semenov, 1891 is not included here as it will be presented elsewhere. If not otherwise mentioned, all material was identified or reviewed by J. Růžička, J. Schneider and/or J. Háva. Only material of *Nicrophorus* Fabricius, 1775 identified or reviewed by D. S. Sikes is marked "DSS det." throughout the text.

Geographical names are unified according to Anonymous (1998, 2000, 2001). If the historical name or original name provided on the locality label is substantially different from the transliteration given in Anonymous (1998, 2000, 2001), a recent transliteration is given within square brackets after the original name. Transliteration of historical names follows Schütze & Kleinfeld (1997). If coordinates are missing on the locality label, approximate values are also given within square brackets.

RESULTS AND DISCUSSION

Silphinae

Aclypea calva (Reitter, 1890)

China, Xinjiang Uygur autonomous region: Kuldja [= Yining, ca. 43°55′N 081°18′E], without date and collector's name, 1 male (NHMW); Tian Shan mts, Juldus Gebirge [= valley of Kaidu He river, between ca. 42°51′N 084°05′E and 41°56′N 086°44′E], ex coll. Winkler, 1 male (NHMW); Tian Shan mts, Musart [= Muzart pass, ca. 42°21′N 080°47′E], without date and collector's name, 2 males, 3 females (NHMW, ZMHB); Kurla [= Korla, ca. 41°45′N 086°08′E], v.1902, Hauser leg., 1 male, 1 female (NHMW, NMPC); Borochoro-Gebirge [= Boro Horo Shan mts, ca. 44°00′N 083°00′E], vi.1905, Hauser leg., 1 male, 1 female (NHMW).

Known from Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan (Nikolaev 1990, Schawaller 1996a, Nikolaev & Kozminykh 2002); from China: Xinjiang Uygur autonomous region reported by Nikolaev (1990) and Nikolaev & Kozminykh (2002).

Aclypea daurica (Gebler, 1832)

China, Beijing municipality: Dongling Shan mts, Xiaolongmen, 39°57′N 115°43′E, 17.vi.2001, J. Cooter leg., rotting kitchen waste, 1 male, 2 females (JCOC, JRUC); the same locality, 1400 m, 16.vi.2001, 1 male (JCOC); **Gansu province:** Xiahe [= Labrang, ca. 35°18′N 102°30′E], 3700 m,

1.-15.vii.1998, V. Major leg., 2 males (JSCC); **Hebei province:** Kalgan [= Zhangjiakou, ca. 40°49′N 114°53′E], without date, Hauser leg., 9 males, 10 females (NHMW, ZMHB); same locality, without date and collector's name, ex coll. W. H. Muche, 1 male (SMTD); Shi-wan-tsze [= Xiwanzi, ca. 41°00′N 115°15′E], Hiu-mou kiang-keou [not located], without date and collector's name, 2 males, 1 female (ZMHB); road Chengde – Chifeng, pass 1600 m, 41.6°N 118.2°E, 1.-2.vi.2000, J. Turna & Z. Jindra leg., 11 spec. (JSCC); **Heilongjiang province:** Chitaizski-Sterana [= Chinese side of Amur river, between ca. 49°24′N 129°32′E and 48°23′N 134°25′E], without date, E. v. Bodemeyer leg., 2 males (ZMHB); **Hubei province:** Ichang [= Yichang, ca. 30°42′N 111°17′E], without date and collector's name, 1 male (ZMHB); **Nei Mongol autonomous region:** Jnn Shan mts [= In Shan ridge, part of Yin Shan mts, N of Baotou, ca. 40°51′N 110°00′E], 980-2100 m, without date and collector's name, 1 male, 5 females (ZMHB); Inn Shan mts [= In Shan ridge, part of Yin Shan mts, N of Baotou, ca. 40°51′N 110°00′E], without date and collector's name, 1 male, 2 females (NMPC); same locality, without date and collector's name, ex coll. W. H. Muche, 25 spec. (SMTD); same locality, without date and collector's name, ex coll. Noesske, 4 spec. (SMTD); **Qinghai province:** Kuku-Nor [= Qinghai lake, ca. 37°00′N 100°00′E], 3200 m, 1898, F. Hauser leg., 39 spec. (BMNH, HNHM, MNHN, NHMW, NMPC, ZMHB); **Shaanxi province:** Qingling Shan mts, road Xi'an – Ningshan, pass 50 km S Xi'an, 33.8°N 108.8°E, 2000 m, 12.-26.vi.2000, J. Turna leg., traps, 1 male, 1 female (JSCC); Qingling Shan mts, 12 km SW Xunyangba [ca. 33°30′N 108°28′E], 2000-2250 m, 14.-18.vi.2000, C. Holzschuh leg., 1 male (JSCC); **Sichuan province:** Sunpanting [= Songpan, ca. 32°40′N 103°30′E], 1925, Stötzner Expedition, 3 males, 1 female (SMTD); Songpan env. [ca. 32°38′N 103°35′E], 30.v.-1.vi.1995, V. Beneš leg., 2 males, 2 females (JSCC); same locality, 17.-18.vi.1996, Beneš & Štěpař leg., 2 spec. (JSCC); Zhangla [ca. 32°48′N 103°40′E], 14.-17.vi.1996, Beneš & Štěpař leg., 1 spec. (JSCC); road Langmusi – Songpan, Zoige [ca. 32°38′N 103°35′E], vii.1996, V. Beneš leg., 4 spec. (JSCC).

Known from eastern Siberia, Far East of Russia and Korea (Cho & Lee 1992, Schawaller 1996b); a single, probably doubtful record recently reported from Altai mts (Nikolaev & Kozminykh 2002). From China reported from Nei Mongol autonomous region, Beijing municipality, and Gansu, Hebei, Heilongjiang, Qinghai, Shanxi and Sichuan provinces (Schawaller 1996b, Růžička & Schneider 1996). First record from Hubei and Shaanxi provinces.

Aclypea opaca (Linnaeus, 1758)

China, Xinjiang Uygur autonomous region: Tian Shan mts, Musart [= Muzart pass, ca. 42°21′N 080°47′E], without date and collector's name, 1 female (ZMHB); Kuldscha [= Yining, ca. 43°55′N 081°18′E], without date and collector's name, 1 female (ZMHB); Kuldja [= Yining], Mont. bor. [= mountains N of Yining, ca. 44°15′N 081°20′E], without date, Hauser lgt., 2 females (NHMW).

Widely distributed across Palaearctic region and north-western part of Nearctic region (Anderson & Peck 1985, Schawaller 1996b). Mentioned without more details from "northern China" by Portevin (1926); from Xinjiang Uygur autonomous region reported by Schawaller (1996b).

Aclypea turkestanica (Ballion, 1871)

China, Xinjiang Uygur autonomous region: Kuldja [= Yining], Mont. bor. [= mountains N of Yining, ca. 44°15′N 081°20′E], without date and collector's name, 1 female (ZMHB).

Widely distributed in Central Asia, reaching Iran, Afghanistan, Pakistan and Kashmir in the south (Nikolaev 1990, Schawaller 1996, Nikolaev & Kozminykh 2002, Růžička & Schneider 2002). Reported without more details from "Turkestan" by Portevin (1926). First record from China.

Diamesus osculans (Vigors, 1825)

China, Chongqing municipality: Chunking [= Chongqing, ca. 29°32′N 106°31′E], without date and collector's name, ex coll. Em. Reitter, 1 male (NMPC).

Widely distributed from India, Sri Lanka, Bhutan, Myanmar, Vietnam, Laos, Malaysia, Indonesia, New Guinea, New Zealand to eastern Australia (Portevin 1926, Růžička et al. 2000, Peck 2001). First record from China.

Necrodes littoralis (Linnaeus, 1758)

China, Beijing municipality: Qinglongquio [= Qinglongqiao, ca. 40°20′N 115°59′E], vii.1990, R. Červenka leg., 1 spec. (JSCC); **Fujian province:** Kuatun [= Huaqiao], 27°40′N 117°40′E, 2300 m, various dates between 10.iv.1938 and 16.v.1938, J. Klapperich leg., 1 male, 5 females (ZFMK); same locality, 16.v.1938, J. Klapperich leg., 2 males, 1 female (NMPC); **Gansu province:** Hoei-Sien [= Hui Xian, ca. 33°46′N 106°04′E], without date and collector's name, 1 female (ZMHB); Wenxian env. [ca. 32°59′N 104°40′E], 26.vi.1995, V. Beneš leg., 2 males, 2 females (NMPC); **Hebei province:** Dongling Shan mts, 100 km W Beijing [ca. 39°48′N 115°29′E], 1500 m, 12.-15.vi.2000, Z. Jindra leg., carrion of *Bos*, 1 male (JSCC); **Heilongjiang province:** Maoershan [= Mao'er Shan, ca. 45°16′N 127°31′E], without date and collector's name, ex coll. W. H. Muche, 1 female (SMTD); **Hubei province:** Daba Shan mts, Muyuping [ca. 31°28′N 110°26′E], 17.-22.vii.2001, M. Schülke leg., at light, 1 female (MSCC); **Jiangxi province:** Lu Shan mts [ca. 29°33′N 115°58′E], 2.-6.ix.1959, Székessy & Yang leg., 1 male (HNHM); **Shaanxi province:** Qingling Shan mts, Foping Nature Reserve, 33°51′N 107°57′E, 1600 m, 20.iv.-11.v.1999, V. Siniaev & A. Plutenko leg., 9 spec. (JSCC); Qingling Shan mts, Taibai Shan range, Houzhenzi env., 33°51′N 107°49′E, 1600 m, 1.-2.vii.1999, V. Siniaev & A. Plutenko leg., 48 spec. (JSCC); same locality, 11.-12.viii.1999, V. Siniaev & A. Plutenko leg., 2 females (JSCC); same locality, 33°53′N 107°49′E, 1900 m, 1.-11.viii.1999, V. Siniaev & A. Plutenko leg., 6 females (JSCC); Qingling mts, 12 km SW Xunyangba [ca. 33°30′N 108°28′E], 2000-2250 m, 14.-18.vi.2000, C. Holzschuh leg., 1 male (JSCC); **Sichuan province:** Giufu Shan [= Jinfo Shan mts, ca. 29°01′N 107°14′E], without date and collector's name, ex coll. Reitter, 38 spec. (NHMW, NMPC); same locality, 1500-2000 m, without date and collector's name, 1 female (NMPC); Tatsienlu [= Kangding, ca. 30°05′N 102°04′E], without date and collector's name, ex coll. Reitter, 2 males, 2 females (NMPC); same locality, without date and collector's name, ex coll. Reitter, 1 female (ZFMK); Daxue Shan mts, Gongga Shan mt., Moxi, 29°39′N 102°06′E, 1700 m, without date, V. Siniaev & A. Plutenko leg., 1 male, 1 female (JSCC); same locality, NW Moxi env., 29°41′N 101°58′E, 2850 m, without date, V. Siniaev & A. Plutenko leg., 2 females (JSCC); Jiuzhaigou [ca. 33°20′N 104°00′E], 2000 m, 16.vi.1992, M. Bok leg., 1 male (SMNS); Gongga Shan mt., Moxi, 29°13′N 102°10′E, 1300 m, 3.vii.1996, Farkač, Kabátek & Smetana leg., 1 male (JSCC); 20 km N Sabde, 29°35′N 101°23′E, 3200 m, 10.-16.vii.1998, J. Schneider leg., mixed primary forest near a river, under a dog carrion, 10 females (JSCC); valley 39 km SSW Zamtang [= Gamda], 31°54′N 100°58′E, 3700 m, 16.-19.vii.2001, J. Rejsek leg., 2 females (JSCC).

Widely distributed across Palaearctic region (Portevin 1926, Nikolaev & Kozminykh 2002); from China reported from Hubei, Sichuan, Yunnan and Zhejiang provinces (Zhang 1992a, 1993b, 1995, 1997, Růžička & Schneider 1996). First records from Beijing municipality and Fujian, Gansu, Heilongjiang, Jiangxi and Shaanxi provinces.

Necrodes nigricornis Harold, 1875

China, Heilongjiang province: Chitaizski-Sterana [= Chinese side of Amur river, between ca. 49°24′N 129°32′E and 48°23′N 134°25′E], without date, E. v. Bodemeyer leg., 1 female (NHMW); **Hubei province:** Wu Shan mts [ca. 31°07′N 110°11′E], without date and collector's name, 1 male, 2 females (ZMHB).

Known from northern and eastern India, Bangladesh, Vietnam, Korea, Taiwan and Japan (Portevin 1914, 1926; Cho & Lee 1992; Růžička et al. 2000; Růžička & Schneider 2002). Mentioned without more details from "northern China" by Portevin (1926); from Chongqing municipality and Sichuan province reported by Zhang (1997) and Růžička et al. (2000). First records from Heilongjiang and Hubei provinces.

Phosphuga atrata atrata (Linnaeus, 1758)

China, Beijing municipality: Dongling Shan mts, Xiaolongmen, Liu Lang Yu, 39°57′N 115°43′E, 1400 m, 15.vi.2001, J. Cooter leg., dung, 2 spec. (JCOC); **Gansu province:** Dengkagoin [ca. 34°03′N 103°21′E], 9.vi.1996, Beneš leg., 3 spec. (NMPC); **Hebei province:** road Chengde – Chifeng, pass 1600 m, 41.6°N 118.2°E, 1.-2.vi.2000, J. Turna & Z. Jindra leg., 10 spec. (JSCC); same locality, 14.-16.vi.2001, J. Turna leg., 3 spec. (JSCC); Dongling Shan mts, 100 km W Beijing [ca. 39°48′N 115°29′E], 1500 m, 12.-15.vi.2000, Z. Jindra leg., 1 spec. (JSCC); **Heilongjiang province:** Charbin [= Harbin, ca. 45°45′N 136°38′E], without date and collector's name, ex coll. W. H. Muche, 2 spec. (SMTD); **Nei Mongol autonomous region:** Inn Shan mts [= In Shan ridge, part of Yin Shan mts, N of Baotou, ca. 40°51′N 110°00′E], without date and collector's name, ex coll. Noesske, 3 spec. (SMTD); **Qinghai province:** Kuku-nor [= Qinghai lake, ca. 37°00′N 100°00′E], 3200 m, 1898, F. Hauser leg., 8 spec. (JRUC, MNHN, ZMHB); **Shaanxi province:** Qingling Shan mts, 12 km SW Xunyangba [ca. 33°30′N 108°28′E], 2000-2250 m, 14.-18.vi.2000, C. Holzschuh leg., 1 spec. (JSCC); **Sichuan province:** Sunpanting [= Songpan, ca. 32°40′N 103°30′E], 1925, Stötzner Expedition, 6 spec. (SMTD); Songpan env. [ca. 32°38′N 103°35′E], 30.v.-1.vi.1995, V. Beneš leg., 2 spec. (JSCC); Songpan [ca. 32°38′N 103°35′E], 17.-18.vi.1996, Beneš & Štěpař leg., 4 spec. (JSCC, NMPC); Zoige [ca. 33°35′N 102°58′E], 13.vi.1996, Beneš leg., 2 spec. (NMPC); Zhangla [ca. 32°48′N 103°40′E], 14.-17.vi.1996, Beneš & Štěpař leg., 1 spec. (JSCC); **Xinjiang Uygur autonomous region:** Kuldja [= Yining, ca. 43°55′N 081°18′E], without date and collector's name, 4 spec. (HNHM); Juldus [= Kaidu He river valley], Kuldja [= Yining, ca. 43°55′N 081°18′E], without date and collector's name, ex coll. Noesske, 2 spec. (SMTD); Tian Shan mts, Musart [= Muzart pass, ca. 42°21′N 080°47′E], without date and collector's name, 1 spec. (ZMHB); Turfan [= Turpan, ca. 42°59′N 089°10′E], without date and collector's name, 14 spec. (HNHM); 61 km of Fukang, 42 km of Heaven Lake, Bogda Shan mts [ca. 43°55′N 088°24′E], 14.vii.1991, M. Snížek leg., 1 spec. (JRUC); 40 km ENE Qingshuihezi, SW slope of Boro Horo Shan mts [ca. 44°19′N 081°11′E], 2000-3000 m, 24.-26.vii.1993, J. Turna leg., 1 spec. (JSCC).

Widely distributed across Palaearctic region (Nikolaev & Kozminykh 2002). From "China" mentioned without more details by Kôno (1929) and Lafer (1989); from Gansu and Sichuan

provinces reported by Růžička & Schneider (1996). First record from Beijing municipality, Nei Mongol and Xinjiang Uygur autonomous regions, and Hebei, Heilongjiang, Qinghai and Shaanxi provinces.

Silpha businskyorum Háva, Schneider et Růžička, 1999

China, Shaanxi province: Qingling Shan mts, road Baoji – Taibai vill., pass 40 km S Baoji [ca. 34°06′N 107°18′E], 21.-23.vi.1998, Z. Jindra leg., 1 female (JSCC); Taibai Shan mts [ca. 33°51′N 107°49′E] above Houshenzi [= Houzhenzi], 1300-1700 m, 9.vi.-3.vii.1998, P. Jäger & J. Martens leg., 1 female (SMNS); Qingling Shan mts, Foping Nature Reserve, 33°51′N 107°57′E, 1600 m, 8.iv.1999, V. Siniaev & A. Plutenko leg., 1 female (JMAC); Qingling Shan mts, Houzhenzi env. [ca. 33°54′N 107°47′E], 1600 m, vi.1999, M. Häckel leg., 6 males, 6 females (JHAC); Qingling Shan mts, Taibaishan range, Houzhenzi env., 33°53′N 107°49′E, 1900 m, 1.-11.viii.1999, V. Siniaev & A. Plutenko leg., 9 spec. (JSCC); Qingling Shan mts, 12 km SW Xunyangba [ca. 33°30′N 108°28′E], 2000-2250 m, 14.-18.vi.2000, I. H. Marshal leg., more than 100 spec. (JSCC).

Further records of this recently described species (Háva et al. 1999); so far known only from China: Shaanxi province.

Silpha carinata Herbst, 1783

China, Xinjiang Uygur autonomous region: Borochoro-Gebirge [= Boro Horo Shan mts, ca. 44°00′N 083°00′E], vi.1905, Hauser leg., 1 male, 1 female (NHMW).

Widely distributed across western part of Palaearctic region, known from Europe to Central Asia and Russian Far East (Reitter 1901, Portevin 1926, Nikolaev & Kozminykh 2002). From "western China" mentioned without more details by Nikolaev & Kozminykh (2002). First record from Xinjiang Uygur autonomous region.

Silpha obscura obscura Linnaeus, 1758

China, Xinjiang Uygur autonomous region: Juldus [= Kaidu He river valley], Kuldja [= Yining, ca. 43°55′N 081°18′E], without date and collector's name, ex coll. Noesske, 2 males (SMTD); same locality, without date and collector's name, ex coll. W. H. Muche, 1 male, 1 female (SMTD); Kuldja [= Yining, ca. 43°55′N 081°18′E], without date and collector's name, 2 females (HNHM); Kuldscha [= Yining, ca. 43°55′N 081°18′E], without date and collector's name, 3 males, 3 females (ZMHB); Turfan [= Turpan, ca. 42°59′N 089°10′E], without date and collector's name, 9 males, 3 females (HNHM); Urumqi [= Ürümqi, ca. 43°47′N 087°35′E], 22.vi.1993, R. Predel leg., 1 male (SMNS); 115 km E Urumqi [= Ürümqi], 10 km N Tianchi, NW slope of Bogda Shan mts [ca. 43°49′N 089°01′E], 1500-2000 m, 18.-19.v.1993, J. Turna leg., 1 male (JSCC).

Widely distributed across western part of Palaearctic region to eastern Siberia and Mongolia (Schawaller 1980, Nikolaev & Kozminykh 2002); in China known only from Xinjiang Uygur autonomous region (Růžička & Schneider 1996).

Silpha perforata Gebler, 1832

China, Beijing municipality: Dongling mts, Xiaolongmen, 39°57′N 115°43′E, 17.vi.2001, J. Cooter leg., rotting kitchen waste, 1 male (JCOC); **Hebei province:** Kalgan [= Zhangjiakou, ca. 40°49′N 114°53′E], without date and collector's name, 22 spec. (NHMW, ZMHB); same

locality, without date and collector's name, ex coll. W. H. Muche, 8 spec. (SMTD); Shi-wan-tsze [= Xiwanzi, ca. 41°00′N 115°15′E], 1167 m, without date and collector's name, 1 female (ZMHB); Shi-wan-tsze [= Xiwanzi, ca. 41°00′N 115°15′E], Hiu-mou kiang-keou [not located], without date and collector's name, 1 male (ZMHB); road Chengde – Chifeng, pass 1600 m, 41.6°N 118.2°E, 1.-2.vi.2000, J. Turna leg., 3 males (JSCC); Fengning env. [= Dagezhen], NW slope of Yunwu Shan mts, 41.2°N 116.6°E, 1200 m, 3.vi.2000, J. Turna leg., 2 males (JSCC); **Heilongjiang province:** Chitaizski-Sterana [= Chinese side of Amur river, between ca. 49°24′N 129°32′E and 48°23′N 134°25′E], without date, E. v. Bodemeyer leg., 3 males, 2 females (NMPC, ZMHB); Charbin [= Harbin, ca. 45°45′N 136°38′E], without date and collector's name, ex coll. W. H. Muche, 5 spec. (SMTD); **Nei Mongol autonomous region:** Inn Shan mts [= In Shan ridge, part of Yin Shan mts, N of Baotou, ca. 40°51′N 110°00′E], without date and collector's name, 1 male (MNHN); same locality, without date and collector's name, ex coll. W. H. Muche, 34 spec. (SMTD); Jnn Shan mts [= In Shan ridge, part of Yin Shan mts, N of Baotou, ca. 40°51′N 110°00′E], 980-2100 m, without date and collector's name, 2 males, 2 females (ZMHB); **Shanxi province:** Taihang Shan mts, 20 km S Wangshuangbu [= Wangzhuangbu, ca. 39°15′N 113°54′E], 1200 m, 23.-26.vii.1998, Bolm leg., 1 female (JSCC); Wutai Shan mts [ca. 39°02′N 113°36′E], 4.-7.vii.2000, E. Kučera leg., 2 females (JSCC); Wutai Shan mts, 39°02′N 113°36′E, 1900 m, 27.vi.2001, P. Sekerka leg., 1 male (ZZNC).

Widely distributed across eastern part of Palaearctic region, known from Mongolia and Eastern Siberia to Korea and Japan (Cho & Lee 1995, Nikolaev & Kozminykh 2002); precise data from China reported only from Jiangxi province (Portevin 1926). First records from Beijing municipality, Nei Mongol autonomous region, and Hebei, Heilongjiang and Shanxi provinces.

Silpha schawalleri Háva, Schneider et Růžička, 1999

China, Sichuan province: Wenchuan env. [= Weizhou, ca. 31°29′N 103°35′E], 2000 m, v.1999, M. Häckel leg., 1 female (JHAC).

Recently described from a single locality in Sichuan province (Háva et al. 1999). Weizhou is located ca. 150 km south of the type locality.

Silpha qinlinga Schawaller, 1996

China, Hubei province: Daba Shan mts, pass E of Mt. Da Shennongjia, 12 km NW Muyuping, 31°30′N 110°21′E, 2050 m, 19.-22.vii.2001, A. Smetana leg., pitfall trap, 15 specimens (JSCC); same locality, 1950 m, 16.-22.vii.2001, A. Smetana leg., pitfall trap, more than 200 spec. (JRUC, JSCC); same locality, 1950 m, 16.-22.vii.2001, dry creek valley and mixed deciduous forest, D. Wrase leg., 15 spec. (DWWC, JRUC); same locality, 1950 m, 16.-22.vii.2001, dry creek valley and mixed deciduous forest, pitfall traps with vinegar, M. Schülke leg., 26 spec. (JRUC, MSCC); **Shaanxi province:** Qingling Shan mts, S slope, S and W of Xunyangba [ca. 33°30′N 108°28′E], 1400-2100 m, 5-9.vi.1995, L. & R. Businský leg., 1 male, 1 female (JHAC); Qingling Shan mts, track Hou Zen Zi vill. [= Houzhenzi] to Taibai Shan mt. [ca. 33°54′N 107°47′E], 2500 m, 27.-29.vi.1998, mixed forest, O. Šafránek & M. Trýzna leg., 2 males (MTRC); Qingling Shan mts, Foping Nature Reserve, 33°51′N 107°57′E, 1600 m, 8.iv.1999, V. Siniaev & A. Plutenko leg., 1 female (JMAC); same locality, 15.viii.-15.x.1999, V. Siniaev & A. Plutenko leg., 1 male, 1 female

(JSCC); Qingling Shan mts, 105 km SW Xi'an, pass on road Zhouzhi – Foping [= Yuanjiazhuang], N slope, 33°44′N 107°59′E, 1990 m, 2.-4.vii.2001, D. Wrase leg., small creek valley, mixed deciduous forest, bamboo and small meadows, 1 male, 3 females (JRUC, MSCC); Qingling Shan mts, 45 km SSW Xi'an, mountain range W pass on road Xi'an – Shagoujie, N slope, 33°52′N 108°46′E, 2675 m, 25.vii.2001, M. Schülke leg., *Abies*, *Betula*, *Larix*, *Rhododendron* forest and subalpine meadows, sifted, 2 females (JRUC, MSCC).

Recently described from Shaanxi province (Schawaller 1996a); first record from Hubei province.

Thanatophilus dentigerus Semenov, 1891

China, Qinghai province: Ertala env. [ca. 36°06′N 100°27′E], 3800 m, 20.-21.vi.1992, J. Kaláb leg., 2 males, 1 female (MTRC); Qingshuihe [ca. 33°48′N 097°07′E], 4200 m, 1.-5.vii.1992, without collector's name, 2 males, 2 females (MTRC); **Sichuan province:** Tatsienlu [= Kangding, ca. 30°05′N 102°04′E], without date and collector's name, ex coll. Reitter, 1 female (NMPC); 70 km NNW Barkam [ca. 32°23′N 101°58′E], mts 3000-4000 m, 22.vii.1995, J. Rejsek leg., 1 male (SMNS); Jiuzhaigou env. [ca. 33°20′N 104°00′E], 2400 m, 29.vi.1996, Heinz leg., 1 female (SMNS); 20 km N Sabde, 29°35′N 101°23′E, 3200 m, 10.-16.vii.1998, J. Schneider leg., 119 spec. (JSCC); Temple 35 km N Sabde, 29°40′N 101°20′E, 3500-4300 m, 13.-14.vii.1998, D. Král leg., 27 males, 32 females (DKRC, JRUC); Kangding County, Gongga Shan mts – NW side of central part, 29°38′-46′N 101°42′-45′E, 3800-4400 m, 10.-12.vi.2001, L. & R. Businský leg., 2 females (JSCC); Kanding County – Yulong County border, Mugang Ling mts – the central part, 29°13′-24′N 101°39′-45′E, 4000-4800 m, 23.-30.vi.2001, L. & R. Businský leg., 6 males, 4 females (JSCC); valley 15 km SW Zamtang [= Gamda], 32°11′N 100°51′E, 3700 m, 6.vii.2001, coniferous forest / clearings, J. Kaláb leg., 1 female (JSCC); valley 39 km SSW Zamtang [= Gamda], 31°54′N 100°58′E, 3700 m, 16.-19.vii.2001, J. Rejsek leg., 4 males, 8 females (JSCC); NW Zogqen, 32°14′N 098°49′E, 3800 m, 22.vii.2001, J. Rejsek leg., grassland, 2 males, 2 females (JSCC); 15 km NE Serxü, 33°05′N 098°15′E, 4000 m, 23.-24.vii.2001, J. Rejsek leg., grassland, 1 female (JSCC); **Xizang autonomous region:** Lhatse [=Quxar, ca. 29°05′N 087°39′E], 4000-4100 m, 13.vii.1996, Heinz leg., 2 males, 2 females (SMNS); N Yanjing, 28°51′N 098°41′E, 2600 m, 24.vi.1997, M. Trýzna & O. Šafránek leg., 16 males, 14 females (MTRC); road Markam [= Gartog] – Zogang, 20 km NE Zogang, Tuntala Shan pass, 29°43′N 098°02′E, 5000 m, 30.vi.-2.vii.1997, J. Turna leg., alpine meadow, 1 male, 2 females (MTRC); Bamda env., 30°15′N 097°16′E, 4400 m, 5.vii.1997, grassland, J. Turna leg., 1 male (JSCC); **Yunnan province:** SE Dequen [= Deqen], 28°25′N 099°00′E, 4100-4600 m, 27.-30.vi.1992, L. & R. Businský leg., 1 female (NHMW); road Dequen [= Deqen] – Yanjing, 10 km W Dequen [= Deqen], 28°28′N 098°53′E, 3600 m, 21.-22.vi.1997, J. Turna leg., 1 female (JSCC); road Dequen [= Deqen] – Yanjing, 30 km W Dequen [= Deqen], 28°32′N 098°49′E, ca. 3000 m, 23.vi.1997, M. Trýzna & O. Šafránek leg., 1 male, 1 female (MTRC).

Known from Nepal, India (Himachal Pradesh, Uttar Pradesh), and Pakistan (Schawaller 1981, 1982; Růžička & Schneider 2002); Nikolaev & Kozminykh (2002) mentioned one tentatively determined specimen from Tajikistan. From China reported from Qinghai, Sichuan and Yunnan provinces (Semenov 1891, Schawaller 1982, Růžička & Schneider 1996). The previous record from "Tibet" ("montes Amdo", type locality) belongs to the nowadays territory of Qinghai province (Schütze & Kleinfeld 1997). First records from Xizang autonomous region.

Thanatophilus latericarinatus Motschulsky, 1860

China, Heilongjiang province: Harbin [ca. 45°45′N 136°38′E], 6.v.1965, P. M. Hammond leg., 5 males, 3 females (BMNH); **Qinghai province:** Koko Nor lake [= Qinghai lake], Heimahe [ca. 36°44′N 099°46′E], 3200-3250 m, 9.-11.vi.1996, J. Martens leg., 2 males, 2 females (SMNS); Ertala env. [ca. 36°06′N 100°27′E], 3800 m, 20.-21.vi.1992, J. Kaláb leg., 2 males, 1 female (JSCC).

Known from Altai and Mongolia to Amur region (Lafer 1989, Schawaller 1981, Nikolaev & Kozminykh 2002); from China previously reported only from Qinghai province (Schawaller 1981). First record from Heilongjiang province.

Thanatophilus pilosus Jakovlev, 1890

China, Sichuan province: valley 39 km SSW Zamtang [= Gamda], 31°54′N 100°58′E, 3700 m, 16.-19.vii.2001, J. Rejsek leg., 1 male, 2 females (JSCC); **Xizang autonomous region:** Tsangpo valley [valley of Brahmaputra river], Gyala [= Gya La pass, ca. 28°45′N 084°28′E], 9000 ft, 20.vii.1924, F. K. Ward leg., 1 spec. (BMNH); NW Rawu, 29°32′N 096°45′E, 4000-4700 m, 9.-12.vii.1992, L. & R. Businský leg., 1 female (NHMW); Bamda env., 30°15′N 097°16′E, 4400 m, 5.vii.1997, J. Turna leg., grassland, 2 males, 2 females (JSCC); same locality, 4400 m, 5.vii.1997, M. Trýzna & O. Šafránek leg., 3 males, 2 females (JRUC, MTRC); 5 km E Markam [= Gartog], Zhong La Shan pass [ca. 29°42′N 098°38′E], ca. 4100 m, 3.-6.viii.1998, O. Šafránek & M. Trýzna leg., 1 male (MTRC).

Endemic Chinese species; known from Xizang autonomous region and from Qinghai and Sichuan provinces (Schawaller 1981, Růžička & Schneider 1996).

Thanatophilus porrectus Semenov, 1891

China, Xinjiang Uygur autonomous region: Aksu [ca. 41°10′N 080°15′E], without date, ex coll. A. Grouvelle, 1 female (MNHN); Tian Shan mts, Musart [= Muzart pass, ca. 42°21′N 080°47′E], without date and collector's name, 1 male (SMNS); central northern Karakorum mts, Muztagh valley, Sughet Jangal above K2 – N valley junction [ca. 35°55′N 076°27′E], 1980 m, 18.x.1986, B. Dickoré leg., subalpine desert, at dead owl, 3 spec. (SMNS).

Widely distributed from Armenia, Afghanistan, Pakistan, and Central Asia to Russian Far East (Schawaller 1981, Nikolaev & Kozminykh 2002, Růžička & Schneider 2002). From China reported from Xinjiang Uygur autonomous region and Qinghai province (Schawaller 1981, Růžička & Schneider 1996, Nikolaev & Kozminykh 2002).

Thanatophilus roborowskyi Jakovlev, 1887

China, Gansu province: Labang [= Labrang] env., valley E of Ponggartang, 35°14′N 102°55′E, 2700 m, 9.vii.1995, M. Janata leg., coniferous forest, 2 females (JSCC); Xiahe [= Labrang, ca. 35°18′N 102°30′E], 3300-3700 m, 1.-15.vi.1998, V. Major leg., 16 spec. (JHAC, JSCC); **Qinghai province:** road Jushu [= Yushu] – Toramarkok [= Toramarkog], 20 km S Jushu [= Yushu, ca. 32°51′N 097°02′E], 3500 m, 22.vi.1995, J. Rejsek leg., 1 female (JSCC); Koko Nor lake [= Qinghai lake], Heimahe [ca. 36°44′N 099°46′E], 3200-3250 m, 9.-11.vi.1996, J. Martens leg., 1 male, 1 female (SMNS); **Sichuan province:** Tatsienlu [= Kangding, ca. 30°05′N 102°04′E], without date and collector's name, ex coll. Reitter, 1 male (NMPC); Litang env. [ca. 30°00′N 100°15′E], 4700 m, 22.-24.vii.1994, V. Beneš leg., 11 males, 10 females (JSCC, MPEC); pass 15 km E Xiwu, 33°09′N 097°30′E, 4000 m, 14.vii.1995, J. Turna leg., alpine meadow, 1 male (JSCC); 25 km NW

Serxü, Seki Semie, 33°07′N 097°54′E, 3600 m, 15.vii.1995, J. Turna leg., 1 male (JSCC); pass 20 km S Xuagca [= Quagca], 32°30′N 098°25′E, 4100 m, 17.-18.vii.1995, J. Turna leg., alpine meadow, 1 male, 2 females (JSCC); 20 km N Sabde, 29°35′N 101°23′E, 3200 m, 10.-16.vii.1998, J. Schneider leg., mixed primary forest near a river, under a dog carrion, 6 spec. (JSCC); Temple 35 km N Sabde, 29°40′N 101°20′E, 3500-4300 m, 13.-14.vii.1998, D. Král leg., 6 male, 3 female (DKRC, JRUC, JSCC); Kangding County, Gongga Shan mts – NW side of central part, 29°38′-46′N 101°42′-45′E, 3800-4400 m, 10.-12.vi.2001, L. & R. Businský leg., 3 males, 1 female (JSCC); **Xizang autonomous region:** Chumbi valley, Pharizong [= Pagri, ca. 27°43′N 089°09′E], without date, ex coll. M. Pic and G. Portevin, 1 male (MNHN); NW Rawu, 29°32′N 096°45′E, 4000-4700 m, 9.-12.vii.1992, L. & R. Businský leg., 2 males, 2 females (NHMW); N Rawu, 29°33′N 096°47′E, 4200 m, 11.vi.1996, L. & R. Businský leg., 1 male (JSCC); road Markam [= Gartog] – Zogang, 20 km NE Zogang, Tuntala Shan pass, 29°43′N 98°02′E, 5000 m, 30.vi.-2.vii.1997, J. Turna leg., alpine meadow, 5 spec. (JSCC); Bamda env., 30°15′N 97°16′E, 4400 m, 5.vii.1997, J. Turna leg., grassland, 23 spec. (JSCC); same locality, 4400 m, 5.vii.1997, M. Trýzna & O. Šafránek leg., 15 males, 17 females (MTRC).

Endemic Chinese species, described from Bourkhane-Boudda mts in "eastern Tibet" (nowadays Burhan Budai Shan mts in Qinghai province, see Schütze & Kleinfeld (1997)). From China previously reported from Gansu, Qinghai and Sichuan provinces (Schawaller 1981, Růžička & Schneider 1996). First records from Xizang autonomous region.

Thanatophilus rugosus Linnaeus, 1758

China, Beijing municipality: Dongling Shan mts, Xiaolongmen, 39°57′N 115°43′E, 17.vi.2001, J. Cooter leg., rotting kitchen waste, 1 male, 3 females (JCOC, JRUC); **Sichuan province:** Sabde env. [ca. 29°28′N 101°19′E], 3000 m, 1.-3.viii.1992, J. Schneider leg., 1 female (JSCC); Litang [ca. 30°00′N 100°15′E], 4700 m, 22.-24.vii.1994, Beneš leg., 1 male (MPEC); 70 km NNW Barkam [ca. 32°23′N 101°58′E], 22.vii.1995, J. Rejsek leg., 1 male (SMNS); valley SW Barkam, 31°53′N 102°12′E, 3000-3800 m, 22.vii.1995, M. Janata leg., mixed / coniferous forest, 2 spec. (JSCC); 100 km NW Kangding, Dawu near Tagu [ca. 30°59′N 101°08′E], 3500 m, 21.-25.viii.1995, J. Schneider leg., 3 males, 1 female (JSCC); road Luhuo – Sertar, 40 km N Luhuo, 31°41′N 100°44′E, 4000 m, 23.vii.1997, M. Trýzna & O. Šafránek leg., *Thuja* and *Picea* forest, 2 males, 2 females (MTRC); 20 km N Sabde, 29°35′N 101°23′E, 3200 m, 10.-16.vii.1998, J. Schneider leg., 17 spec. (JSCC); road Qianning – Danba, pass 15 km NE Qianning, 30°35′N 101°41′E, 11.vii.1998, J. Turna leg., alpine meadows, 1 female (JSCC); Temple 35 km N Sabde, 29°40′N 101°20′E, 3500-4300 m, 13.-14.vii.1998, D. Král leg., 3 males, 6 females (DKRC, JRUC); Kangding County, Gongga Shan mts – NW side of central part, 29°38′-46′N 101°42′-45′E, 3800-4400 m, 10.-12.vi.2001, L. & R. Businský leg., 3 males, 3 females (JSCC); valley 15 km SW Zamtang [= Gamda], 32°11′N 100°51′E, 3700 m, 6.vii.2001, coniferous forest / clearings, J. Kaláb leg., 1 male, 1 female (JSCC); pass 35 km NE Luhuo, 31°43′N 100°44′E, 4000 m, 2.vii.2001, J. Rejsek leg., coniferous forest, 1 male, 1 female (JSCC); valley 39 km SSW Zamtang [= Gamda], 31°54′N 100°58′E, 3700 m, 16.-19.vii.2001, J. Rejsek leg., 4 male, 7 females (JSCC); NW Zogqen, 32°14′N 98°49′E, 3800 m, 22.vii.2001, J. Rejsek leg., grassland, 1 male (JSCC); 15 km NW Aba, 33°00′N 101°36′E, 3500 m, 29.-30.vii.2001, J. Rejsek leg., 1 male (JSCC); **Shaanxi province:** Qingling Shan mts, 120 km E Xi'an, Hua Shan mt. [ca. 34°25′N 110°06′E], 14.vii.1990, R. Dunda leg., 1 female (JSCC); same locality, 3.-4.vi.1992, J. Turna leg., 1 male (JSCC); Qingling Shan mts, 118 km E Xian, Hua Shan

mt., S top, 34°25′N 110°06′E, 1950-2000 m, mixed forest, 19.viii.1995, D. Wrase leg., 2 males, 1 female (JSCC); Qingling Shan mts, 31 km E Xian, Li Shan mt. near Lintong, 34°20′N 109°16′E, 1000-1200 m, 23.-25.viii.1995, A. Pütz leg., dry meadows and forest, sifted, 1 female (JSCC); Qingling Shan mts, Foping Nature Reserve, 33°51′N 107°57′E, 1600 m, 20.iv.-11.v.1999, V. Siniaev & A. Plutenko leg., 7 spec. (JSCC); Qingling Shan mts, Taibai Shan range, Houzhenzi env., 33°51′N 107°49′E, 1600 m, 11.-12.viii.1999, V. Siniaev & A. Plutenko leg., 4 males, 4 females (JSCC); **Sichuan province:** Sunpanting [= Songpan, ca. 32°40′N 103°30′E], 1925, Stötzner Expedition, 1 female (SMTD); **Qinghai province:** Laji Shan range, Laji Shan pass [ca. 36°19′N 101°42′E], 3900 m, 5.vii.1997, A. Gorodinski leg., 1 spec. (MULC); **Xinjiang Uygur autonomous region:** Juldus [= Kaidu He river valley], Kuldja [= Yining, ca. 43°55′N 081°18′E], without date and collector's name, ex coll. Noesske, 1 male, 1 female (SMTD); same locality, without date and collector's name, ex coll. W. H. Muche, 1 male (SMTD); Kuldscha [= Yining, ca. 43°55′N 081°18′E], without date and collector's name, 2 males (HNHM); Turfan [= Turpan, ca. 42°59′N 089°10′E], without date and collector's name, 3 males, 3 females (HNHM); **Yunnan province:** Dali, Er Hai lake, 24°42′N 100°12′E, 1950 m, vii.1994, V. Kubáň leg., 3 spec. (JSCC); Qiaojia county, Yao Shan mts, 27°11′-16′N 103°01′-03′E, 2400-3900 m, 19.-30.vii.1998, L. & R. Businský leg., 2 males, 1 female (JSCC).

Widely distributed across Palaearctic region (Schawaller 1981, Nikolaev & Kozminykh 2002); from China reported from Xinjiang Uygur autonomous region and Gansu, Qinghai, Sichuan and Yunnan provinces (Schawaller 1981, Růžička & Schneider 1996). First records from Beijing municipality and from Shaanxi province.

Thanatophilus sinuatus (Fabricius, 1775)

China, Beijing municipality: Dongling mts, Xiaolongmen, 39°57′N 115°43′E, 17.vi.2001, J. Cooter leg., rotting kitchen waste, 1 female (JCOC); **Shaanxi province:** Qingling Shan mts, 31 km E Xian, Li Shan mt. near Lintong, 34°20′N 109°16′E, 1000-1200 m, 23.-25.viii.1995, D. Wrase & A. Pütz leg., dry mountain meadow and forest, 2 males, 3 females (JSCC); 25 km SE Pingyao, Chao Shan mts, 37.1°N 112.4°E, 4.-5.vii.2001, J. Turna leg., 4 males, 1 female (JSCC).

Widely distributed across Palaearctic region (Schawaller 1981, Nikolaev & Kozminykh 2002); from China previously reported from Xinjiang Uygur and Nei Mongol autonomous regions and Hubei and Sichuan provinces (Schawaller 1981, Zhang 1992, Růžička & Schneider 1996). First records from Beijing municipality and from Shaanxi province.

Thanatophilus terminatus (Hummel, 1825)

China, Xinjiang Uygur autonomous region: Tian Shan mts, Musart [= Muzart pass, ca. 42°21′N 080°47′E], without date, ex coll. J. Fodor, 1 male (HNHM).

Known from Turkey and southern Ukraine to eastern Siberia (Nikolaev & Kozminykh 2002); from China reported only from Xinjiang Uygur autonomous region (Schawaller 1981).

Nicrophorinae

Nicrophorus antennatus (Reitter, 1884)

China, Xinjiang Uygur autonomous region: Turfan [= Turpan, ca. 42°59′N 089°10′E], without date and collector's name, DSS det., 1 male (HNHM); Tian Shan mts, Musart [= Muzart pass, ca. 42°21′N 080°47′E], without date and collector's name, DSS det., 1 male

(NHMW); same locality, 1.-30.vi.1894, Hauser leg., DSS det., 1 female (ZMAN); same locality, 1.vi.-31.xii.1894, Hauser leg., DSS det., 2 males, 2 females (HNHM, FMNH, NHMW, SMFD).

Widely distributed across western part of Palaearctic region, reaching Central Asia and southern part of western Siberia (Nikolaev & Kozminykh 2002, Sikes et al. 2002). From China reported from Heilongjiang province (Sikes et al. 2002); mentioned also from "Turkestan" without more details by Portevin (1926). First record from Xinjiang Uygur autonomous region.

Nicrophorus argutor Jakovlev, 1890

China, Gansu province: Lanchowfu [= Lanzhou, ca. 36°07′N 103°36′E], without date and collector's name, DSS det., 2 males, 2 females (HNHM, SMTD); Minshan mts, between Min and Tao [= Tao He river] [ca. 34°30′N 103°20′E], 1.vi.1948-31.vii.1949, Eichinger leg., DSS det., 2 females (ZSMC); **Nei Mongol autonomous region:** Jnn Shan mts [= In Shan ridge, part of Yin Shan mts, N of Baotou, ca. 40°51′N 110°00′E], without date and collector's name, DSS det., 1 male (ZMHB); **Xizang autonomous region:** Khamba Jong [= Khampa Dzong, ca. 28°18′N 088°32′E], 15000-16000', 15.-30.vii.1903, H. J. Walton leg., DSS det., 2 males (BMNH, NMPC); Kampa Dzong [= Khampa Dzong, ca. 28°18′N 088°32′E], 15000', 17.vii.1924, R. W. G. Hingston leg., DSS det., 1 male (BMNH); Tringri [= Tingri] plateau, 28°34′N 86°52′E, 440 m, 3.-5.viii.1998, Jäger leg., DSS det., 1 male (SMNS).

Known from eastern Kazakhstan, Siberia and Mongolia (Nikolaev & Kozminykh 2002, Sikes et al. 2002); from China reported from Beijing municipality, Gansu province and Xizang autonomous region (Sikes et al. 2002). The record from Beijing municipality: Qing Long Qiao [= Qinglongqiao, ca. 40°20′N 115°59′E] was erroneously reported as being from Hebei province (Růžička & Schneider 1996: 81). First record from Nei Mongol autonomous region.

Nicrophorus basalis Faldermann, 1835

China, Beijing municipality: Pékin [= Beijing, ca. 39°53′N 116°20′E], without date and collector's name, DSS det., 6 males, 7 females (MNHN); 50 km W Beijing, Xiang Shan mts [ca. 39°59′N 116°12′E], 4.-8.ix.1990, R. Dong leg., DSS det., 10 males, 18 females (SBPC); **Heilongjiang province:** Harbin [ca. 45°45′N 136°38′E], 5.ix.1930, v. Jetmar leg., DSS det., 1 female (ZMBH); same locality, 28.ix.1930, v. Jetmar leg., sand dunes, DSS det., 1 female (ZMBH); same locality, 161 m, 10.vi.1966, P. M. Hammond leg., 1 male (BMNH); **Jiangsu province:** Haichow, Hiu Keou [= Qingkou, ca. 34°50′N 119°07′E], 4.vi.1926, without collector's name, DSS det., 2 males (MNHN).

Known from Mongolia, Far East of Russia and Korea (Nikolaev & Kozminykh 2002, Sikes et al. 2002); from China reported from Heilongjiang and Jiangsu provinces (Sikes et al. 2002). First record from Beijing municipality.

Nicrophorus concolor Kraatz, 1877

China, Fujian province: Yun ling Shan mts, Koateng [= Huaqiao, ca. 27°40′N 117°40′E], without date and collector's name, DSS det., 5 males, 1 female (ZMHB); Foochow region [= Fuzhou] to Kuatan region [= Huaqiao], 25 m, without collector's name, DSS det., 2 males, 3 females (AMNH); Foochow [= Fuzhou, ca. 26°04′N 119°18′E], San Chiang [not located], 25 m, 1927, C. H. Pope leg., DSS det., 1 female (AMNH); Kuatun [= Huaqiao], 27°40′N 117°40′E, 2300 m, 22.vii.1938, without collector's name, 1 male (NMPC); same locality, 14.iii.1946, Tschung

Sen leg., 7 spec. (SMNS); same locality, various dates between 14.iv.1938 and 28.iv.1938, J. Klapperich leg., 4 spec. (ZFMK); same locality, various dates between 1.v.1938 and 27.v.1938, J. Klapperich leg., 26 spec. (ZFMK); same locality, various dates between 3.vi.1938 and 29.vi.1938, J. Klapperich leg., 17 spec. (ZFMK); same locality, various dates between 5.vii.1938 and 30.vii.1938, J. Klapperich leg., 119 spec. (ZFMK); same locality, various dates between 1.viii.1938 and 12.viii.1938, J. Klapperich leg., 30 spec. (ZFMK); same locality, 20.vii.1946, Tschung Sen leg., DSS det., 1 male (HNHM); same locality, 15.viii.1946, Tschung Sen leg., DSS det., 1 male, 1 female (HNHM); Wuyi Shan mts, 3 km NE Tongmu, 27.75°N 117.66°E, ca. 780 m, 7.vi.2001, J. Cooter leg., pitfall trap (fish bait), mixed forest + bamboo, 7 spec. (JCOC, JRUC); **Guangdong province:** Daqiao env., 27°54′N 113°01′E, 1000-1200 m, 1.-3.v.2002, R. Fencl leg., 2 males, 1 female (JRUC); **Guizhou province:** 20 km NW Jiangkou, Fanjing Shan mts, Kuaichang [ca. 27°52′N 108°47′E], 27.v.-3.vi.1995, E. Jendek & O. Šauša leg., DSS det., 1 male (JHAC); **Heilongjiang province:** Charbin [= Harbin, ca. 45°45′N 136°38′E], 167 m, without date and collector's name, DSS det., 1 female (SMTD); Kaolingtze [= Gaolingzi, ca. 44°52′N 128°50′E], 12.vii.1940, without collector's name, DSS det., 1 male (CASC); Gasolinzcy [= Gaolingzi, ca. 44°52′N 128°50′E], 16.vii.1949, without collector's name, DSS det., 1 female (FMNH); **Hunan province:** Hoeng-Shan [= Hengshan, ca. 27°14′N 112°51′E], 900 m, 14.-22.iv.1933, H. Höne leg., DSS det., 1 male (ZMHB); Guidong env. [ca. 26°05′N 113°56′E], 26.-31.v.1994, O. Šauša leg., 6 spec. (JHAC, MTRC); **Liaoning province:** 60-70 miles S Kirin [= Shenyang], SungariR [= probably Sungari River, not located], 23.vi.-16.vii.1913, without collector's name, DSS det., 1 male, 1 female (USNM); **Shaanxi province:** Qingling Shan mts, 31 km E Xian, Li Shan mt. near Lintong, 34°20′N 109°16′E, 1000-1200 m, 23.-25.viii.1995, A. Pütz leg., dry meadows and forest, sifted, 1 female (JSCC); Qingling Shan mts, Taibaishan range, Houzhenzi env., 33°53′N 107°49′E, 1900 m, 1.-11.viii.1999, V. Siniaev & A. Plutenko leg., 1 male, 1 female (JSCC); same locality, 33°51′N 107°49′E, 1400 m, ix.1999, local collector leg., 1 male (JSCC); **Sichuan province:** Tatsienlu [= Kangding, ca. 30°05′N 102°04′E], without date and collector's name, DSS det., 1 female (JSCC); Giufu Shan [= Jinfo Shan mts, ca. 29°01′N 107°14′E], 1500-2000 m, ex coll. E. Reitter, without date, DSS det., 3 spec. (JSCC, NMPC); Daxue Shan mts, Gongga Shan mt., Moxi, 29°39′N 102°06′E, 1700 m, without date, V. Siniaev & A. Plutenko leg., 1 male, 1 female (JSCC); Shin Kaisi, Mt. Omei [= Emei Shan mt., ca. 29°37′N 103°24′E], 1341.1 m, 6.viii.-1.ix.1929, D. C. Graham leg., DSS det., 1 male (USNM); Xichang [ca. 27°54′N 102°16′E], 18.vi.1987, T. Deuve & M. Perreau leg., 1 spec. (MPEC); Miansizhen [ca. 31°22′N 103°30′E], 24.vi.1996, V. Beneš leg., DSS det., 1 male (JSCC); Luding Shan mts, Moxi [ca. 29°40′N 102°07′E], 9.-14.vii.1999, V. Beneš leg., 2 males (JSCC); **Yunnan province:** Li-kiang [= Lijiang, ca. 26°52′N 100°14′E], 21.vii.1934, H. Höne leg., DSS det., 1 female (ZMHB); same locality, 21.vi.1935, H. Höne leg., DSS det., 1 male (ZMHB); **Zhejiang province:** Tung-lu [= Tonglu, ca. 29°48′N 119°39′E], 10.v.1936, without collector's name, DSS det., 1 female (CASC); Tienmuschan [= Tianmu Shan mts, between ca. 30°06′N 118°47′E and 30°26′N 119°39′E], without date, ex coll. Reitter, DSS det., 8 females (NMPC); West Tien Mushan [= Tianmu Shan mts, between ca. 30°06′N 118°47′E and 30°26′N 119°39′E], 1300 m, without date and collector's name, DSS det., 1 male (ZMHB).

Known from northern India, Nepal, Bhutan, Far East of Russia, Korea to Japan (Nikolaev & Kozminykh 2002, Sikes et al. 2002); from China reported from Chongqing municipality and Fujian, Guizhou, Heilongjiang, Hubei, Hunan, Sichuan, Yunnan, Tianjin and Zhejiang provinces (Fairmaire 1891; Portevin 1926; Mazokhin-Porshnyakov 1953; Zhang 1992b, 1993a,b, 1995, 1997; Růžička & Schneider 1996; Sikes et al. 2002). First records from Guangdong, Liaoning and Shaanxi provinces.

Nicrophorus confusus Portevin, 1924

China, Xinjiang Uygur autonomous region: Tian Shan mts, Musart [= Muzart pass, ca. 42°21′N 080°47′E], without date and collector's name, DSS det., 1 male, 1 female (FMNH); same locality, 1.-30.vi.1894, Hauser leg., DSS det., 1 female (SMFD); same locality, 1.vi.-31.xii.1894, Hauser leg., DSS det., 4 males, 1 female (HNHM, FMNH).

Known from southern Ukraine (Crimea), Transcaucasia, north-western Turkey and Kazakhstan (Nikolaev & Kozminykh 2002, Sikes et al. 2002); from China reported only from Xinjiang Uygur autonomous region (Portevin 1926, Sikes et al. 2002).

Nicrophorus dauricus Motschulsky, 1860

China, Beijing municipality: Pékin [= Beijing, ca. 39°53′N 116°20′E], without date and collector's name, DSS det., 2 males (MNHN); 60 km NE Beijing, Qing Long Qiao [= Qinglongqiao, ca. 40°20′N 115°59′E], 27.vii.1990, S. Bečvář leg., 1 male (JRUC); 50 km W Beijing, Xiang Shan mts [ca. 39°59′N 116°12′E], 4.-8.ix.1990, R. Dong & S. B. Peck leg., DSS det., 1 female (SBPC); 60 km NW Beijing, Badaling peak env. [ca. 40°20′N 115°59′E], 28.v.2000, Z. Jindra leg., 1 male (JSCC); **Gansu province:** Wudu [ca. 33°24′N 104°55′E], 1.-4.viii.1996, E. Kučera leg., DSS det., 2 males (JHAC); **Heilongjiang province:** Kaolingtze [= Gaolingzi, ca. 44°52′N 128°50′E], 2.vii.1940, without collector's name, DSS det., 1 male (USNM); Kaolinstze [= Gaolingzi, ca. 44°52′N 128°50′E], 12.vii.1940, without collector's name, DSS det., 1 male (CASC); **Jilin province:** Weischache [= Weishahe, ca. 42°53′N 127°14′E], 19.vii.1946, without collector's name, DSS det., 1 male (FMNH); **Sichuan province:** Wei Chow [=Weizhou, ca. 31°29′N 103°35′E], 5800-9000', 1.-4.viii.1933, D. C. Graham leg., DSS det., 1 male (USNM); **Qinghai province:** Kuku-Nor [= Qinghai lake, ca. 37°00′N 100°00′E], 3200 m, 1898, F. Hauser leg., DSS det., 1 male (NHMW).

Known from western and central Siberia, Mongolia, Russian Far East to Korea (Lafer 1989, Cho & Lee 1992, Nikolaev & Kozminykh 2002, Sikes et al. 2002). From China reported from Beijing municipality and from Gansu, Heilongjiang, Qinghai and Sichuan provinces (Růžička & Schneider 1996, Sikes et al. 2002). The specimen from Beijing municipality: Qing Long Qiao (full record repeated above) was erroneously misidentified as *N. vestigator* Herschel, 1807 by J. Růžička (Růžička & Schneider 1996: 82); moreover, it was reported as being from Hebei province. First record of *N. dauricus* from Jilin province.

Nicrophorus humator (Gleditsch, 1767)

China, Xinjiang Uygur autonomous region: Kuldja [= Yining, ca. 43°55′N 081°18′E], without date and collector's name, DSS det., 1 female (ZMHB).

Widely distributed in western part of Palaearctic region to western Siberia and Central Asia (Nikolaev & Kozminykh 2002, Sikes et al. 2002); from "Turkestan" reported by Portevin (1926). First record from China.

Nicrophorus investigator Zetterstedt, 1824

China, Hebei province: Shi-wan-tsze [= Xiwanzi, ca. 41°00′N 115°15′E], Hiu mou kiang-keou [not located], without date and collector's name, DSS det., 1 female (ZMHB); **Heilongjiang province:** Charbin [= Harbin, ca. 45°45′N 136°38′E], without date and collector's name, ex coll. W. H. Muche, 3 spec. (SMTD); **Shaanxi province:** Taibai Shan mts above Houshenzi [= Houzhenzi, ca. 33°54′N 107°47′E], 2500-2600 m, 9.vi.-3.vii.1998, P. Jäger & J. Martens leg., DSS det., 1 male, 1 female (SMNS); **Shandong province:** Tsingtau [= Qingdao, ca. 36°05′N

120°20′E], 30 m, without date and collector's name, DSS det., 1 female (SMTD); **Shanxi province:** Wutai Shan mts [ca. 39°02′N 113°36′E], 3000 m, 1.-31.vii.1987, T. Deuve & M. Perreau leg., DSS det., 1 male (MNHN); **Sichuan province:** Sanggarpar env. [ca. 32°10′N 102°35′E], without date, J. Kaláb leg., DSS det., 1 female (JSCC); Chetu pass [= Zheduo Shankou, ca. 30°04′N 101°50′E] near Tatsienlu [= Kangding], Ngan Yang Ba [not located], 13000-14500', 16.vii.1923, D. C. Graham leg., DSS det., 1 male (SBPC); Tibet border W Tatsienlu [= Kangding, ca. 30°05′N 102°04′E], 17000', 1.-15.viii.1930, D. C. Graham leg., DSS det., 1 female (USNM); Zoighe [ca. 33°35′N 102°58′E], 3000 m, 1.-31.vii.1996, P. Moretto leg., DSS det., 1 male (JSCC); Dagu, 30°15′N 101°39′E, 3700 m, 27.-30.vii.1998, A. Křížová & J. Mikšovská leg., DSS det., 1 female (JSCC); 15km NW Serxü, 33°05′N 098°15′E, 4000 m, 23.-24.vii.2001, J. Kaláb leg., DSS det., 1 male (JSCC); 40 km ESE Aba, 32°43′N 102°06′E, 3800 m, 31.vii.-1.viii.2001, J. Rejsek leg., DSS det., 1 female (JSCC); **Xinjiang Uygur autonomous region:** Tian Shan mts, Musart [= Muzart pass, ca. 42°21′N 080°47′E], without date and collector's name, DSS det., 1 female (ZMHB).

Sikes et al. (2002) treated *Nicrophorus praedator* (Reitter, 1887) as a junior subjective synonym of *N. investigator* Zetterstedt, 1824. *Nicrophorus investigator* is very widely distributed across the Holarctic region. From China it has been reported from the Heilongjiang province (Mazokhin-Porshnyakov 1953, as *N. praedator*). First records from Hebei, Shaanxi, Shandong, Shanxi and Sichuan provinces and from Xinjiang Uygur autonomous region.

Nicrophorus japonicus Harold, 1877

China, Beijing municipality: Pékin [= Beijing, ca. 39°53′N 116°20′E], without date and collector's name, DSS det., 4 males, 7 females (MNHN); Peking, Westberge [= mts W Beijing], 1925, Stötzner Expedition, DSS det., 1 female (SMTD); **Fujian province:** Koateng [= Huaqiao, ca. 27°40′N 117°40′E], without date and collector's name, DSS det., 1 male (ZMHB); **Heilongjiang province:** Charbin [= Harbin, ca. 45°45′N 136°38′E], 167 m, 1.-31.vii.1928, H. v. Jettmar leg., DSS det., 3 females (ZMHB); Harbin [ca. 45°45′N 136°38′E], 5.vi.1966, P. M. Hammond leg., 1 male (BMNH); **Hebei province:** Chang-Li county [ca. 39.7°N 119.1°E], 1.-30.vi.1974, without collector's name, DSS det., 2 spec. (NKUM); Wu-qing county [39.3°N 117°E], 3.vi.1976, without collector's name, DSS det., 1 spec. (NKUM); same locality, 1.-31.vii.1976, without collector's name, DSS det., 1 spec. (NKUM); Da-chen county [ca. 38.6°N 116.6°E], 12.vi.1976, without collector's name, DSS det., 1 spec. (NKUM); **Hubei province:** Hankou [= Wuhan, ca. 30°37′N 114°18′E], without date and collector's name, DSS det., 1 male (ZMAS); **Jilin province:** Weishaho [= Weishahe, ca. 42°53′N 127°14′E], 193 km E Harbin on Chinese Eastern Railway, 5.-10.vii.1941, V. N. Alin leg., DSS det., 1 male (CASC); **Liaoning province:** Mukden [= Shenyang, ca. 41°47′ N 123°24′E], without date and collector's name, DSS det., 9 males, 1 female (FMNH, NHMW, ZMAN); same locality, without date, Hajek leg., DSS det., 2 females (SMFD); same locality, 21.viii.1927, A. S. Loukashkin leg., DSS det., 1 female (CASC); same locality, 7.xi.1928, without collector's name, DSS det., 1 male (MVMA); **Shandong province:** Tsingtau [= Qingdao, ca. 36°05′N 120°20′E], 30 m, without date, A. P. Richter leg., DSS det., 1 female (ZMHB); same locality, 30 m, without date, S. Glaue leg., DSS det., 1 male (ZMHB); same locality, 30 m, without date and collector's name, DSS det., 1 male (SMTD); same locality, without date and collector's name, ex coll. W. Müller, 1 spec. (SMTD); **Shanghai municipality:** Shanghai [ca. 31°14′N 121°29′E], without date and collector's name, DSS det., 6 males, 8 females (MVMA, USNM); same locality, 9.vi.1924, E. Suenson leg., DSS det., 1 female (ZMUC); Shanghai [ca. 31°14′N 121°29′E], Zô Sč [not located], 6.v.1934, A. Savio leg., DSS

det., 1 male (MNHN); **Tianjin municipality:** Tianjin [ca. 39°09′N 117°12′E], 3.vi.1975, without collector's name, DSS det., 1 spec. (NKUM); same locality, 24.vi.1975, without collector's name, DSS det., 1 spec. (NKUM); same locality, 6.vii.1975, without collector's name, DSS det., 3 spec. (NKUM).

Known from Mongolia, Russian Far East, Korea and Japan (Cho & Lee 1995, Nikolaev & Kozminykh 2002, Sikes et al. 2002). From "eastern China" reported by Nikolaev & Kozminykh (2002) and from "northern and central China" by Sikes et al. (2002). First records from Beijing, Shanghai and Tianjin municipalities and from Fujian, Heilongjiang, Hebei, Hubei, Jilin, Liaoning and Shandong provinces.

Nicrophorus lunatus Fischer von Waldheim, 1842

China, Xinjiang Uygur autonomous region: Juldus [= Kaidu He river valley], Kuldja [= Yining, ca. 43°55′N 081°18′E], without date and collector's name, 1 female (MNHN); Turfan [= Turpan, ca. 42°59′N 089°10′E], without date and collector's name, 6 males (HNHM).

Known from Kyrgyzstan, Kazakhstan and Uzbekistan (Háva 1996, Nikolaev & Kozminykh 2002, Sikes et al. 2002); from China reported only from Xinjiang Uygur autonomous region (Háva 1996, Nikolaev & Kozminykh 2002, Sikes et al. 2002).

Nicrophorus maculifrons Kraatz, 1877

China, Fujian province: Kuatun [= Huaqiao], 27°40′N 117°40′E, 2300 m, various dates between 16.iii.1938 and 29.iii.1938, J. Klapperich leg., 9 males, 8 females (ZFMK); same locality, various dates between 1.iv.1938 and 30.iv.1938, J. Klapperich leg., 42 males, 45 females (ZFMK); same locality, various dates between 1.v.1938 and 24.v.1938, J. Klapperich leg., 9 males, 9 females (ZFMK); same locality, various dates between 6.vi.1938 and 23.vi.1938, J. Klapperich leg., 2 males, 3 females (ZFMK); **Gansu province:** Luqu [ca. 34°36′N 102°30′E], 2500 m, 11.vii.1990, M. Nikodým leg., DSS det., 1 female (JSCC); **Heilongjiang province:** Charbin [= Harbin, ca. 45°45′N 136°38′E], without date and collector's name, DSS det., 1 male (FMNH); Chitaizski-Sterana [= Chinese side of Amur river, between ca. 49°24′N 129°32′E and 48°23′N 134°25′E], without date, E. v. Bodemeyer leg., ex coll. Noesske, 1 female (SMTD); Kaolingtze [= Gaolingzi, ca. 44°52′N 128°50′E], 2.vii.1940, without collector's name, DSS det., 2 females (USNM); Gasolinzcy [= Gaolingzi, ca. 44°52′N 128°50′E], 16.vii.1949, without collector's name, DSS det., 1 male (FMNH); **Jiangsu province:** Chinkiang [= Zhenjiang, ca. 32°12′N 119°26′E], without date and collector's name, DSS det., 1 female (NMPC); **Shanghai municipality:** Shangai [ca. 31°15′N 121°29′E], without date and collector's name, DSS det., 2 females (MVMA).

Known from Russian Far East, Korea and Japan (Nikolaev & Kozminykh 2002, Sikes et al. 2002); from "north-eastern China" mentioned by Sikes et al. (2002), from Heilongjiang province reported by Mazokhin-Porshnyakov (1953). First records from Fujian, Gansu and Jiangsu provinces and Shanghai municipality.

Nicrophorus morio Gebler, 1817

China, Gansu province: Lanchowfu [= Lanzhou, ca. 36°07′N 103°36′E], without date and collector's name, DSS det., 2 males, 1 female (HNHM); **Hebei province:** Kalgan [= Zhangjiakou, ca. 40°49′N 114°53′E], without date and collector's name, DSS det., 3 females (ZMHB); **Nei Mongol autonomous region:** Jnn Shan mts [= In Shan ridge, part of Yin Shan mts, N of Baotou, ca. 40°51′N 110°00′E], without date and collector's name, DSS det.,

1 male, 1 female (ZMHB); **Qinghai province:** Kuku-noor [= Qinghai lake, ca. 37°00′N 100°00′E], without date, Reitter leg., 5 specimens (coll. Koltze in DEIC); **Xinjiang Uygur autonomous region:** Kuldja [= Yining, ca. 43°55′N 081°18′E], without date and collector's name, DSS det., 2 females (ZMHB); Tian Shan mts, Musart [= Muzart pass, ca. 42°21′N 080°47′E], without date and collector's name, DSS det., 2 females (NHMW).

Known from southern Russia, Iran, Afghanistan, Turkmenistan, Kazakhstan, Uzbekistan, Kyrgyzstan to Mongolia and eastern Siberia (Nikolaev & Kozminykh 2002, Sikes et al. 2002, Růžička & Schneider 2002); from China reported from Nei Mongol autonomous region and Qinghai province (Růžička & Schneider 1996). First records from Gansu and Hebei provinces and Xinjiang Uygur autonomous region.

Nicrophorus nepalensis Hope, 1831

China, Anhui province: Kouy Tchera [not located], 15.vii.1938, F. Touj leg., DSS det., 1 female (MNHN); **Chongqing municipality**: Chungking [= Chongqing, ca. 29°32′N 106°31′E], 600-1500', 1.-30.ix.1930, D. C. Graham leg., DSS det., 1 male (SBPC); **Fujian province:** Kuatun [= Huaqiao, ca. 27°40′N 117°40′E], 2300 m, 1.i.-30.xii.1938, J. Klapperich leg., 3 males (USNM); same locality, 4.vii.1938, Klapperich leg., DSS det., 1 male (SMNS); same locality, 25.iv.1939, T. H. Cheng leg., 1 male (SBPC); same locality, 2300 m, 24.iv.1946, Tschung Sen leg., DSS det., 1 male (SMNS); same locality, 2300 m, 15.vi.1946, Tschung Sen leg., DSS det., 1 female (HNHM); same locality, 2300 m, 15.viii.1946, Tschung Sen leg., DSS det., 1 male (HNHM); same locality, 2300 m, 14.ix.1946, Tschung Sen leg., DSS det., 2 males (HNHM); Mt. Wuyi [= Wuyi Shan mts], Sangang [ca. 27°45′N 117°41′E], 24.iv.1993, without collector's name, DSS det., 1 spec. (NKUM); **Gansu province:** Wudu [ca. 33°24′N 104°55′E], 25.-27.vi.1997, E. Kučera leg., DSS det., 1 female (WBAC); **Guangdong province:** Daqiao env., 27°54′N 113°01′E, 1000-1200 m, 1.-3.v.2002, R. Fencl leg., 1 male, 1 female (JRUC); **Guangxi autonomous region:** Lingui county, Ping Shan mts., 25°33′N 109°36′E, 700-1300 m, 19.-23.viii.1998, L. & R. Businský leg., DSS det., 1 female (JSCC); **Hainan province:** 30 km E Maoyang, Wuzhi Shan Resort [ca. 18°55′N 109°42′E], 700-800 m, 18.i.1996, M. Jäch leg., DSS det., 1 male (NHMW); **Hubei province:** Ichang [= Yichang, ca. 30°42′N 111°17′E], 6000-8000', without date and collector's name, DSS det., 1 male (MNHN); Chang Yang [= Changyang, ca. 30°28′N 111°11′E] near Ichang [= Yichang], without date and collector's name, DSS det., 1 female (MNHN); **Hunan province:** Hoeng Shan [= Heng Shan mts, N Hengyang, ca. 27°18′N 112°41′E], 900 m, 14.-22.iv.1933, H. Höne leg., DSS det., 1 male, 1 female (ZMHB); **Jiangsu province:** Chinkiang [= Zhenjiang, ca. 32°12′N 119°26′E], without date, ex coll. Reitter, DSS det., 1 male (NMPC); **Jiangxi province:** Kiukiang [= Jiujiang, ca. 29°43′N 115°58′E], 1.-31.v.1887, A. E. Pratt leg., DSS det., 1 female (MNHN); **Nei Mongol autonomous region:** Jnn Shan mts [= In Shan ridge, part of Yin Shan mts, N of Baotou, ca. 40°51′N 110°00′E], 980-2100 m, without date and collector's name, DSS det., 1 female (ZMHB); **Shaanxi province:** Xi'an [ca. 34°16′N 108°53′E], Qingling Shan mts, 25.-26.iv.1990, without collector's name, DSS det., 1 female (MNIC); **Sichuan province:** Tatsienlu [= Kangding, ca. 30°05′N 102°04′E], Kiulung [not located], without date, ex coll. Reitter, DSS det., 12 males, 7 females (SMFD, NMPC); Giufu Shan [= Jinfo Shan mts, ca. 29°01′N 107°14′E], 1500-2000 m, without date and collector's name, ex coll. Reitter, DSS det., 7 females (NMPC); Kwanhsien [= Guan Xian, ca. 31°01′N 103°40′E], 1915, Stötzner Expedition, 1 female (SMTD); Kinfushan [= Jinfo Shan mts, ca. 29°01′N 107°14′E], 2000 m, without date, Sung-Kanho leg., DSS det., 1 male, 1 female (NHMW); Kiating [= Leshan] env., Shin Kaisi, Mt. Omei [= Emei Shan mts, ca.

29°37′N 103°24′E], 4400', 1921, D. C. Graham leg., DSS det., 1 male (SBPC); Suifu [= Yibin, ca. 28°46′N 104°37′E], 1.-31.x.1930, D. C. Graham leg., DSS det., 2 males, 2 females (SBPC); same locality, 1.-10.x.1930, D. C. Graham leg., DSS det., 1 female (SBPC); same locality, 12.xi.1930, D. C. Graham leg., DSS det., 2 males, 2 females (SBPC); same locality, 18.-19.xi.1930, D. C. Graham leg., 2 females (SBPC); 30 mi N Chengtu [= Chengdu, ca. 30°40′N 104°04′E], Beh Luh Din [not located], 6000', 1.vii.-31.viii.1933, D. C. Graham leg., DSS det., 1 male, 1 female (SBPC); Yingxiuwan [ca. 31°04′N 103°29′E], 20.-26.vi.1996, Beneš & Štěpař leg., DSS det., 1 female (WBAC); **Zhejiang province:** Tienmuschan [= Tianmu Shan mts, between ca. 30°06′N 118°47′E and 30°26′N 119°39′E], 1157 m, without date, ex coll. Reitter, DSS det., 7 males, 7 females (NMPC, JRUC); same locality, 1500 m, 23.iv.1932, without collector's name, DSS det., 1 male (ZMHB); same locality, 1500 m, 10.vii.1932, without collector's name, DSS det., 1 female (ZMHB); same locality, 1600 m, 31.viii.1932, H. Höne leg., DSS det., 1 female (ZMHB); same locality, 20.ix.1932, H. Höne leg., DSS det., 1 female (ZMHB); same locality, 5.x.1932, H. Höne leg., DSS det., 1 female (ZMHB).

Widely distributed from Pakistan, northern India, Nepal, Laos, Burma, Thailand and Vietnam to Japan (Ryukyu archipelago), Philippines, Malaysia and Indonesia (Sikes et al. 2002). From China reported from Chongqing municipality and Fujian, Gansu, Guizhou, Hubei, Hunan, Shaanxi, Sichuan, Yunnan and Zhejiang provinces (Portevin 1926; Zhang 1992a,b, 1993a,b, 1995, 1997; Růžička & Schneider 1996). First records from Anhui, Hainan, Jiangsu and Jiangxi provinces and from Nei Mongol and Guangxi autonomous regions.

Nicrophorus oberthuri Portevin, 1924

China, Gansu province: "S Kansu", without more detailed locality, 2483 m, 24.vii.1930, ex coll. Hummet, DSS det., 1 female (NHRS); **Qinghai province:** Laji Shan mts, Gushan env. [ca. 36°05′N 102°42′E], 2600-2700 m, 16.-20.vii.1993, Heinz leg., 1 male (SMNS); **Shaanxi province:** Qingling Shan mts, NW of Houzhenzi, 33°35′N 107°43′E, 2600 m, 1.-31.vii.1996, M. Häckel leg., DSS det., 3 males, 1 female (JSCC); Qingling Shan mts, Houzhenzi env. [ca. 33°54′N 107°47′E], 2600 m, 7.vii.1996, M. Janata leg., DSS det., 3 females (JSCC); Taibai Shan range above Houshenzi [= Houzhenzi, ca. 33°54′N 107°47′E], 2500-2600 m, 9.vi.-3.vii.1998, P. Jäger & J. Martens leg., DSS det., 3 females (SMNS); Qingling Shan mts, track Houzhenzi vill. to Taibai Shan mt. [ca. 33°54′N 107°47′E], 3000 m, 20.vi.-2.vii.1998, fir forest, Z. Jindra, O. Šafránek & M. Trýzna leg., 1 female (JSCC); **Sichuan province:** Jiuzhaigou [ca. 33°20′N 104°00′E], 3100 m, 13.-15.vi.1992, M. Bok leg., DSS det., 1 female (SMNS); Kangding env. [ca. 30°02′N 101°57′E], 3000 m, 30.vi.1993, M. Trýzna leg., 2 males (JHAC, MTRC); Gongga Shan mt., upper Hailuogou valley [= Hailuoguo valley], 29°35′N 101°59′E, 2700-3200 m, 4.vii.1994, K. & B. Březina leg., coniferous forest, DSS det., 2 females (JSCC, DSSC); pass [ca. 31°52′N 102°41′E] between Shuamaluko [= Shuajingsi] and Zhegushan [= Matang], 3700 m, 24.-25.vi.1996, Heinz leg., 1 male (SMNS); pass near Zhanglau [= Zhangla, ca. 32°48′N 103°39′E], 3200-3400 m, 27.-28.vi.1996, W. Heinz leg., DSS det., 1 male (SMNS); pass between Zhangla and Huanglong [ca. 32°48′N 103°39′E], 3200-3400 m, 27.-28.vi.1996, Heinz leg., 1 female (SMNS); 40 km ESE Aba, 32°43′N 102°06′E, 3800 m, 31.vii.2001, J. Rejsek leg., 1 male (JSCC); **Qinghai province:** Laji Shan mts, Gushan env. [ca. 36°05′N 102°42′E], Yao Shuichuan [not located], 2600-2700 m, 16.-20.vii.1993, W. Heinz leg., DSS det., 1 male (SMNS); **Yunnan province:** Xue Shan mts nr. Zhongdian, 27°49′N 99°34′E, 3800 m, 23.-26.vi.1996, J. Farkač, P. Kabátek & A. Smetana leg., DSS det., 1 male (JRUC); same locality, 4000-4100 m, 23.vi.1996, J. Farkač, P. Kabátek & A. Smetana leg., DSS det., 1 male (JSCC).

Sikes et al. (2002) treated *Nicrophorus burmanicus* Hlisnikovský, 1964 and *N. unifasciatus* Hlisnikovský, 1964 as junior subjective synonyms of *N. oberthuri* Portevin, 1924. It is known only from northern Burma and China; it has been reported from the Qinghai, Shaanxi, Sichuan, and Yunnan provinces (Portevin 1926, Hlisnikovský 1964, Růžička & Schneider 1996 [as *N. unifasciatus*], Sikes et al. 2002).

Nicrophorus przewalskii Semenov, 1894

China, Gansu province: Mt. Xing-long [= Xinglong Shan, ca. 35°49′N 104°00′E], 2200 m, 29.vii.1993, without collector's name, DSS det., 1 male (NKUM); **Qinghai province:** Kuku-noor [= Qinghai lake, ca. 37°00′N 100°00′E], without date and collector's name, ex coll. Reitter, 2 females (coll. Koltze in DEIC); Kuku-Nor [= Qinghai lake, ca. 37°00′N 100°00′E], 3200 m, 1898, F. Hauser leg., DSS det., 1 male (NHMW); Laji Shan range, Laji Shan pass [ca. 36°19′N 101°42′E], 3900 m, 5.vii.1997, A. Gorodinski leg., 1 female (JHAC); **Sichuan province:** Maniganggo env., 31°55′N 99°10′E, ca. 4000 m, 2.-7.vii.1998, A. Křížová & J. Mikšovská leg., 1 male, 1 female (JHAC, JSCC); Huang Long [= Huanglong, ca. 28°24′N 103°48′E], 3500 m, vii.1996, Moretto leg., 1 male (JSCC).

Endemic Chinese species, reported from Gansu, Qinghai and Sichuan provinces (Portevin 1926, Růžička & Schneider 1996, Sikes et al. 2002).

Observations on the reproductive behaviour of this species have not been made. Given the apparently basal phylogenetic position of this species in the genus (D. S. Sikes, unpubl. data), such observations would be valuable towards understanding the evolution of the complex reproductive strategy seen in all *Nicrophorus* that have been studied so far.

Nicrophorus quadraticollis Portevin, 1903

China, Xizang autonomous region: Batang, Yangtze valley [= valley of Jinsha Jiang river, ca. 29°57′N 099°03′E], 2800 m, 4.vii.1936, H. Höne leg., DSS det., 1 male (NMPC).

Known from Russian Far East and Korea (Nikolaev & Kozminykh 2002, Sikes et al. 2002); from China reported from Heilongjiang and Sichuan provinces and Xizang autonomous region (Portevin 1903, 1926; Sikes et al. 2002).

Nicrophorus quadripunctatus Kraatz, 1877

China, Heilongjiang province: Maoershan [= Mao'er Shan, ca. 45°16′N 127°31′E], without date and collector's name, ex coll. W. H. Muche, 1 female (SMTD); Kaolingtze [= Gaolingzi, ca. 44°52′N 128°50′E], 2.vii.1940, without collector's name, DSS det., 1 female (USNM); Shang-zhi county, Mao'er Shan [ca. 45°16′N 127°31′E], 2200 m, 19.vi.1988, DSS det., 1 male (NKUM); **Jiangxi province:** Kiukiang [= Jiujiang, ca. 29°43′N 115°58′E], 1.-30.vi.1887, A. E. Pratt leg., DSS det., 1 male, 1 female (MNHN).

Known from Russian Far East, Korea and Japan (Nikolaev & Kozminykh 2002, Sikes et al. 2002); from "north-eastern China" reported by Nikolaev & Kozminykh (2002) and from Heilongjiang province by Mazokhin-Porshnyakov (1953). First record from Jiangxi province.

Nicrophorus reichardti Kieseritzky, 1930

China, Xinjiang Uygur autonomous region: Tian Shan mts, Musart [= Muzart pass, ca. 42°21′N 080°47′E], 1.-30.vi.1894, F. Hauser leg., DSS det., 1 female (FMNH).

Known from Kyrgyzstan and Kazakhstan (Nikolaev & Kozminykh 2002, Sikes et al. 2002). First record from China.

Nicrophorus satanas Reitter, 1893

China, Xinjiang Uygur autonomous region: Ober. Jli-Thal [= upper portion of the Ili river valley, between ca. 43°49′N 080°47′E and 43°36′N 081°46′E], 1897, F. Hauser leg., DSS det., 1 female (NHMW).

Known from south-eastern Russia, Kazakhstan, Uzbekistan, Turkmenistan, Kyrgyzstan, Iran, Afghanistan and Pakistan (Nikolaev & Kozminykh 2002, Sikes et al. 2002). From "Turkestan" reported by Portevin (1926). First record from China.

Nicrophorus semenowi (Reitter, 1887)

China, Gansu province: Dogcanglhamo env. [ca. 34°06′N 102°35′E], 4200 m, 12.-15.vii.1990, J. Kaláb leg., DSS det., 2 females (JRUC); **Qinghai province:** Huashixia, Madoi [ca. 35°02′N 096°23′E], 4500 m, 23.-28.vi.1989, without collector's name, DSS det., 1 female (MNIC); 120 km W Qinghai Hu lake, Tian Jun [= Xinyuan, ca. 37°18′N 099°01′E], 3500 m, 3.-4.vi.1990, J. Kaláb leg., DSS det., 1 female (JRUC); Chalaxung [ca. 34°16′N 097°53′E], 4000 m, 29.-30.vii.1992, J. Kaláb leg., DSS det., 1 male (JSCC); **Sichuan province:** 15 km NW Serxü, 33°05′N 098°15′E, 4000 m, 23.-24.vii.2001, J. Kaláb leg., DSS det., 1 male (JSCC); **Xizang autonomous region:** S Lhatse [= Lhaze, ca. 30°47′N 095°00′E], Lhakpa-la [= Lhakpa La pass, not located], N side, 4500-4700 m, 14.vii.1996, Heinz leg., DSS det, 1 male (SMNS); between Shogu-la [= Suge La pass] and Dongu-la [= Donggu La pass], Margyang [ca. 29°47′N 089°55′E], 4500 m, 15.vii.1996, Heinz leg., DSS det., 1 female (SMNS).

Sikes et al. (2002) treated *N. temporalis* Shchegoleva-Barovskaya, 1933 as a junior subjective synonym of *N. semenowi* (Reitter, 1887). *Nicrophorus semenowi* is an endemic Chinese species reported from Gansu, Qinghai and Sichuan provinces and Xizang autonomous region (Shchegoleva-Barovskaya 1933, Růžička & Schneider 1996, Sikes et al. 2002).

Nicrophorus sepultor Charpentier, 1825

China, Xinjiang Uygur autonomous region: Tian Shan mts, Musart [= Muzart pass, ca. 42°21′N 080°47′E], without date and collector's name, DSS det., 4 females (SMFD, SMTD); same locality, 1.-30.vi.1894, Hauser leg., DSS det., 4 females (HNHM, NHMW, SMFD); same locality, 1.vi.-31.xii.1894, Hauser leg., DSS det., 2 males, 4 females (HNHM, NHMW, SMFD).

Widely distributed in western part of Palaearctic region to Kazakhstan, Kyrgyzstan and eastern Siberia (Nikolaev & Kozminykh 2002, Sikes et al. 2002). First record from China.

Nicrophorus smefarka Háva, Schneider et Růžička, 1999

China, Hubei province: Daba Shan mts, pass E of Mt. Da Shennongjia, 12 km NW Muyuping, 31°30′N 110°21′E, 1950 m, 19.-22.vii.2001, M. Schülke leg., dry creek valley, mixed deciduous forest, pitfall traps with vinegar, 1 female (JRUC); **Shaanxi province:** Qingling Shan mts, Foping Nature Reserve, 33°51′N 107°57′E, 1600 m, 8.iv.1999, V. Siniaev & A. Plutenko leg., 1 male (JRUC); **Sichuan province:** 20 km S Muli, 27°45′N 101°13′E, 3500 m, 29.vi.1998, M. Bocák leg., 1 male (SMNS); pass between Xihe and Hongxi, Ta Yan Ping [ca. 28°45′N 103°03′E], 3000 m, 17.-25.v.1999, V. Beneš leg., 1 female (JHAC); 53 km NW Lixian [= Zagunao, ca. 31°38′N 102°47′E], 3300-3500 m, vii. 2001, S. Murzin leg., 1 male, 2 females (JSCC); valley 5 km N Wenchuan [= Weizhou, ca. 31°32′N 103°35′E], 2000 m, 3.-5.vii.2001, S. Murzin leg., 1 male (DSSC).

Recently described species, based on a single female from China: Sichuan province (Háva et al. 1999). First records from Hubei and Shaanxi provinces.

The reproductive behaviour of this species is also not known. Its knowledge would be highly desirable for the same reasons as in *N. przewalskii*.

Nicrophorus tenuipes Lewis, 1887

China, Heilongjiang province: Kaolingtzu [= Gaolingzi, ca. 44°52′N 128°50′E], 7.-20.vii.1940, without collector's name, DSS det., 1 female (EIHU); Kaolinstze [= Gaolingzi, ca. 44°52′N 128°50′E], 12.vii.1940, without collector's name, DSS det., 1 male, 1 female (CASC).

Known from Russian Far East, Korea and Japan (Nikolaev & Kozminykh 2002, Sikes et al. 2002); from China reported from Heilongjiang province by Mazokhin-Porshnyakov (1953).

Nicrophorus ussuriensis Portevin, 1923

China, Heilongjiang province: Gaolinzcy [= Gaolingzi, ca. 44°52′N 128°50′E], 1.-30.vi.1938, without collector's name, DSS det., 1 female (ZSMC).

Known from Russian Far East and Korea (Lafer 1989, Cho & Kwon 1999, Nikolaev & Kozminykh 2002, Sikes et al. 2002); from China reported from Heilongjiang province by Mazokhin-Porshnyakov (1953).

Nicrophorus validus Portevin, 1920

China, Xizang autonomous region: Tsangpo valley [Brahmaputra river valley], SW Mailing [= Mainling, ca. 29°12′N 094°05′E], 3380 m, 14.viii.1994, B. Dickoré leg., meadow in mountainous *Picea* forest, DSS det., 1 female (SMNS).

Known from northern India, Sikkim and Nepal (Portevin 1926, Sikes et al. 2002); from China reported only from Xizang autonomous region by Sikes et al. (2002).

Nicrophorus vespillo Linnaeus, 1758

China, Xinjiang Uygur autonomous region: Kuldscha [= Yining, ca. 43°55′N 081°18′E], without date and collector's name, DSS det., 2 males, 1 female (HNHM, ZMHB); Tian Shan mts, Musart [= Muzart pass, ca. 42°21′N 080°47′E], 1.vi.-31.xii.1894, Hauser leg., DSS det., 1 male, 1 female (HNHM, NMPC).

Widely distributed in western part of Palaearctic region to eastern Siberia and Mongolia (Nikolaev & Kozminykh 2002, Sikes et al. 2002). From China reported only from Xinjiang Uygur autonomous region (Růžička & Schneider 1996).

Nicrophorus vespilloides Herbst, 1783

China, Heilongjiang province: Chitaizski-Sterana [= Chinese side of Amur river, between ca. 49°24′N 129°32′E and 48°23′N 134°25′E], without date, E. v. Bodemeyer leg., ex coll.Noesske, 1 spec. (SMTD); Gaolinzcy [= Gaolingzi, ca. 44°52′N 128°50′E], 1.-30.vi.1938, without collector's name, DSS det., 3 females (ZSMC); Kaolingtze [= Gaolingzi, ca. 44°52′N 128°50′E], 2.vii.1940, without collector's name, DSS det., 7 males, 2 females (CUIC, USNM); **Sichuan province:** Zoighe [= Zoige, ca. 33°35′N 102°58′E], 3000 m, vii.1996, P. Moretto leg., 1 male (JSCC).

Widely distributed across Holarctic region (Nikolaev & Kozminykh 2002, Sikes et al. 2002); from China reported from Heilongjiang and Sichuan provinces (Mazokhin-Porshnyakov 1953, Růžička & Schneider 1996).

Ptomascopus morio Kraatz, 1877

China, Shaanxi province: Qingling Shan mts, 6 km E of Xunyangba [ca. 33°33′N 108°37′E], 1000-1300 m, 23.v.-13.vi.2000, C. Holzschuh & I. H. Marshal leg., 1 male, 1 female (JSCC).

Known from Russian Far East, Korea and Japan (Nikolaev & Kozminykh 2002, Sikes et al. 2002); from China reported from Heilongjiang province (Mazokhin-Porshnyakov 1953). First records from Shaanxi province.

Ptomascopus plagiatus (Ménétriés, 1854)

China, Beijing municipality: Peking, Westberge [=Xiang Shan mts, ca. 39°50′N 115°36′E], 1925, Stötzner Expedition, DSS det., 1 female (SMTD); Peking [=Beijing, ca. 39°54′N 116°22′E], without date and collector's name, ex coll. W. H. Muche, 1 spec. (SMTD); Beijing [ca. 39°54′N 116°22′E], 56 m, 4.vi.1989, O. Majzlan leg., 1 spec. (NHMW); 50km W Beijing, Xiang Shan mts [ca. 39°50′N 115°36′E], 4.-8.ix.1990, R. Dong & S. B. Peck leg., DSS det., 1 male, 2 females (SBPC); **Fujian province:** Kuatun [= Huaqiao], 27°40′N 117°40′E, 7.iv.1938, J. Klapperich leg., DSS det., 3 females (NMPC, SMNS); same locality, 8.iv.1938, J. Klapperich leg., 2 females (ZFMK); same locality, 18.iv.1938, J. Klapperich leg., 1 female (ZFMK); **Gansu province:** Hweisin [= Hua Xian, ca. 33°46′N 106°04′E], without date and collector's name, DSS det., 1 female (SMTD); Lanchowfu [= Lanzhou, ca. 36°07′N 103°36′E], without date and collector's name, 12 spec. (HNHM, NHMW, NMPC, SMTD, ZSMC); same locality, without date and collector's name, ex coll. Noesske, 9 spec. (SMTD); Wenxian env. [ca. 32°59′N 104°40′E], 18.-16.vi.1995, V. Beneš leg., 1 male (JSCC); **Heilongjiang province:** Charbin [= Harbin, ca. 45°45′N 136°38′E], without date and collector's name, ex coll. W. H. Muche, 1 spec. (SMTD); Maoershan [= Mao'er Shan, ca. 45°16′N 127°31′E], without date and collector's name, DSS det., 1 female (SMTD); **Hubei province:** Wu-schan mts [Wu Shan mts, ca. 31°07′N 110°11′E], without date and collector's name, DSS det., 2 males, 3 females (SMFD); **Liaoning province:** Mukden [= Shenyang, ca. 41°47′ N 123°24′E], without date and collector's name, DSS det., 4 spec. (FMNH, NHMW, ZSMC); **Nei Mongol autonomous region:** Sui Yuan [= Suiyüan region], Tsingshuiho [= Qingshuihe, ca. 39°55′N 111°40′E], without date and collector date, DSS det., 2 females (SMTD, ZSMC); **Shanghai municipality:** Shanghai [ca. 31°14′N 121°29′E], 24.vi.1924, E. Suenson leg., DSS det., 1 female (ZMUC); same locality, 3.vii.1942, E. Suenson leg., DSS det., 1 male (ZMUC); same locality, 7.vii.1943, E. Suenson leg., DSS det., 1 male, 1 female (ZMUC); same locality, 7.vii.1942, H. Höne leg., 1 female (ZFMK); same locality, 25.viii.1943, E. Suenson leg., DSS det., 3 males, 1 female (ZMUC); **Tianjin municipality:** Tianjin [ca. 39°09′N 117°12′E], 26.vi.1975, without collector's name, DSS det., 1 spec. (NKUM).

Known from Russian Far East and Korea (Lafer 1989, Cho & Lee 1992, Sikes et al. 2002). First mentioned from "northern China" without more details by Portevin (1926), from China further reported from Heilongjiang and Qinghai provinces (Portevin 1932, Mazokhin-Porshnyakov 1953, Růžička & Schneider 1996). First records from Beijing, Shanghai and Tianjin municipality, Nei Mongol autonomous region, and Fujian, Gansu, Hubei and Liaoning provinces.

Ptomascopus zhangla Háva, Schneider et Růžička, 1999

China, Gansu province: 70 km NW Wudu, Min Shan mts [ca. 33°41′N 104°19′E], 2100 m, 25.vi.2000, S. Sazonov leg., 1 spec. (MULC); **Shaanxi province:** Qingling Shan mts, Foping

Nature Reserve, 33°51′N 107°57′E, 1600 m, 8.iv.1999, V. Siniaev & A. Plutenko leg., 1 spec. (JMAC); same locality, 20.iv.-11.v.1999, V. Siniaev & A. Plutenko leg., 1 spec. (JSCC); Qingling Shan mts, Houzhenzi env. [ca. 33°51′N 107°49′E], 1600 m, vi.1999, M. Häckel leg., 2 spec. (JSCC); Haozhenzi [= Houzhenzi], 1350-2000 m, 27.v.-8.vi.1999, S. Murzin leg., 7 spec. (JSCC, DSSC); Taibai Shan Nature Park [ca. 33°53′N 107°49′E], 1350 m, 10.vi.1999, M. Murzin leg., 2 spec. (JSCC); Qingling Shan mts, S Taibaishan, Houzhenzi, 33°51′N 107°49′E, 1.-2.vii.1999, V. Siniaev & A. Plutenko leg., 9 spec. (JHAC, JSCC, DSSC); **Sichuan province:** Kangding [ca. 30°02′N 101°57′E], 1500 m, v.1999, M. Häckel leg., 1 male (JHAC).

Recently described from China: Gansu, Shaanxi and Sichuan provinces (Háva et al. 1999). The specimens studied vary in the colour pattern of pronotum: in most specimens the central, heart-shaped spot (which is isolated in the holotype) is connected with the wide posterior black portion of pronotum. In a few specimens, also the antero-medial spot is connected with the central spot, so the pronotum is mostly black, with only two antero-lateral red spots.

Most of the specimens reported above were collected from tunnels built inside the large fresh excrements of *Bos*, and several specimens were observed actively preying on undetermined Diptera larvae in these tunnels. To date, none have been collected from carrion.

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SOUHRN

Práce uvádí nálezy 52 druhů mrchožroutů (čeleď Silphidae), sebraných převážně českými a německými entomology v Číně v letech 1990-2002. Doplněny jsou i údaje získané studiem staršího materiálu, uloženého v několika muzeích, jenž byl recentně studován J. Růžičkou nebo D. S. Sikesem. Celkem jsou zahrnuty údaje o více než 2240 exemplářích. Není zařazen materiál rodů *Calosilpha* Portevin, 1920, *Oiceoptoma* Leach, 1815 a *Eusilpha* Semenov, 1891, který bude zpracován samostatně.

Jednotlivé druhy jsou řazeny abecedně v rámci obou podčeledí Silphinae a Nicrophorinae, v abecedním pořadí jsou řazeny i názvy provincií, autonomních regionů a municipalit v rámci materiálu citovaného u každého druhu; v rámci jednotlivých geografických oblastí je materiál řazen chronologicky. Geografické názvy jsou sjednoceny podle Anonym (1998, 2000, 2001). Pokud se údaj uvedený na lokalitním štítku výrazně odlišuje od znění ve výše uvedených mapách, je v seznamu materiálu za původním názvem uveden v hranatých závorkách i standardizovaný název podle Anonym (1998, 2000, 2001). K identifikaci historických názvů lokalit byla nejčastěji použita práce Schützeho & Kleinfelda (1997). Pokud nejsou na lokalitním štítku uvedeny údaje o geografických souřadnicích lokality, přibližné hodnoty jsou také uvedeny v hranatých závorkách za jejím názvem.

Pokud není uvedeno jinak, materiál byl určen či revidován J. Růžičkou, J. Schneiderem a/nebo J. Hávou. Pouze materiál rodu *Nicrophorus* Fabricius, 1775 určený či revidovaný D. S. Sikesem je ve výčtu materiálu každého druhu odlišen zkratkou „DSS det.".

Poprvé jsou z Číny uvedeny druhy *Aclypea turkestanica* (Ballion, 1871), *Nicrophorus humator* (Gleditsch, 1767), *N. reichardti* Kieseritzky, 1930, *N. satanas* Reitter, 1893 a *N. sepultor* Charpentier, 1825 (všechny z území autonomního regionu Xinjiang Uygur) a dále druh *Diamesus osculans* (Vigors, 1825) (z municipality Chongqing).

První nálezy z jednotlivých provincií či autonomních regionů jsou uvedeny pro následující druhy mrchožroutů: *Aclypea daurica* (Gebler, 1832) (provincie Hubei a Shaanxi), *A. turkestanica*

(Ballion, 1871) (autonomní region Xinjiang Uygur), *Necrodes littoralis* (Linnaeus, 1758) (municipalita Beijing; provincie Fujian, Gansu, Heilongjiang, Jiangxi a Shaanxi), *Necrodes nigricornis* Harold, 1875 (provincie Heilongjiang a Hubei), *Nicrophorus antennatus* (Reitter, 1884) (autonomní region Xinjiang Uygur), *N. argutor* Jakovlev, 1890 (autonomní region Nei Mongol), *N. basalis* Faldermann, 1835 (municipalita Beijing), *N. concolor* Kraatz, 1877 (provincie Guangdong, Liaoning a Shaanxi), *N. dauricus* Motschulsky, 1860 (provincie Jilin), *N. humator* (Gleditsch, 1767) (autonomní region Xinjiang Uygur), *N. investigator* Zetterstedt, 1824 (provincie Hebei, Shaanxi, Shandong, Shanxi a Sichuan; autonomní region Xinjiang Uygur), *N. japonicus* Harold, 1877 (municipality Beijing, Shanghai a Tianjin; provincie Fujian, Heilongjiang, Hebei, Hubei, Jilin, Liaoning a Shandong), *N. maculifrons* Kraatz, 1877 (municipalita Shanghai; provincie Fujian, Gansu a Jiangsu), *N. morio* Gebler, 1817 (provincie Gansu a Hebei; autonomní region Xinjiang Uygur), *N. nepalensis* Hope, 1831 (provincie Anhui, Hainan, Hunan, Jiangsu a Jiangxi; autonomní regiony Nei Mongol a Guangxi), *N. quadripunctatus* Kraatz, 1877 (provincie Jiangxi), *N. smefarka* Háva, Schneider et Růžička, 1999 (provincie Hubei a Shaanxi), *Phosphuga atrata atrata* (Linnaeus, 1758) (municipalita Beijing; autonomní regiony Nei Mongol a Xinjiang Uygur; provincie Hebei, Heilongjiang, Qinghai a Shaanxi), *Ptomascopus morio* Kraatz, 1877 (provincie Shaanxi), *P. plagiatus* (Ménétries, 1854) (municipality Beijing, Shanghai a Tianjin; autonomní region Nei Mongol; provincie Fujian, Gansu, Hubei a Liaoning), *Silpha carinata* Herbst, 1783 (autonomní region Xinjiang Uygur), *S. perforata* Gebler, 1832 (municipalita Beijing; autonomní region Nei Mongol; provincie Hebei, Heilongjiang a Shanxi), *S. qinlinga* Schawaller, 1996 (provincie Hubei), *Thanatophilus dentigerus* (Semenov, 1891) (autonomní region Xizang), *T. latericarinatus* Motschulsky, 1860 (provincie Heilongjiang), *T. roborowskyi* Jakovlev, 1887 (autonomní region Xizang), *T. rugosus* Linnaeus, 1758 (municipalita Beijing; provincie Shaanxi) a *T. sinuatus* (Fabricius, 1775) (municipalita Beijing; provincie Shaanxi).

Nicrophorus vestigator Herschel, 1807 je vyřazen ze soupisu fauny čínských mrchožroutů, protože jediný publikovaný údaj (Růžička & Schneider 1996) byl založen na chybně určeném exempláři druhu *N. dauricus*.