

macrocephala* Heer, 1849; see under *PARAPHAENOGASTER**.

macrogyna. *Myrmica rubra* var. *macrogyna* Brian, M.V. & Brian, A.D. 1949: 397 (q.m.) GREAT BRITAIN.

Subspecies of *rubra*: Sadil, 1952: 242.

Subspecies of *ruginodis*: Collingwood, 1958b: 68.

Junior synonym of *ruginodis*: Bolton, 1995b: 281; Radchenko & Elmes, 2010: 236; Radchenko, 2016: 120.

maculipes Curtis, 1854; see under **TETRAMORIUM**.

maligna Smith, F. 1865; see under **PODOMYRMA**.

margaritae. *Myrmica margaritae* Emery, 1889b: 502 (w.) MYANMAR.

Status as species: Dalla Torre, 1893: 112; Emery, 1895k: 471; Forel, 1903a: 697; Bingham, 1903: 267; Emery, 1921f: 38; Wheeler, W.M. 1928c: 8; Wheeler, W.M. 1929g: 37; Eidmann, 1941: 15; Weber, 1950b: 219; Chapman & Capco, 1951: 127; Wu, J. & Wang, 1992: 1304; Bolton, 1995b: 281; Wu, J. & Wang, 1995: 92; Tang, J. Li, *et al.* 1995: 48; Radchenko & Elmes, 1998: 5; Mathew & Tiwari, 2000: 299; Zhou, 2001b: 118; Wei, Zhou, *et al.* 2001: 561 (in key); Radchenko & Elmes, 2010: 199; Guénard & Dunn, 2012: 47; Bharti, Guénard, *et al.* 2016: 40.

martensi. *Myrmica martensi* Radchenko & Elmes, 1998: 21, fig. 5 (w.q.) NEPAL.

Status as species: Radchenko & Elmes, 2001a: 243; Radchenko & Elmes, 2010: 200; Bharti, Sasi & Radchenko, 2016: 966.

martini. *Myrmica martini* Seifert, *et al.* 2014: 176, figs. 1-6 (w.) FRANCE.

Status as species: Borowiec, L. 2014: 132; Lebas, *et al.* 2016: 320.

marylandica Buckley, 1867; see under **CREMATOGASTER**.

medvedevi. *Myrmica stangeana* subsp. *medvedevi* Arnol'di, 1970b: 1841 (w.) UKRAINE.

Subspecies of *stangeana*: Arnol'di & Dlussky, 1978: 532 (in key).

Junior synonym of *stangeana*: Seifert, 1988b: 23; Radchenko, 1994c: 144 (in key); Radchenko, 1994e: 78; Bolton, 1995b: 281; Radchenko & Elmes, 2009c: 509; Radchenko & Elmes, 2010: 291; Radchenko, 2016: 141.

mekongi. *Myrmica kozlovi* subsp. *mekongi* Ruzsky, 1915a: 437, fig. 12 (w.) CHINA (Tibet).

Subspecies of *kozlovi*: Emery, 1921f: 37; Menozzi, 1939a: 294 (in key); Weber, 1947: 471; Chapman & Capco, 1951: 126; Bolton, 1995b: 281.

Junior synonym of *kozlovi*: Radchenko & Elmes, 2010: 175; Bharti, Sasi & Radchenko, 2016: 966; Chen, Zhou & Huang, 2016: 90.

melanocephala Mayr, 1855; see under **LEPTOTHORAX**.

mellea Smith, F. 1859; see under **SOLENOPSIS**.

mexicana. *Myrmica mexicana* Wheeler, W.M. 1914b: 52 (w.q.m.) MEXICO (Hidalgo).

Subspecies of scabrinodis: Cole, 1942: 368; Weber, 1950b: 206; Smith, M.R. 1951a: 790; Smith, M.R. 1958c: 113; Smith, M.R. 1967: 350; Hunt & Snelling, 1975: 21.

Status as species: Wheeler, W.M. 1917a: 503; Emery, 1921f: 38; Cole, 1937b: 135; Gregg, R.E. 1961: 211; Smith, D.R. 1979: 1350; Bolton, 1995b: 281; Mackay & Mackay, 2002: 164.

microgyna. *Myrmica rubra* var. *microgyna* Brian, M.V. & Brian, A.D. 1949: 397 (q.m.) GREAT BRITAIN.

Subspecies of *rubra*: Sadil, 1952: 242.

Subspecies of *ruginodis*: Collingwood, 1958b: 68; Collingwood, 1971: 156.

Junior synonym of *ruginodis*: Bolton, 1995b: 281; Radchenko, *et al.* 1997: 484; Czechowski, *et al.* 2002: 20; Radchenko & Elmes, 2010: 236; Czechowski, *et al.* 2012: 77; Radchenko, 2016: 120.

microgyna. *Myrmica microgyna* Buschinger, 1990: 245 (in text). *Nomen nudum* (attributed to Pearson, 1981).

microrubra. *Myrmica microrubra* Seifert, 1993: 10, figs. 1, 4 (q.m.) GERMANY.

Status as species: Douwes, 1995: 88; Espadaler, 1997b: 30; Czechowski, *et al.* 2002: 19; Radchenko & Elmes, 2003a: 236; Seifert, 2018: 168.

Junior synonym of *rubra*: Steiner, Schlick-Steiner, Konrad, *et al.* 2006: 777; Werner & Wiezik, 2007: 146; Radchenko & Elmes, 2010: 228; Csösz, *et al.* 2011: 56; Czechowski, *et al.* 2012: 73; Schär & Nash, 2014: 2396; Radchenko, 2016: 117.

[Note: the numerous shifts of this taxon from valid species to junior synonym and back are monotonous and unproductive. It is retained here as a junior synonym, currently the majority opinion.]

mifui. *Myrmica mifui* Chen, Zhou & Huang, 2016: 103, figs. 20-22 (w.) CHINA (Shaanxi).

minima Buckley, 1867; see under **MONOMORIUM**.

minkii Foerster, 1850; see under **STENAMMA**.

***minor**. **Myrmica obsoleta* var. *minor* Heer, 1849: 160, pl. 13, fig. 3 (q.) GERMANY (Miocene).

[Also described as new by Heer, 1850: 160.]

Subspecies of **obsoleta*: Dalla Torre, 1893: 113.

Unidentifiable taxon, *incertae sedis* in *Myrmica*.

minuta Say, 1836; see under **SOLENOPSIS**.

minuta. *Myrmica laevinodis* var. *minuta* Ruzsky, 1905b: 670 (w.) TAJIKISTAN.

[Unresolved junior primary homonym of *Myrmica minuta* Say, 1836: 294 (Bolton, 1995b: 281).]

As unavailable (infrasubspecific) name: Emery, 1908a: 170; Emery, 1921f: 39; Kuznetsov-Ugamsky, 1927e: 193.

Subspecies of *laevinodis*: Weber, 1947: 455.

Status as species: Arnol'di, 1976a: 548; Bolton, 1995b: 281 (error).

Junior synonym of *dshungarica*: Radchenko, 1994f: 73; Radchenko & Elmes, 2010: 124.

minuta. *Myrmica rugulosa* var. *minuta* Karavaiev, 1929b: 204 (w.m.) UKRAINE.

[Junior primary homonym of *Myrmica minuta* Say, 1836: 294.]

Replacement name: *Myrmica rugulosa* var. *constricta* Karavaiev, 1934: 74.

mirabilis. *Myrmica mirabile* Elmes & Radchenko, 1998: 218, figs. 1-5 (w.) TAIWAN.

Status as species: Lin & Wu, 2003: 64; Terayama, 2009: 160; Radchenko & Elmes, 2010: 201; Chen, Zhou & Huang, 2016: 114 (in key).

mixta. *Myrmica mixta* Radchenko & Elmes, in Radchenko, Zhou, *et al.* 2008: 770, figs. 11-15 (q.) CHINA (Sichuan).

Status as species: Radchenko & Elmes, 2010: 202; Guénard & Dunn, 2012: 47.

modesta Foerster, 1850; see under **TETRAMORIUM**.

modesta Smith, F. 1860; see under **TETRAMORIUM**.

moesta Smith, F. 1863; see under **VOLLENHOVIA**.

***molassica**. **Myrmica molassica* Heer, 1849: 162, pl. 13, fig. 6 (q.) GERMANY (Miocene).

[Also described as new by Heer, 1850: 162.]

Status as species: Giebel, 1856: 180; Scudder, 1891: 719; Dalla Torre, 1893: 112; Bolton, 1995b: 281.

Unidentifiable taxon, *incertae sedis* in *Myrmica*: Handlirsch, 1907: 875; Radchenko, Dlussky & Elmes, 2007: 1494.

molefaciens Buckley, 1860; see under **POGONOMYRMEX**.

molesta Say, 1836; see under **SOLENOPSIS**.

montana Labram & Imhoff, 1838; see under **MANICA**.

montana. *Myrmica (Monomorium) montana* Buckley, 1867: 339 (w.) U.S.A. (Texas).

[Unresolved junior primary homonym of *Myrmica montana* Labram & Imhoff, 1838, pl. 36 (Bolton, 1995b: 281).]

Combination in *Monomorium*: Cresson, 1887: 262.

Status as species: Cresson, 1887: 262; Dalla Torre, 1893: 112.

Unidentifiable taxon: Emery, 1895c: 338; Wheeler, W.M. 1902f: 27;
unidentifiable taxon; *incertae sedis* in Myrmicinae: Smith, M.R. 1951a: 833; Smith, D.R.
1979: 1414;
unidentifiable taxon; *incertae sedis* in *Myrmica*: Bolton, 1995b: 281.

[Note: Wheeler, W.M. 1902f: 27, says possible combinations may be in *Pogonomyrmex* or *Tetramorium*.]

monticola. *Myrmica monticola* Creighton, 1950a: 101.

[First available use of *Myrmica scabrinodis* subsp. *schencki* var. *monticola* Wheeler, W.M. 1917a: 505 (w.m.) U.S.A. (Colorado); unavailable (infrasubspecific) name.]
Wheeler, G.C. & Wheeler, J. 1953a: 117 (l.).

As unavailable (infrasubspecific) name: Emery, 1921f: 41.

Junior synonym of *emeryana*: Smith, M.R. 1951a: 790.

Status as species: Francoeur, 1977b: 206; Yensen, *et al.* 1977: 182; Smith, D.R. 1979:
1350; Allred, 1982: 492; Wheeler, G.C. & Wheeler, J. 1986g: 22 (in key); Mackay, Lowrie,
et al. 1988: 92 (in key); Bolton, 1995b: 281; Mackay & Mackay, 2002: 165.

moravica. *Myrmica moravica* Soudek, 1922: 45, fig. 1 (1-3) (w.q.) CZECH REPUBLIC.

[Also described as new by Soudek, 1923: 107.]

Soudek, 1925a: 35 (m.).

Status as species: Soudek, 1925a: 35 (redescription); Finzi, 1926: 104; Weber, 1950b: 213
(redescription).

Subspecies of *deplanata*: Novák & Sadil, 1941: 80 (in key); Kratochvíl, in Kratochvíl,
Novák & Šnoflák, 1944: 40; Sadil, 1952: 263.

Junior synonym of *lacustris*: Radchenko, 1994f: 78; Seifert, 2003b: 150; Radchenko, Elmes
& Alicata, 2006: 516; Werner & Wiezik, 2007: 139.

Junior synonym of *deplanata*: Karavaiev, 1934: 83; Arnol'di, 1970b: 1843; Seifert, 1988b:
36; Bolton, 1995b: 281; Radchenko & Elmes, 2009c: 511; Radchenko & Elmes, 2010: 116;
Radchenko, 2016: 130.

multiplex. *Myrmica multiplex* Radchenko & Elmes, 2009a: 81, figs. 46-55 (w.q.) CHINA
(Shaanxi).

Status as species: Radchenko & Elmes, 2010: 203; Guénard & Dunn, 2012: 47; Chen,
Zhou & Huang, 2016: 115, 121 (in key).

muscorum Nylander, 1846; see under **LEPTOTHORAX**.

mutata. *Myrmica rubra* var. *mutata* Sadil, 1952: 242, fig. I, 13 (w.) CZECH REPUBLIC.

Junior synonym of *ruginodis*: Seifert, 1988b: 6; Bolton, 1995b: 281; Radchenko & Elmes,
2010: 236; Radchenko, 2016: 120.

mutica Nylander, 1849; see under **MESSOR**.

mutica Emery, 1895; see under **MANICA**.

myrmecophila. *Myrmica myrmecophila* Wasmann, 1910: 516 (q.) AUSTRIA.

[Note: holotype is a *Mermis*-infested worker, not a queen.]

Status as species: Emery, 1921f: 38; Finzi, 1926: 91; Stärcke, 1926: 85 (in key); Weber,
1948a: 270; Bernard, 1967: 123 (redescription); Kutter, 1968a: 49; Kutter, 1968b: 202;
Kutter, 1973c: 255.

Junior synonym of *sulcinodis*: van Boven, 1970a: 130; Bolton, 1988a: 4; Seifert, 1988b: 7;
Radchenko, 1994g: 81; Bolton, 1995b: 281; Radchenko & Elmes, 2003a: 239; Radchenko
& Elmes, 2010: 294; Radchenko, 2016: 124.

myrmicoxena. *Myrmica myrmicoxena* Forel, 1895i: 143 (q.) SWITZERLAND.

[Misspelled as *myrmecoxena* by Emery, 1921f: 38, Finzi, 1926: 114, and others.]

Emery, 1908a: 181 (m.).

Status as species: Emery, 1908a: 181; Forel, 1910a: 29; Forel, 1915d: 28 (in key);
Bondroit, 1918: 103; Emery, 1921f: 38; Soudek, 1923: 116; Finzi, 1926: 114; Stärcke,
1926: 85 (in key); Novák & Sadil, 1941: 76 (in key); Weber, 1950b: 218; Bernard, 1967:

116 (redescription); Kutter, 1968a: 49; Kutter, 1968b: 202; Kutter, 1973c: 255; Kutter, 1977c: 67; Mei, 1987: 466 (in table); Bolton, 1988a: 4 (in table); Seifert, 1988b: 41; Bolton, 1995b: 281; Radchenko & Elmes, 2003a: 220; Glaser, *et al.* 2011: 107; Radchenko & Elmes, 2010: 204; Borowiec, L. 2014: 132; Lebas, *et al.* 2016: 326; Seifert, 2018: 172.

natalensis Santschi, 1925; see under **MYRMICARIA**.

nearctica. *Myrmica sabuleti* subsp. *nearctica* Weber, 1939b: 148 (w.q.m.) U.S.A. (North Dakota, Colorado), CANADA (Manitoba).

Junior synonym of *monticola*: Creighton, 1950a: 101; Smith, D.R. 1979: 1350.

Subspecies of *sabuleti*: Wheeler, G.C. & Wheeler, E.W. 1944: 243; Smith, M.R. 1951a: 790.

Status as species: Weber, 1948a: 294 (redescription); Francoeur, 1977b: 206; Wheeler, G.C., *et al.* 1994: 303; Bolton, 1995b: 281; Coovert, 2005: 37; Ellison, *et al.* 2012: 289.

***nebulosa**. **Myrmica nebulosa* Novák, O. 1878: 91, pl. 3, fig. 1 (m.) GERMANY (Oligocene).

Status as species: Scudder, 1891: 719; Dalla Torre, 1893: 112; Bolton, 1995b: 281.

Unidentifiable taxon, *incertae sedis* in *Myrmica*: Handlirsch, 1907: 875; Radchenko, Dlussky & Elmes, 2007: 1494.

nefaria. *Myrmica nefaria* Bharti, 2012a: 150, figs. 1-17 (w.q.m.) INDIA (Himachal Pradesh).

Status as species: Bharti, Guénard, *et al.* 2016: 40; Bharti, Radchenko & Sasi, 2016: 124 (in key); Bharti, Sasi & Radchenko, 2016: 967.

neglecta. *Myrmica neglecta* Stärcke, 1942c: xxvii (footnote). *Nomen nudum*.

Material referred to *puerilis* by Stärcke, 1942c: xxvii; Weber, 1948a: 287; Bolton, 1995b: 282.

Material referred to *specioides* by Güsten, *et al.* 2006: 29.

neolaevinodis. *Myrmica rubra* r. *neolaevinodis* Forel, 1901h: 80 (w.) U.S.A. (New York, intercepted in quarantine in Hamburg, Germany).

[Misspelled as *neolevinodis* by Wheeler, W.M. 1910g: 566.]

As unavailable (infrasubspecific) name: Emery, 1921f: 39.

Subspecies of *laevinodis*: Weber, 1947: 455.

Subspecies of *rubra*: Wheeler, W.M. 1910g: 566; Smith, D.R. 1979: 1351; Bolton, 1995b: 281.

Incertae sedis in *Myrmica*: Smith, D.R. 1979: 1351.

nevodovskii. *Leptothorax (Leptothorax) nevodovskii* Karavaiev, 1926c: 164, fig. 3 (w.) GEORGIA.

Junior synonym of *bessarabicus*: Arakelian, 1994: 23; Radchenko, 1994e: 77; Bolton, 1995b: 281.

Junior synonym of *specioides*: Seifert, 2002a: 95 (by implication); Radchenko & Elmes, 2004: 229 (by implication); Radchenko & Elmes, 2010: 284; Radchenko, 2016: 136.

nigripes. *Myrmica sulcinodis* var. *nigripes* Ruzsky, 1895: 32 (w.q.m.) RUSSIA.

[Also described as new by Ruzsky, 1896: 73.]

Subspecies of *sulcinodis*: Ruzsky, 1905b: 707; Emery, 1908a: 174; Emery, 1921f: 42; Soudek, 1923: 116; Finzi, 1926: 88; Ruzsky, 1936: 95; Ruzsky, 1946: 70; Weber, 1947: 441; Weber, 1948a: 268; Sadil, 1952: 244; Arnol'di, 1970b: 1839; Arnol'di & Dlussky, 1978: 531 (in key).

Junior synonym of *sulcinodis*: Collingwood, 1971: 157; Seifert, 1988b: 7; Radchenko, 1994g: 81; Bolton, 1995b: 281; Radchenko & Elmes, 2010: 294; Radchenko, 2016: 124.

nitida. *Myrmica nitida* Radchenko & Elmes, 1999a: 35, fig. 3 (1-10) (w.q.m.) INDIA (Jammu & Kashmir).

Status as species: Radchenko & Elmes, 2001a: 261; Radchenko & Elmes, 2010: 205; Bharti, Sasi & Radchenko, 2016: 967.

nitidula Nylander, 1846; see under **FORMICOXENUS**.

nodicornis. *Myrmica nodicornis* Chappell, 1886: 58 (w.m.) GREAT BRITAIN. *Nomen nudum*.

Material referred to *lobicornis* by Donisthorpe, 1915d: 134.
novaeboracensis Buckley, 1867; see under ***CREMATOGASTER***.
nylanderi Foerster, 1850; see under ***TEMNOTHORAX***.
obensis. *Myrmica limanica* subsp. *obensis* Arnol'di, 1970b: 1840 (w.m.) RUSSIA.
Subspecies of *limanica*: Arnol'di & Dlussky, 1978: 532 (in key).
Subspecies of *gallienii*: Bolton, 1995b: 281 (error).
Junior synonym of *gallienii*: Radchenko, 1994e: 76; Radchenko & Elmes, 2010: 138;
Radchenko, 2016: 156.
oblonga Smith, F. 1860; see under ***VOLLENHOVIA***.
obscura. *Myrmica schencki* var. *obscura* Finzi, 1926: 111 (w.q.m.) ITALY, HUNGARY.
Subspecies of *schencki*: Novák & Sadil, 1941: 80 (in key); Weber, 1948a: 302; Baroni Urbani, 1971c: 36.
Junior synonym of *lobicornis*: Seifert, 1988b: 38; Bolton, 1995b: 281 (error).
Junior synonym of *schencki*: Bernard, 1967: 118; Radchenko, 1994f: 77; Seifert, 2003b: 145; Radchenko, Elmes & Alicata, 2006: 513.
Status as species: Elmes, Radchenko, *et al.* 2008: 99 (redescription); Radchenko & Elmes, 2010: 206; Borowiec, L. 2014: 132; Lebas, *et al.* 2016: 322.
obscurata. *Myrmica obscurata* Motschoulsky, 1863: 16 (w.) SRI LANKA.
Status as species: Smith, F. 1871a: 327; Dalla Torre, 1893: 112; Chapman & Capco, 1951: 127.
Unidentifiable taxon: Forel, 1903a: 698;
unidentifiable to genus; *incertae sedis* in *Myrmica*: Bolton, 1995b: 281;
unidentifiable taxon; *incertae sedis* in Myrmicinae: Radchenko & Elmes, 2010: 667.
****obsoleta***. **Myrmica obsoleta* Heer, 1849: 160, pl. 13, fig. 3 (q.) GERMANY (Miocene).
[Also described as new by Heer, 1850: 160.]
Status as species: Giebel, 1856: 179; Heer, 1867: 30; Scudder, 1891: 719; Dalla Torre, 1893: 112; Bolton, 1995b: 281.
Unidentifiable taxon, *incertae sedis* in *Myrmica*: Handlirsch, 1907: 875; Radchenko, Dlussky & Elmes, 2007: 1494.
Current subspecies: nominal plus **minor*.
occidentalis Cresson, 1865; see under ***POGONOMYRMEX***.
ominosa Gerstäcker, 1859; see under ***TRICHOMYRMEX***.
onoyamai. *Myrmica onoyamai* Radchenko & Elmes, in Radchenko, Elmes & Alicata, 2006: 507, figs. 23-42 (w.q.m.) JAPAN.
Status as species: Radchenko & Elmes, 2010: 208.
opaca Smith, F. 1861; see under ***ROMBLONELLA***.
opposita Say, 1836; see under ***APHAENOGASTER***.
ordinaria. *Myrmica ordinaria* Radchenko & Elmes, 1999a: 41, fig. 4 (11-16) (w.q.) INDIA (Jammu & Kashmir), PAKISTAN.
Status as species: Radchenko & Elmes, 2001a: 252; Radchenko & Elmes, 2010: 209; Bharti, Guénard, *et al.* 2016: 40; Bharti, Sasi & Radchenko, 2016: 967.
orientalis. *Myrmica ruginodis* subsp. *orientalis* Karavaiev, 1926f: 65, fig. 1 (w.) RUSSIA (Primorsky Region).
Kuznetsov-Ugamsky, 1928b: 38 (q.m.).
Subspecies of *ruginodis*: Kuznetsov-Ugamsky, 1928b: 37; Kuznetsov-Ugamsky, 1929a: 33; Teranishi, 1932: 49.
Subspecies of *rubra*: Weber, 1947: 450.
Status as species: Kupyanskaya, 1990: 101; Bolton, 1995b: 281.
Junior synonym of *ruginodis*: Radchenko, 1994f: 73.
Junior synonym of *kotokui*: Radchenko, 2005b: 142; Radchenko & Elmes, 2010: 170.

orthostyla. *Myrmica orthostyla* Arnol'di, 1976a: 552, fig, 8 (w.q.m.) KYRGYZSTAN.

[Misspelled as *orthostila* by Tarbinsky, 1976: 27.]

Status as species: Tarbinsky, 1976: 27 (redescription); Radchenko, 1994c: 142 (in key); Radchenko, 1994e: 81; Bolton, 1995b: 281; Schultz, R. et al. 2006: 203; Radchenko & Elmes, 2010: 210.

oui. *Myrmica oui* Chen, Zhou & Huang, 2016: 105, figs. 23-25 (w.) CHINA (Guizhou).

pachei. *Myrmica pachei* Forel, 1906b: 79 (w.q.m.) NEPAL.

Status as species: Emery, 1921f: 38; Menozzi, 1939a: 293 (in key); Weber, 1947: 467 (redescription); Chapman & Capco, 1951: 128; Collingwood, 1970: 374; Bolton, 1995b: 281; Radchenko & Elmes, 2001a: 256; Radchenko & Elmes, 2009a: 69; Radchenko & Elmes, 2010: 211; Bharti, Guénard, et al. 2016: 40; Bharti, Sasi & Radchenko, 2016: 967; Chen, Zhou & Huang, 2016: 120 (in key).

paleata Lund, 1831; see under **SOLENOPSIS**.

pallida Nylander, 1849; see under **APHAENOGASTER**.

pallidinodis, misspelling, see under *pilinodis*.

pallinodis, misspelling, see under *pilinodis*.

pallidula Nylander, 1849; see under **PHEIDOLE**.

****paradoxa***. **Myrmica paradoxa* Radchenko, Dlussky & Elmes, 2007: 1496, figs. 2, 3 (w.) SAXONIAN AMBER (Germany, Eocene).

Status as species: Dlussky & Rasnitsyn, 2009: 1032; Radchenko & Elmes, 2010: 654; Perkovsky, 2016: 116.

parallela Smith, F. 1859; see under **TETRAMORIUM**.

pararitae. *Myrmica pararitae* Radchenko & Elmes, in Radchenko, Zhou, et al. 2008: 773, figs. 16-25 (w.q.) CHINA (Sichuan).

[Misspelled as *parasitae* by Radchenko, Zhou, et al. 2008: 776 (in table).]

Status as species: Radchenko & Elmes, 2010: 213; Guénard & Dunn, 2012: 48; Chen, Zhou & Huang, 2016: 118 (in key).

parasitae, misspelling, see under *pararitae*.

parasitica Creighton, 1934; see under **MANICA**.

parvula Schenck, 1852; see under **TEMNOTHORAX**.

pechi. *Sifolinia pechi* Samšiňák, 1957: 167, figs. 1B, 2B-E (q.) CZECH REPUBLIC.

Pisarski, 1962b: 367 (m.).

Status as species: Pisarski, 1962b: 367; Collingwood, 1971: 159.

Junior synonym of *karavajevi*: Samšiňák, 1964: 156; Kutter, 1968b: 202; Arnol'di & Dlussky, 1978: 535 (in key); Bolton, 1988a: 4; Bolton, 1995b: 281; Czechowski, et al. 2002: 32; Radchenko & Elmes, 2003a: 231; Werner & Wiezik, 2007: 139; Radchenko & Elmes, 2010: 163; Czechowski, et al. 2012: 111; Radchenko, 2016: 159.

pedestris Smith, F. 1861; see under **VOLLENHOVIA**.

pelops. *Myrmica pelops* Seifert, 2003b: 148, figs. 9, 12, 14, 15 (w.) GREECE.

Status as species: Radchenko, Elmes & Alicata, 2006: 527; Radchenko & Elmes, 2010: 213; Legakis, 2011: 5; Borowiec, L. & Salata, 2012: 522; Borowiec, L. 2014: 132; Lebas, et al. 2016: 322; Salata & Borowiec, 2018c: 47.

pellucida Smith, F. 1857; see under **TAPINOMA**.

perelegans. *Myrmica perelegans* Curtis, 1854: 214, pl. 23, figs. 15-17 (w.q.m.) GREAT BRITAIN.

Junior synonym of *sulcinodis*: Mayr, 1855: 408; Nylander, 1856b: 80; Smith, F. 1855b: 120; Smith, F. 1858b: 116; Mayr, 1863: 435; Roger, 1863b: 28; Smith, F. 1871b: 3; André, 1874: 203 (in list); Forel, 1874: 101 (in list); Emery & Forel, 1879: 460; Dalla Torre, 1893: 117; Ruzsky, 1905b: 703; Donisthorpe, 1915d: 122; Emery, 1921f: 42; Donisthorpe, 1927b: 132; Radchenko, 1994g: 81; Bolton, 1995b: 281; Radchenko & Elmes, 2010: 294; Radchenko, 2016: 124.

persiana. *Myrmica bergi* subsp. *persiana* Weber, 1947: 474.

Replacement name for *Myrmica bergi* var. *fortior* Crawley, 1920a: 163. [Junior primary homonym of *Myrmica smythiesii* var. *fortior* Forel, 1904c: 22.]

Subspecies of *bergi*: Bolton, 1995b: 281 (error).

Junior synonym of *bergi*: Radchenko, 1994e: 76; Radchenko, Elmes & Woyciechowski, 2002: 413; Radchenko & Elmes, 2010: 101; Radchenko, 2016: 157.

pertinax Smith, F. 1861; see under **VOLLENHOVIA**.

petita. *Myrmica petita* Radchenko & Elmes, 1999a: 45, fig. 5 (11-15) (q.) INDIA (Jammu & Kashmir).

Status as species: Radchenko & Elmes, 2001a: 261; Radchenko & Elmes, 2010: 215; Bharti, Guénard, et al. 2016: 40.

petrophila. *Myrmica petrophila* Gredler, 1858: 21. *Nomen nudum* (attributed to Foerster).

phalacra. *Myrmica phalacra* Radchenko & Elmes, 2009a: 74, figs. 21-30 (w.q.) CHINA (Shaanxi).

Status as species: Radchenko & Elmes, 2010: 216; Guénard & Dunn, 2012: 48; Bharti, Sasi & Radchenko, 2016: 967; Chen, Zhou & Huang, 2016: 115, 121 (in key).

pilinodis. *Myrmica pilinodis* Motschoulsky, 1863: 16 (w.) SRI LANKA.

[Misspelled as *pallidinodis* by Dalla Torre, 1893: 113; misspelled as *pallinodis* by Smith, F. 1871a: 327, Emery, 1924d: 356, Chapman & Capco, 1951: 128; misspelled as *pallinodes* by Forel, 1903a: 698.]

Status as species: Dalla Torre, 1893: 113; Chapman & Capco, 1951: 128.

Unidentifiable taxon: Forel, 1903a: 698;

unidentifiable to genus; *incertae sedis* in *Myrmica*: Bolton, 1995b: 281;

unidentifiable taxon; *incertae sedis* in Myrmicinae: Radchenko & Elmes, 2010: 668.

pilosiscapus. *Myrmica pilosiscapus* Bondroit, 1920a: 147, fig. 1 (w.q.m.) BELGIUM.

[Also described as new by Bondroit, 1920b: 301.]

[Misspelled as *pilodiscapus* by Casevitz-Weulersse, 1990c: 435.]

Subspecies of *scabrinodis*: Finzi, 1926: 102; Santschi, 1931b: 343; Stitz, 1939: 94; Novák & Sadil, 1941: 79 (in key).

Subspecies of *sabuleti*: Weber, 1948a: 296.

Status as species: Sadil, 1952: 256; Kutter, 1968a: 59; Arnol'di, 1970b: 1837 (in key), 1841; Baroni Urbani, 1971c: 26.

Junior synonym of *sabuleti*: Bernard, 1967: 117; van Boven, 1977: 120.

Junior synonym of *scabrinodis*: Collingwood, 1958b: 72 (in text); Kutter, 1977c: 69; Collingwood, 1979: 55; Seifert, 1988b: 27; Casevitz-Weulersse, 1990b: 137; Radchenko, 1994e: 79; Bolton, 1995b: 282; Werner & Wiezik, 2007: 139; Radchenko & Elmes, 2010: 259; Radchenko, 2016: 133.

pinetorum. *Myrmica punctiventris* subsp. *pinetorum* Wheeler, W.M. 1905f: 384 (w.q.) U.S.A. (New Jersey).

Weber, 1950b: 217 (m.).

Subspecies of punctiventris: Wheeler, W.M. 1910g: 566; Emery, 1921f: 38; Smith, M.R. 1932: 157; Dennis, 1938: 288; Wesson, L.G. & Wesson, R.G. 1940: 94; Weber, 1950b: 217 (redescription) Smith, M.R. 1951a: 790; Smith, M.R. 1958c: 113; Smith, M.R. 1967: 349.

Status as species: Creighton, 1950a: 102; Carter, 1962a: 6 (in list); Francoeur, 1977b: 206; Smith, D.R. 1979: 1350; Wheeler, G.C., et al. 1994: 303; Bolton, 1995b: 282; Coovert, 2005: 38; MacGown & Forster, 2005: 70; Francoeur, 2007: 156 (redescription); Ellison, et al. 2012: 290.

Senior synonym of isfahani: Francoeur, 2007: 156.

pisarskii. *Myrmica pisarskii* Radchenko, 1994h: 208, figs. 1-12 (w.q.m.) RUSSIA (Siberia), MONGOLIA.

[*Myrmica pisarskii* Radchenko, 1994b: 109 (in key); Radchenko, 1994c: 142 (in key); Radchenko, 1994g: 90: published without designation of type-material and hence unavailable.]

Status as species: Radchenko, 1994b: 109 (in key); Radchenko, 1994c: 142 (in key); Radchenko, 1994g: 90; Bolton, 1995b: 282; Radchenko & Elmes, 2010: 216; Yamane & Aibek, 2012: 179.

plana. *Myrmica lobicornis* var. *plana* Karavaiev, 1927a: 283, fig. 1 (w.) UKRAINE.

Arnol'di, 1934: 170 (q.m.).

Subspecies of *lobicornis*: Karavaiev, 1927c: 259 (in key).

Subspecies of *schencki*: Karavaiev, 1929b: 208; Weber, 1948a: 302.

Subspecies of *deplanata*: Arnol'di, 1934: 170; Karavaiev, 1936: 274 (redescription).

Junior synonym of *lacustris*: Radchenko, 1994f: 78; Seifert, 2003b: 150; Radchenko, Elmes & Alicata, 2006: 516.

Junior synonym of *deplanata*: Karavaiev, 1934: 83; Arnol'di, 1970b: 1843; Seifert, 1988b: 36; Bolton, 1995b: 282; Radchenko & Elmes, 2009c: 511; Radchenko & Elmes, 2010: 116; Radchenko, 2016: 130.

***pleiorhytida*.** *Myrmica pleiorhytida* Radchenko & Elmes, 2009a: 78, figs. 41-45 (w.) CHINA (Yunnan).

Status as species: Radchenko & Elmes, 2010: 218; Guénard & Dunn, 2012: 48; Chen, Zhou & Huang, 2016: 114, 120 (in key).

***poldii*.** *Myrmica poldii* Radchenko & Rigato, in Radchenko, Zhou, *et al.* 2008: 776, figs. 26-30 (w.) CHINA (Sichuan).

Status as species: Radchenko & Elmes, 2010: 219; Guénard & Dunn, 2012: 48; Chen, Zhou & Huang, 2016: 119 (in key).

polita Smith, F. 1860; see under **CAREBARA**.

polita Smith, F. 1862; see under **SOLENOPSIS**.

***polyglypta*.** *Myrmica polyglypta* Radchenko & Rigato, in Radchenko, Zhou, *et al.* 2008: 781, figs. 44-48 (w.) CHINA (Yunnan).

Status as species: Radchenko & Elmes, 2009a: 72; Radchenko & Elmes, 2010: 220; Guénard & Dunn, 2012: 48; Chen, Zhou & Huang, 2016: 115, 121 (in key).

poneroides Smith, F. 1860; see under **VOLLENHOVIA**.

***pradella*.** *Myrmica pradella* Kutter, 1977: 6. *Nomen nudum*.

***pseudorugosa*.** *Myrmica pseudorugosa* Bharti, 2012b: 12, figs. 4-6 (w.) PAKISTAN.

Status as species: Bharti, Sasi & Radchenko, 2016: 967.

puerilis. *Myrmica puerilis* Stärcke, 1942c: xxvii, figs. 1-3, 5 (w.q.m.) NETHERLANDS.

Status as species: van Boven, 1947: 177 (in key); Weber, 1948a: 287; Kutter, 1963: 129; Kutter, 1968a: 59; van Boven, 1977: 121.

Junior synonym of *specioides*: Collingwood & Yarrow, 1969: 57; Collingwood, 1971: 157; Bolton & Collingwood, 1975: 18; Pisarski, 1975: 12; Collingwood, 1979: 56; Seifert, 1988b: 16; Bolton, 1995b: 282; Seifert, 2002a: 95 (by implication); Radchenko & Elmes, 2004: 229 (by implication); Güsten, *et al.* 2006: 29; Casevitz-Weulersse & Galkowski, 2009: 491; Radchenko & Elmes, 2010: 284; Seifert, 2011: 183; Radchenko, 2016: 136.

***pulchella*.** *Myrmica margaritae* var. *pulchella* Santschi, 1937h: 368 (w.) TAIWAN.

Replacement name for *Myrmica margaritae* var. *formosae* Wheeler, W.M. 1929g: 37 (Radchenko & Elmes, 2010: 221). [Junior primary homonym of *Myrmica formosa* Smith, F. 1858b: 128.]

[Note: *pulchella* junior synonym of *formosae* Wheeler, W.M.; hence *pulchella* first available replacement name for *formosae* Wheeler, W.M.]

Radchenko & Elmes, 2010: 222 (q.).

Subspecies of *margaritae*: Weber, 1950b: 219; Chapman & Capco, 1951: 127; Bolton, 1995b: 282.

Junior synonym of *formosae*: Radchenko & Elmes, 1998: 7; Elmes & Radchenko, 1998: 222; Terayama, 2009: 160.

Status as species: Radchenko & Elmes, 2010: 221; Chen, Zhou & Huang, 2016: 118 (in key).

punctata Smith, F. 1860; see under ***PRISTOMYRMEX***.

punctinops. *Myrmica punctinops* Francoeur, 2007: 163, figs. 20 – 27 (w.) U.S.A. (California).

punctiventris. *Myrmica punctiventris* Roger, 1863a: 190 (w.) U.S.A. (no state data).

Mayr, 1886d: 450 (q.); Emery, 1895c: 312 (m.).

Status as species: Roger, 1863b: 29; Mayr, 1863: 434; Mayr, 1886d: 450; Cresson, 1887: 261; Dalla Torre, 1893: 113; Emery, 1895c: 312; Wheeler, W.M. 1905f: 383; Wheeler, W.M. 1906b: 6; Wheeler, W.M. 1910g: 566; Wheeler, W.M. 1916m: 587; Emery, 1921f: 38; Wesson, L.G. & Wesson, R.G. 1940: 94; Buren, 1944a: 283; Weber, 1950b: 215 (redescription); Creighton, 1950a: 102; Smith, M.R. 1951a: 790; Gregg, R.E. 1961: 211; Carter, 1962a: 6 (in list); Smith, M.R. 1967: 349; Francoeur, 1977b: 206; Smith, D.R. 1979: 1350; DuBois & LaBerge, 1988: 140; Wheeler, G.C., *et al.* 1994: 304; Bolton, 1995b: 282; Deyrup, 2003: 45; Covert, 2005: 38; MacGown & Forster, 2005: 70; Francoeur, 2007: 158 (redescription); Ellison, *et al.* 2012: 291; Deyrup, 2017: 80.

punica Smith, 1861; see under ***TETRAMORIUM***.

pusilla* Heer, 1849; see under **MYRMECITES***.

pyrenaea. *Myrmica arduennae* var. *pyrenaea* Bondroit, 1918: 106, fig. 53 (w.) FRANCE.

[Misspelled as *ryrenaea* by Radchenko, 1994g: 87.]

As unavailable (infrasubspecific) name: Emery, 1921f: 38.

Status as species: Bondroit, 1920a: 151.

Subspecies of *lobicornis*: Finzi, 1926: 108; Santschi, 1931b: 350; Weber, 1948a: 287.

Junior synonym of *lobicornis*: Seifert, 1988b: 38; Radchenko, 1994g: 87; Bolton, 1995b: 282.

Junior synonym of *lobulicornis*: Seifert, 2005: 6; Casevitz-Weulersse & Galkowski, 2009: 490; Radchenko & Elmes, 2010: 191.

quadrispinosa Smith, F. 1865; see under ***PHEIDOLE***.

quebecensis. *Myrmica quebecensis* Francoeur, 1981: 756, figs. 5, 6 (q.) CANADA (Québec).

Francoeur & Loiselle, 1984: 4 (m.).

Status as species: Francoeur & Loiselle, 1984: 4; Mei, 1987: 466 (in table); Bolton, 1988a: 4 (in table); Bolton, 1995b: 282; Ellison, *et al.* 2012: 292.

radchenkoi. *Myrmica radchenkoi* Bharti & Sharma, 2011b: 430, figs. 1-6 (w.q.) INDIA (Jammu & Kashmir).

Status as species: Bharti & Sharma, 2013: 129 (in key); Bharti, Guénard, *et al.* 2016: 40; Bharti, Sasi & Radchenko, 2016: 967.

ravasinii. *Myrmica ravasinii* Finzi, 1923: 2, fig. (w.) ALBANIA.

Arakelian, 1989: 734 (q.m.).

Status as species: Finzi, 1926: 112; Weber, 1950b: 212; Arnol'di, 1970b: 1839 (in key); Arnol'di & Dlussky, 1978: 535 (in key); Agosti & Collingwood, 1987a: 53; Agosti & Collingwood, 1987b: 268 (in key); Seifert, 1988b: 37 (redescription); Arakelian, 1989: 734; Arakelian, 1994: 25; Radchenko, 1994c: 140 (in key); Radchenko, 1994f: 79; Bolton, 1995b: 282; Seifert, 2003b: 150 (redescription); Radchenko, Elmes & Alicata, 2006: 519; Petrov, 2006: 88 (in key); Gratiashvili & Barjadze, 2008: 140; Radchenko & Elmes, 2010: 223; Legakis, 2011: 5; Borowiec, L. & Salata, 2012: 522; Czekes, *et al.* 2012: 41 (in key); Kiran & Karaman, 2012: 22; Borowiec, L. 2014: 132; Lebas, *et al.* 2016: 322; Radchenko, Yusupov & Komarov, 2016: 3; Salata & Borowiec, 2018c: 47.

recedens Nylander, 1856; see under **TEMNOTHORAX**.

rediana Gené, 1841; see under **CREMATOGASTER**.

religiosa. *Myrmica religiosa* Bharti & Gul, in Bharti & Sharma, 2013: 127, figs. 13-15 (w.) INDIA (Uttarakhand).

Status as species: Bharti, Guénard, *et al.* 2016: 40; Bharti, Sasi & Radchenko, 2016: 968.

reticulata Smith, F. 1862; see under **TETRAMORIUM**.

reticulata. *Myrmica rolandi* var *reticulata* Stärcke, 1942c: xxv.

[First available use of *Myrmica scabrinodis* st. *rolandi* var. *reticulata* Santschi, 1931b: 344 (w.q.m.) FRANCE; unavailable (infrasubspecific) name (Bolton, 1995b: 282).]

[Unresolved junior primary homonym of *Myrmica reticulata* Smith, F. 1862b: 33.]

As unavailable (infrasubspecific) name: Weber, 1947: 442; Weber, 1950b: 208.

Junior synonym of *scabrinodis*: Seifert, 1988b: 27; Radchenko, 1994e: 79; Bolton, 1995b: 282; Casevitz-Weulersse & Galkowski, 2009: 491; Radchenko & Elmes, 2010: 259; Radchenko, 2016: 133.

Junior synonym of *spinosior*: Seifert, *et al.* 2014: 178 (in text).

rhynchophora. *Myrmica rhynchophora* Foerster, 1850b: 488 (m.) ALGERIA.

Junior synonym of *Manica rubida*: Mayr, 1861: 63 (in key); Roger, 1863b: 28; Mayr, 1863: 434; Dours, 1873: 167; André, 1874: 203 (in list); Forel, 1874: 101 (in list); Emery & Forel, 1879: 461; Dalla Torre, 1893: 113; Emery, 1921f: 43; Bolton, 1995b: 249.

Unidentifiable taxon, *incertae sedis* in *Myrmica*: Radchenko & Elmes, 2010: 662.

rhytida. *Myrmica rhytida* Radchenko & Elmes, 1999a: 41, fig. 5 (1-10) (w.q.m.) INDIA (Jammu & Kashmir).

Status as species: Radchenko & Elmes, 2001a: 261; Radchenko & Elmes, 2010: 224; Bharti, Guénard, *et al.* 2016: 41; Bharti, Sasi & Radchenko, 2016: 968.

rigatoi. *Myrmica rigatoi* Radchenko & Elmes, 1998: 18, fig. 4 (6-10) (w.) PAKISTAN.

Status as species: Radchenko & Elmes, 2001a: 256; Radchenko & Elmes, 2010: 225; Bharti & Sharma, 2013: 129 (in key); Bharti, Sasi & Radchenko, 2016: 968.

ritae. *Myrmica ritae* Emery, 1889b: 501, pl. 11, fig. 27 (w.) MYANMAR.

Radchenko & Elmes, 1999b: 95 (q.).

Status as species: Dalla Torre, 1893: 113; Emery, 1895k: 471; Forel, 1903a: 697; Bingham, 1903: 267; Wheeler, W.M. 1919e: 65; Emery, 1921f: 38; Weber, 1950b: 219 (redescription); Chapman & Capco, 1951: 128; Collingwood, 1970: 374; Wang, M., 1992: 679; Bolton, 1995b: 282; Radchenko & Elmes, 1998: 5; Radchenko & Elmes, 1999b: 95; Jaitrong & Nabhitabhata, 2005: 28; Radchenko & Elmes, 2010: 226; Guénard & Dunn, 2012: 48; Bharti, Guénard, *et al.* 2016: 41; Chen, Zhou & Huang, 2016: 118 (in key).

rolandi. *Myrmica rolandi* Bondroit, 1918: 101 (w.q.m.) FRANCE.

Finzi, 1926: 89 (m.).

As unavailable (infrasubspecific) name: Emery, 1921f: 40.

Subspecies of *sulcinodis*: Santschi, 1919e: 244; Menozzi, 1922b: 325.

Subspecies of *scabrinodis*: Emery, 1921f: 40; Santschi, 1925g: 340; Santschi, 1931a: 3; Santschi, 1931b: 344; Weber, 1950b: 208; Schmitz, 1950: 16; Ceballos, 1956: 297.

Status as species: Bondroit, 1920a: 150; Bondroit, 1920b: 300; Finzi, 1926: 89; Menozzi, 1926b: 181; Stärcke, 1926: 91 (in key); Wheeler, W.M. 1926: 5; Menozzi, 1927b: 90; Santschi, 1929e: 139; Bernard, 1956b: 257; Kutter, 1963: 137 (in key); Bernard, 1967: 115 (redescription); Casevitz-Weulersse, 1990c: 435.

Junior synonym of *aloba*: Santschi, 1931b: 340; Seifert, 1988b: 29; Bolton, 1995b: 282; Casevitz-Weulersse & Galkowski, 2009: 490; Radchenko & Elmes, 2010: 84.

rubra. *Formica rubra* Linnaeus, 1758: 580 (w.) (no state data, “Habitat in Europae”).

[Note: type-locality Sweden, after Linnaeus, 1761: 427.]

[Misspelled as *rufa* by Zetterstedt, 1838: 450.]

Latreille, 1798: 48 (q.m.); Latreille, 1802c: 248 (q.m.); Wheeler, G.C. & Wheeler, J. 1953a: 118 (l.); Hauschteck, 1965: 325 (k.).

Combination in *Manica*: Jurine, 1807: 279;

combination in *Myrmica*: Latreille, 1804: 179; Latreille, 1809: 131.

Status as species: Linnaeus, 1761: 427; Linnaeus, 1767: 963; Fabricius, 1782: 490; Fabricius, 1787: 308; Gmelin, 1790: 2799; Christ, 1791: 513; Olivier, 1792: 493; Fabricius, 1793: 353; Latreille, 1798: 48; Latreille, 1802c: 246; Walckenaer, 1802: 165; Latreille, 1804: 179; Fabricius, 1804: 400; Gravenhorst, 1807: 286; Jurine, 1807: 279; Latreille, 1809: 131; Lamarck, 1817: 98; Latreille, 1818a: 149; Billberg, 1820: 104; Stephens, 1829: 356; Brullé, 1833: 327; Losana, 1834: 330; Lepeletier de Saint-Fargeau, 1835: 181; Zetterstedt, 1838: 450; Schilling, 1839: 56; Smith, F. 1851: 4; Curtis, 1854: 213; Forel, 1874: 75 (in key); Emery & Forel, 1879: 460; Lameere, 1892: 68; Dalla Torre, 1893: 113; Emery, 1895c: 312; Saunders, E. 1896: 39; Forel, 1899c: 63; Emery, 1908a: 169; Bondroit, 1910: 494; Karavaiev, 1912b: 583; Forel, 1915d: 28 (in key); Emery, 1916b: 119; Escherich, 1917: 325 (in key); Nadig, 1918: 338; Emery, 1921f: 38; Soudek, 1923: 110; Stärcke, 1926: 89 (in key); Karavaiev, 1927c: 258 (in key); Kuznetsov-Ugamsky, 1927e: 193; Santschi, 1932c: 69; Karavaiev, 1934: 65 (redescription); Weber, 1947: 448; Brian, M.V. & Brian, A.D. 1949: 393; Creighton, 1950a: 103; Chapman & Capco, 1951: 128; Sadil, 1952: 240; Yarrow, 1955b: 114; Ceballos, 1956: 296; Collingwood, 1958b: 67; Collingwood, 1962: 217, 222; Smith, M.R. 1967: 349; Collingwood & Yarrow, 1969: 55; Arnol'di, 1970b: 1833 (in key); Collingwood, 1971: 156; Bolton & Collingwood, 1975: 5 (in key); Pisarski, 1975: 10; Arnol'di, 1976a: 554 (in key); Tarbinsky, 1976: 40 (redescription); van Boven, 1977: 115; Arnol'di & Dlussky, 1978: 530 (in key); Collingwood, 1978: 78 (in key); Smith, D.R. 1979: 1350; Collingwood, 1979: 52; Onoyama, 1980: 197; Pearson, 1981: 75; Agosti & Collingwood, 1987a: 53; Agosti & Collingwood, 1987b: 267 (in key); Nilsson & Douwes, 1987: 66; Seifert, 1988b: 5 (redescription); Onoyama, 1989a: 131; Casevitz-Weulersse, 1990c: 435; Ogata, 1991b: 78; Morisita, *et al.* 1992: 11; Atanassov & Dlussky, 1992: 83; Arakelian, 1994: 25; Radchenko, 1994b: 105 (in key); Radchenko, 1994c: 137 (in key); Radchenko, 1994f: 72; Bolton, 1995b: 282; Douwes, 1995: 87; Poldi, *et al.* 1995: 2; Wu, J. & Wang, 1995: 92; Espadaler, 1997b: 30; Radchenko, *et al.* 1997: 483; Collingwood & Prince, 1998: 12 (in key); Gallé, *et al.* 1998: 214; Wei, Zhou *et al.* 2001: 562 (in key); Czechowski, *et al.* 2002: 17; Markó & Csösz, 2002: 112; Imai, *et al.* 2003: 182; Karaman, M.G. & Karaman, 2003: 43; Bračko, 2006: 138; Markó, Sipos, *et al.* 2006: 70; Petrov, 2006: 87 (in key); Schultz, R. *et al.* 2006: 206; Steiner, Schlick-Steiner, *et al.* 2006: 777; Bračko, 2007: 18; Zryanyin & Zryanova, 2007: 230; Seifert, 2007: 204; Bolton, 2005: 13 (in key); Werner & Wiezik, 2007: 146; Gratiashvili & Barjadze, 2008: 140; Casevitz-Weulersse & Galkowski, 2009: 490; Lapeva-Gjonova, *et al.* 2010: 9; Boer, 2010: 56; Radchenko & Elmes, 2010: 228; Csösz, *et al.* 2011: 56; Karaman, M.G. 2011b: 45; Legakis, 2011: 5; Wetterer & Radchenko, 2011: 87; Borowiec, L. & Salata, 2012: 522; Ellison, *et al.* 2012: 293; Czechowski, *et al.* 2012: 73; Czekes, *et al.* 2012: 41 (in key); Guénard & Dunn, 2012: 48; Kiran & Karaman, 2012: 22; Yamane & Aibek, 2012: 180; Borowiec, L. 2014: 132; Bračko, *et al.* 2014: 14; Lebas, *et al.* 2016: 312; Radchenko, 2016: 117; Chen, Zhou & Huang, 2016: 114 (in key); Salata & Borowiec, 2018c: 47; Seifert, 2018: 166.

Senior synonym of bruesi: Yarrow, 1955b: 114; Smith, D.R. 1979: 1350; Bolton, 1995b: 282; Imai, *et al.* 2003: 182; Radchenko & Elmes, 2010: 228; Radchenko, 2016: 118.

Senior synonym of champlaini: Yarrow, 1955b: 114; Smith, D.R. 1979: 1350; Bolton, 1995b: 282; Imai, *et al.* 2003: 182; Radchenko, 2016: 117.

Senior synonym of europaea: Radchenko, *et al.* 1997: 483; Czechowski, *et al.* 2002: 17; Radchenko & Elmes, 2010: 228; Czechowski, *et al.* 2012: 73; Radchenko, 2016: 118.

Senior synonym of *laevinodis*: Yarrow, 1955b: 114; Collingwood, 1958b: 67; Smith, M.R. 1967: 349; Arnol'di, 1970b: 1839; Collingwood, 1971: 156; Bolton & Collingwood, 1975: 17; Tarbinsky, 1976: 40; van Boven, 1977: 117; Arnol'di & Dlussky, 1978: 530 (in key); Collingwood, 1979: 52; Smith, D.R. 1979: 1350; Onoyama, 1980: 197; Seifert, 1988b: 5; Onoyama, 1989a: 131; Casevitz-Weulersse, 1990c: 435; Arakelian, 1994: 25; Radchenko, 1994f: 72; Bolton, 1995b: 282; Poldi, *et al.* 1995: 2; Radchenko, *et al.* 1997: 483; Gallé, *et al.* 1998: 214; Czechowski, *et al.* 2002: 17; Imai, *et al.* 2003: 182; Radchenko, 2007: 30; Werner & Wiezik, 2007: 139; Gratiashvili & Barjadze, 2008: 140; Casevitz-Weulersse & Galkowski, 2009: 490; Radchenko & Elmes, 2010: 228; Csösz, *et al.* 2011: 56; Czechowski, *et al.* 2012: 73; Kiran & Karaman, 2012: 22; Radchenko, 2016: 117.

Senior synonym of *longiscapus*: Bolton, 1995b: 282; Imai, *et al.* 2003: 182; Radchenko & Elmes, 2010: 228; Radchenko, 2016: 118.

Senior synonym of *microrubra*: Steiner, Schlick-Steiner, *et al.* 2006: 777; Werner & Wiezik, 2007: 146; Radchenko & Elmes, 2010: 228; Csösz, *et al.* 2011: 56; Czechowski, *et al.* 2012: 73; Schär & Nash, 2014: 2396; Radchenko, 2016: 118.

Current subspecies: nominal plus *neolaevinodis*.

rubra Buckley, 1867; see under **LABIDUS**.

rubriceps Nylander, 1849; see under **CREMATOGASTER**.

**rudis*. **Macromischa rudis* Mayr, 1868b: 85, pl. 4, fig. 85 (w.) BALTIC AMBER (Eocene).

Combination in **Nothomyrmica*: Wheeler, W.M. 1915h: 60;

combination in *Myrmica*: Radchenko, Dlussky & Elmes, 2007: 1495.

Status as species: Scudder, 1891: 716; Dalla Torre, 1893: 120; André, 1895b: 82 (in list); Handlirsch, 1907: 875; Wheeler, W.M. 1915h: 60; Burnham, 1979: 110; Keilbach, 1982: 275; Bolton, 1995b: 292; Radchenko, Dlussky & Elmes, 2007: 1495; Dlussky & Rasnitsyn, 2009: 1032; Radchenko & Elmes, 2010: 655; Perkovsky, 2016: 116.

rufa Jerdon, 1851; see under **CREMATOGASTER**.

ruficeps Smith, F. 1861; see under **PHEIDOLE**.

rufitarsis Foerster, 1850; see under **MESSOR**.

rufotestacea Foerster, 1850; see under **MESSOR**.

rugiceps* Heer, 1849; see under **CAREBARA.

rugifrons Smith, F. 1858; see under **MONOMORIUM**.

ruginodiformis. *Myrmica rugulosa* var. *ruginodiformis* Karavaiev, 1929b: 204 (w.q.m.) KYRGYZSTAN.

Subspecies of *rugulosa*: Weber, 1948a: 307.

Junior synonym of *dshungarica*: Arnol'di, 1976a: 551; Radchenko, 1994f: 73; Bolton, 1995b: 282; Radchenko & Elmes, 2010: 124.

ruginodis. *Myrmica ruginodis* Nylander, 1846a: 929, pl. 18, figs. 5, 30 (w.q.m.) FINLAND.

[Misspelled as *ruginodes* by Betrem, 1926: 216, caption of fig. 6.]

Hauschbeck, 1965: 325 (k.).

Junior synonym of *Formica vagans* Fabricius: Foerster, 1850a: 66; Curtis, 1854: 213.

Subspecies of *laevinodis*: Mayr, 1886d: 450; Ruzsky, 1896: 73; Ruzsky, 1902d: 29; Ruzsky, 1905b: 671; Ruzsky, 1925a: 288; Kuznetsov-Ugamsky, 1929b: 44.

Subspecies of *rubra*: Forel, 1874: 76; Emery & Forel, 1879: 460; Lameere, 1892: 68; Saunders, E. 1896: 40 (in key); Ruzsky, 1904a: 288; Emery, 1908a: 171; Forel, 1909c: 103; Bondroit, 1910: 494; Santschi, 1910d: 71; Karavaiev, 1910a: 270; Karavaiev, 1912b: 583; Stitz, 1914: 73; Emery, 1914d: 156; Forel, 1915d: 28; Emery, 1916b: 119; Escherich, 1917: 325 (in key); Menozzi, 1918: 82; Nadig, 1918: 338; Emery, 1921f: 39; Kulmatycki, 1922: 77; Finzi, 1923: 2; Soudek, 1923: 110; Santschi, 1925g: 339; Schkaff, 1925: 274; Karavaiev, 1926b: 94; Stärcke, 1926: 89 (in key); Karavaiev, 1927c: 258 (in key);

Kuznetsov-Ugamsky, 1927e: 193; Gösswald, 1932: 76; Arnol'di, 1933b: 599 (in key); Teranishi, 1940: 14; Chapman & Capco, 1951: 128; Ceballos, 1956: 297.

Junior synonym of *rubra*: Santschi, 1931b: 339; Karavaiev, 1934: 65; Weber, 1947: 448; Sadil, 1952: 240; Pisarski, 1975: 10.

Status as species: Nylander, 1846b: 1052; Foerster, 1850a: 66; Smith, F. 1851: 118; Schenck, 1852: 77; Mayr, 1855: 407 (redescription); Smith, F. 1855b: 116; Nylander, 1856b: 79; Gredler, 1858: 22; Smith, F. 1858b: 115; Mayr, 1861: 63 (in key); Meinert, 1861: 324; Roger, 1863b: 28; Mayr, 1863: 435; Smith, F. 1871b: 2; Dours, 1873: 168; André, 1874: 193 (in key); Mayr, 1877: 15; Emery, 1878a: x (in list); Emery, 1878b: 52; Mayr, 1880: 34; Saunders, E. 1880: 214; André, 1883a: 317 (in key); White, W.F. 1884: 260; Forel, 1886e: clxviii; Provancher, 1887: 247; Nasonov, 1889: 33; Forel, 1892i: 315; Dalla Torre, 1893: 113 (footnote), 115; Ruzsky, 1902e: 16; Wasmann, 1906: 118 (in key); Bondroit, 1912: 351; Ruzsky, 1914b: 105; Donisthorpe, 1915d: 115; Ruzsky, 1916: 5; Bondroit, 1918: 103; Santschi, 1919e: 244; Bondroit, 1920a: 150; Soudek, 1922: 41; Müller, 1923b: 41; Vashkevich, 1924b: 148; Finzi, 1926: 85; Betrem, 1926: 216; Karavaiev, 1926f: 65; Donisthorpe, 1927b: 125; Karavaiev, 1927d: 333; Menozzi, 1927b: 90; Lomnicki, 1928: 5; Karavaiev, 1930b: 145; Karavaiev, 1931e: 210; Teranishi, 1932: 49; Grandi, 1935: 99; Stitz, 1939: 83; Novák & Sadil, 1941: 76 (in key); Holgersen, 1942: 8; Holgersen, 1943b: 168 (in key); Holgersen, 1944: 173; Morisita, 1945: 22; Ruzsky, 1946: 70; van Boven, 1947: 176 (in key); Forsslund, 1947: 68; Arnol'di, 1948: 211 (in list); Röszler, 1950: 223; Consani & Zangheri, 1952: 39; Collingwood, 1958b: 68; Collingwood, 1962: 217, 222; Bernard, 1967: 120 (redescription); Kutter, 1968a: 59; Collingwood & Yarrow, 1969: 56; Arnol'di, 1970b: 1833 (in key); Baroni Urbani, 1971c: 27; Collingwood, 1971: 156; Banert & Pisarski, 1972: 349; Bolton & Collingwood, 1975: 5 (in key); Collingwood, 1976: 300; Aktaç, 1977: 119; van Boven, 1977: 115; Kutter, 1977c: 67; Arnol'di & Dlussky, 1978: 530 (in key); Collingwood, 1978: 78 (in key); Collingwood, 1979: 53; Collingwood, 1981: 26; Agosti & Collingwood, 1987a: 53; Agosti & Collingwood, 1987b: 267 (in key); Nilsson & Douwes, 1987: 66; Seifert, 1988b: 6 (redescription); Atanassov & Dlussky, 1992: 86; Arakelian, 1994: 26; Radchenko, 1994b: 105 (in key); Radchenko, 1994c: 137 (in key); Radchenko, 1994f: 73; Bolton, 1995b: 282; Douwes, 1995: 88; Poldi, *et al.* 1995: 2; Wu, J. & Wang, 1995: 92; Radchenko, *et al.* 1997: 484; Espadaler, 1997b: 30; Collingwood & Prince, 1998: 12 (in key); Gallé, *et al.* 1998: 214; Wei, Zhou, *et al.* 2001: 562 (in key); Czechowski, *et al.* 2002: 19; Markó & Csösz, 2002: 112; Karaman, M.G. & Karaman, 2003: 44; Bolton, 2005: 13 (in key); Karaman, G.S. & Karaman, 2005: 53; Radchenko, 2005b: 144; Bračko, 2006: 138; Markó, Sipos, *et al.* 2006: 70; Petrov, 2006: 87 (in key); Bračko, 2007: 18; Radchenko, 2007: 30; Seifert, 2007: 207; Werner & Wiezik, 2007: 139; Zryanin & Zryanova, 2007: 230; Gratiashvili & Barjadze, 2008: 141; Casevitz-Weulersse & Galkowski, 2009: 490; Boer, 2010: 57; Lapeva-Gjonova, *et al.* 2010: 9; Radchenko & Elmes, 2010: 236; Csösz, *et al.* 2011: 56; Karaman, M.G. 2011b: 45; Legakis, 2011: 5; Borowiec, L. & Salata, 2012: 522; Czechowski, *et al.* 2012: 77; Guénard & Dunn, 2012: 48; Kiran & Karaman, 2012: 22; Yamane & Aibek, 2012: 181; Borowiec, L. 2014: 133; Bračko, *et al.* 2014: 14; Lebas, *et al.* 2016: 314; Radchenko, 2016: 120; Chen, Zhou & Huang, 2016: 114 (in key); Salata & Borowiec, 2018c: 47; Seifert, 2018: 169.

Senior synonym of *diluta*: Mayr, 1861: 63 (in key), Mayr, 1863: 435; Roger, 1863b: 28; Dours, 1873: 168; André, 1874: 203 (in list); Forel, 1874: 101 (in list); Emery & Forel, 1879: 460; Dalla Torre, 1893: 115; Ruzsky, 1905b: 671; Donisthorpe, 1915d: 115; Emery, 1921f: 39; Donisthorpe, 1927b: 125; Bolton, 1995b: 282; Radchenko, 2007: 28; Radchenko & Elmes, 2010: 236; Radchenko, 2016: 120.

Senior synonym of *macrogyna*: Bolton, 1995b: 282; Radchenko & Elmes, 2010: 236; Radchenko, 2016: 120.

Senior synonym of *microgyna*: Bolton, 1995b: 282; Radchenko, *et al.* 1997: 484; Czechowski, *et al.* 2002: 20; Radchenko & Elmes, 2010: 236; Czechowski, *et al.* 2012: 77; Radchenko, 2016: 120.

Senior synonym of *mutata*: Seifert, 1988b: 6; Bolton, 1995b: 282; Radchenko & Elmes, 2010: 236; Radchenko, 2016: 120.

Senior synonym of *ruginodolaevinodis*: Bernard, 1967: 120; van Boven, 1977: 115; Radchenko, 1994f: 73; Bolton, 1995b: 282; Radchenko, *et al.* 1997: 484; Czechowski, *et al.* 2002: 20; Radchenko & Elmes, 2010: 236; Czechowski, *et al.* 2012: 77; Radchenko, 2016: 120.

Senior synonym of *silvestrii*: Radchenko & Elmes, 2010: 236; Radchenko, 2016: 120.

Senior synonym of *sontica*: Radchenko & Elmes, 2010: 236; Radchenko, 2016: 120.

Senior synonym of *yoshiokai*: Radchenko & Elmes, 2010: 236; Radchenko, 2016: 120.

ruginodolaevinodis. *Myrmica rubra* var. *ruginodolaevinodis* Forel, 1874: 78 (q.m.) SWITZERLAND.

[Misspelled as *ruginodolevinodis* by Forel, 1915d: 28 (in key).]

As unavailable (infrasubspecific) name: Emery & Forel, 1879: 461; Lameere, 1892: 68; Forel, 1915d: 28 (in key); Emery, 1916b: 119; Emery, 1921f: 39; Gösswald, 1932: 149.

Status as species: Forel, 1886f: 137; Emery, 1917b: 28; Stitz, 1917: 347.

Subspecies of *laevinodis*: Dalla Torre, 1893: 111; Donisthorpe, 1915d: 115; Donisthorpe, 1927b: 123.

Subspecies of *rubra*: André, 1883a: 319; Emery, 1908a: 169; Soudek, 1922: 42; Kulmatycki, 1922: 77; Stärcke, 1926: 90 (in key); Stitz, 1939: 84; Weber, 1947: 452; Sadil, 1952: 241; Ceballos, 1956: 297.

Subspecies of *ruginodis*: Finzi, 1926: 86; Karavaiev, 1930b: 145; Novák & Sadil, 1941: 76 (in key); Holgersen, 1943b: 168 (in key); van Boven, 1947: 176 (in key); Rösler, 1950: 223; Baroni Urbani, 1971c: 28.

Junior synonym of *rubra*: Onoyama, 1980: 197.

Junior synonym of *ruginodis*: Bernard, 1967: 120; van Boven, 1977: 115; Radchenko, 1994f: 73; Bolton, 1995b: 282; Radchenko, *et al.* 1997: 484; Czechowski, *et al.* 2002: 20; Radchenko & Elmes, 2010: 236; Czechowski, *et al.* 2012: 77; Radchenko, 2016: 120.

rugiventris. *Tetramorium rugiventris* Smith, M.R. 1943b: 4 (w.) U.S.A. (Arizona).

Gregg, 1961: 218 (q.m.).

Combination in *Myrmica*: Brown, 1957d: 6;

combination in *Paramyrmica*: Gregg, R.E. 1961: 215;

combination in *Myrmica*: Bolton, 1988a: 6.

Status as species: Creighton, 1950a: 292; Smith, M.R. 1951a: 824; Brown, 1957d: 6; Gregg, R.E. 1961: 215 (redescription); Smith, M.R. 1967: 350; Hunt & Snelling, 1975: 21; Smith, D.R. 1979: 1351; Bolton, 1988a: 6; Bolton, 1995b: 282; Mackay & Mackay, 2002: 165; Ward, 2005: 66.

rugosa. *Myrmica rugosa* Mayr, 1855: 411 (footnote). *Nomen nudum* (attributed to Koch).

Material referred to *scabrinodis* by Mayr, 1855: 411 (footnote).

rugosa. *Myrmica rugosa* Mayr, 1865: 19 (footnote) (w.) (no state data, “Himalaya”).

Radchenko & Elmes, 2002: 41 (q.m.).

Status as species: Dalla Torre, 1893: 116; Forel, 1903a: 697; Bingham, 1903: 268; Ruzsky, 1905b: 658; Forel, 1906b: 87; Emery, 1908a: 167; Emery, 1921f: 40; Kuznetsov-Ugamsky, 1927e: 191; Donisthorpe, 1929a: 445; Menozzi, 1939a: 294 (in key); Weber, 1947: 462 (redescription); Chapman & Capco, 1951: 129; Bolton, 1995b: 282; Tang, J., Li, *et al.* 1995: 49; Radchenko & Elmes, 2001a: 244; Radchenko & Elmes, 2002: 41; Radchenko &

Elmes, 2010: 242; Guénard & Dunn, 2012: 48; Bharti, Guénard, *et al.* 2016: 41; Bharti, Sasi & Radchenko, 2016: 968.

rugososmythiesi. *Myrmica rugosa* var. *rugososmythiesi* Forel, 1902c: 228 (w.) INDIA (same localities as *debilior*).

[Misspelled as *rugosmythiesi* by Chapman & Capco, 1951: 129.]

Junior synonym of *debilior*: Forel, 1902c: 228; Bolton, 1995b: 282.

[Note: Forel, 1902c: 228, apparently proposes this as an alternative name for *debilior*: “ On pourrait appeler cette variété *rugoso-Smythiesi*. Elle forme passage entre les deux espèces.”]

Junior synonym of *rupestris*: Radchenko & Elmes, 2001a: 245; Radchenko & Elmes, 2010: 246; Bharti, Sasi & Radchenko, 2016: 969.

rugulosa. *Myrmica rugulosa* Nylander, 1849: 32 (w.q.) FINLAND.

[Misspelled as *ruguloca* by Stärcke, 1926: 91 (in key); miscorrected to *regulosa*, p. 151.]

Mayr, 1855: 405 (m.); Lomnicki, 1924: 817 (gynandromorph).

As unavailable (infrasubspecific) name: Gösswald, 1932: 80.

Subspecies of *rubra*: Forel, 1874: 77; Emery & Forel, 1879: 460; Lameere, 1892: 68.

Subspecies of *scabrinodis*: Forel, 1892i: 315; Ruzsky, 1896: 73; Ruzsky, 1905b: 690; Emery, 1908a: 177; Forel, 1913d: 431; Stitz, 1914: 72; Forel, 1915d: 29 (in key); Emery, 1916b: 120; Escherich, 1917: 326 (in key); Emery, 1921f: 41; Soudek, 1922: 43; Kulmatycki, 1922: 78; Soudek, 1923: 115; Kiseleva, 1925: 75; Karavaiev, 1926b: 96; Karavaiev, 1927a: 285; Kuznetsov-Ugamsky, 1927e: 196; Kuznetsov-Ugamsky, 1929b: 45; Ruzsky, 1946: 70; Ceballos, 1956: 297.

Status as species: Mayr, 1855: 405 (redescription); Nylander, 1856b: 80; Gredler, 1858: 21; Smith, F. 1858b: 115; Mayr, 1861: 63 (in key); Meinert, 1861: 324; Roger, 1863b: 29; Mayr, 1863: 435; Dours, 1873: 168; André, 1874: 194 (in key); Mayr, 1877: 15; Mayr, 1880: 34; André, 1883a: 317 (in key); Nasonov, 1889: 34; Dalla Torre, 1893: 113 (footnote), 116; Medina, 1893: 105; Ruzsky, 1902d: 30; Ruzsky, 1905b: 690; Wasmann, 1906: 119 (in key); Bondroit, 1910: 495; Bondroit, 1918: 100; Bondroit, 1920a: 146; Lomnicki, 1924: 817; Menozzi, 1925d: 25; Finzi, 1926: 91; Betrem, 1926: 216; Stärcke, 1926: 91 (in key); Karavaiev, 1927c: 259 (in key); Kuznetsov-Ugamsky, 1927e: 196; Lomnicki, 1928: 6; Karavaiev, 1929b: 203; Arnol'di, 1933b: 600 (in key); Arnol'di, 1934: 160 (redescription); Karavaiev, 1934: 70 (redescription); Grandi, 1935: 99; Holgersen, 1940: 185; Novák & Sadil, 1941: 77 (in key); Holgersen, 1943b: 170 (in key); van Boven, 1947: 175 (in key); Weber, 1948a: 305; Röszler, 1950: 223; Sadil, 1952: 245; Consani & Zangheri, 1952: 40; Dlussky, 1962: 178; Collingwood, 1962: 217; Kutter, 1963: 137 (in key); Bernard, 1967: 115 (redescription); Kutter, 1968a: 59; Collingwood & Yarrow, 1969: 57; Arnol'di, 1970b: 1834 (in key); Baroni Urbani, 1971c: 28; Collingwood, 1971: 157; Banert & Pisarski, 1972: 349; Pisarski, 1975: 11; van Boven, 1977: 118; Kutter, 1977c: 68; Collingwood, 1978: 78 (in key); Arnol'di & Dlussky, 1978: 532 (in key); Collingwood, 1979: 54; Agosti & Collingwood, 1987a: 53; Agosti & Collingwood, 1987b: 267 (in key); Seifert, 1988b: 11 (redescription); Atanassov & Dlussky, 1992: 89; Radchenko, 1994c: 142 (in key); Radchenko, 1994e: 75; Bolton, 1995b: 282; Douwes, 1995: 88; Poldi, *et al.* 1995: 2; Radchenko, *et al.* 1997: 486; Gallé, *et al.* 1998: 214; Czechowski, *et al.* 2002: 23; Markó & Csösz, 2002: 112; Karaman, G.S. & Karaman, 2005: 53; Bračko, 2006: 138; Markó, Sipos, *et al.* 2006: 70; Petrov, 2006: 87 (in key); Bračko, 2007: 18; Seifert, 2007: 194; Radchenko, 2007: 28; Werner & Wiezik, 2007: 139; Zryanin & Zryanina, 2007: 230; Gratiashvili & Barjadze, 2008: 141; Casevitz-Weulersse & Galkowski, 2009: 491; Lapeva-Gjonova, *et al.* 2010: 9; Boer, 2010: 57; Radchenko & Elmes, 2010: 244; Csösz, *et al.* 2011: 56; Karaman, M.G. 2011b: 45; Legakis, 2011: 5; Borowiec, L. & Salata, 2012: 522; Czechowski, *et al.* 2012: 99; Czekes, *et al.* 2012: 43 (in key); Kiran & Karaman, 2012: 22;

Borowiec, L. 2014: 133; Lebas, *et al.* 2016: 316; Radchenko, 2016: 153; Salata & Borowiec, 2018c: 47; Seifert, 2018: 154.

Senior synonym of *clandestina*: Mayr, 1855: 405; Nylander, 1856b: 80; Smith, F. 1858b: 115; Mayr, 1863: 435; Roger, 1863b: 29; Dours, 1873: 168; André, 1874: 203 (in list); Forel, 1874: 101 (in list); Emery & Forel, 1879: 460; Dalla Torre, 1893: 116; Ruzsky, 1905b: 690; Emery, 1921f: 41; Karavaiev, 1934: 71; Pisarski, 1975: 10; Radchenko, 1994e: 75; Bolton, 1995b: 282; Radchenko, *et al.* 1997: 486; Czechowski, *et al.* 2002: 23; Radchenko & Elmes, 2010: 244; Czechowski, *et al.* 2012: 100; Radchenko, 2016: 153.

Senior synonym of *sulcinodorugulosa*: Radchenko, 1994e: 75; Radchenko & Elmes, 2010: 244; Radchenko, 2016: 153.

rugulosoides. *Myrmica rugulosoides* Bondroit, 1918: 102.

[First available use of *Myrmica scabrinodis* r. *scabrinodis* var. *rugulosoides* Forel, 1915d: 29 (in key) (w.) SWITZERLAND; unavailable (infrasubspecific) name.]
Kutter, 1924: 8 (q.m.).

As unavailable (infrasubspecific) name: Emery, 1916b: 120; Emery, 1921f: 40, 41; Soudek, 1922: 44.

Subspecies of *sabuleti*: Grandi, 1935: 99.

Subspecies of *rugulosa*: Consani & Zangheri, 1952: 40.

Subspecies of *scabrinodis*: Kutter, 1924: 8; Santschi, 1931b: 342; Stitz, 1939: 93; Novák & Sadil, 1941: 79 (in key); Weber, 1950b: 208; Sadil, 1952: 251; Ceballos, 1956: 297.

Status as species: Müller, 1923b: 42; Finzi, 1926: 94; Lomnicki, 1928: 6; Kutter, 1968a: 59; Baroni Urbani, 1971c: 30; Kutter, 1977c: 68.

Junior synonym of *scabrinodis*: Bernard, 1967: 116; Collingwood, 1971: 158; Banert & Pisarski, 1972: 350; Collingwood, 1979: 55; Seifert, 1984b: 1; Seifert, 1988b: 27; Radchenko, 1994e: 79; Bolton, 1995b: 282; Poldi, *et al.* 1995: 2; Radchenko, *et al.* 1997: 487; Gallé, *et al.* 1998: 214; Czechowski, *et al.* 2002: 27; Radchenko & Elmes, 2010: 259; Csösz, *et al.* 2011: 56; Czechowski, *et al.* 2012: 83; Radchenko, 2016: 133.

rugulososcabrinodis. *Myrmica rubra* var. *rugulososcabrinodis* Forel, 1874: 226. *Nomen nudum*.

[*Myrmica rubra* r. *rugulososcabrinodis* André, 1883a: 319; Lameere, 1892: 68; Dalla Torre, 1893: 117. *Nomina nuda*.]

rugulososcabrinodis. *Myrmica* (*Myrmica*) *rugulosa* var. *rugulososcabrinodis* Karavaiev, 1929b: 205, fig. 1 (w.m.) ARMENIA.

[*Myrmica rugulosa* f. *rugulososcabrinodis* Ruzsky, 1896: 73. *Nomen nudum*.]

Subspecies of *rugulosa*: Weber, 1948a: 308.

Junior synonym of *bessarabicus*: Dlussky, Soyunov & Zabelin, 1990: 182; Atanassov & Dlussky, 1992: 93; Arakelian, 1994: 22; Radchenko, 1994e: 77; Bolton, 1995b: 282.

Status as species: Radchenko & Elmes, 2004: 231.

Junior synonym of *hellenica*: Seifert, *et al.* 2009: 68; Radchenko & Elmes, 2010: 145; Kiran & Karaman, 2012: 22; Radchenko, 2016: 146.

rupestris. *Myrmica smythiesii* var. *rupestris* Forel, 1902c: 227 (w.) INDIA (no state data, “Ekra Peak, N.-O. Himalaya”).

[Misspelled as *rupestria* by Chapman & Capco, 1951: 130.]

Radchenko & Elmes, 2002: 44 (q.m.).

Subspecies of *smythiesii*: Forel, 1903a: 698; Bingham, 1903: 269; Forel, 1906b: 87; Emery, 1921f: 41; Stärcke, 1935: 260; Menozzi, 1939a: 296 (in key); Weber, 1947: 461; Chapman & Capco, 1951: 130; Bolton, 1995b: 282.

Status as species: Collingwood, 1970: 374; Radchenko & Elmes, 2001a: 245; Radchenko & Elmes, 2002: 44; Radchenko & Elmes, 2010: 246; Guénard & Dunn, 2012: 48; Bharti, Guénard, *et al.* 2016: 41; Bharti, Sasi & Radchenko, 2016: 969.

Senior synonym of *debilior*: Radchenko & Elmes, 2001a: 245; Radchenko & Elmes, 2010: 246; Bharti, Sasi & Radchenko, 2016: 969.

Senior synonym of *everesti*: Radchenko & Elmes, 2001a: 245; Radchenko & Elmes, 2010: 246; Bharti, Sasi & Radchenko, 2016: 969.

Senior synonym of *rugososmythiesi*: Radchenko & Elmes, 2001a: 245; Radchenko & Elmes, 2010: 246; Bharti, Sasi & Radchenko, 2016: 969.

russula Nylander, 1856; see under **TEMNOTHORAX**.

ruzskyana. *Myrmica ruzskyana* Radchenko & Elmes, 2010: 249.

Replacement name for *Myrmica smythiesi* subsp. *exigua* Ruzsky, 1915a: 440. [Junior primary homonym of *Myrmica exigua* Buckley, 1867: 342.]

Status as species: Guénard & Dunn, 2012: 48; Chen, Zhou & Huang, 2016: 114 (in key); Seifert, Schultz, *et al.* 2018: 95.

ruzskyi. *Myrmica kozlovi* subsp. *ruzskyi* Kiseleva, 1925: 75, fig. (w.) RUSSIA.

Subspecies of *kozlovi*: Bolton, 1995b: 282.

Junior synonym of *kurokii*: Radchenko, 1994f: 74; Radchenko & Elmes, 2010: 179.

ruzskyi. *Myrmica kozlovi* subsp. *ruzskyi* Weber, 1947: 471.

Unnecessary replacement name for, hence junior synonym of, *subalpina* Ruzsky, 1915a: 438 (Bolton, 1995b: 282).

[Unresolved junior primary homonym of *Myrmica kozlovi* subsp. *ruzskyi* Kiseleva, 1925: 75 (Bolton, 1995b: 282).]

Junior synonym of *kozlovi*: Radchenko & Elmes, 2010: 175; Bharti, Sasi & Radchenko, 2016: 966.

sabeana Buckley, 1867; see under **SOLENOPSIS**.

sabuleti. *Myrmica sabuleti* Meinert, 1861: 327 (w.m.) DENMARK.

Emery, 1908a: 176 (q.); Hauschteck, 1965: 325 (k.); Donisthorpe, 1915b: 258 (gynandromorph).

As unavailable (infrasubspecific) name: Emery & Forel, 1879: 460; Emery, 1895c: 314; Wheeler, W.M. 1905f: 384; Wheeler, W.M. 1906b: 7; Emery, 1908a: 176; Wheeler, W.M. 1910g: 566; Santschi, 1911d: 5; Forel, 1915d: 29 (in key); Emery, 1916b: 120; Menozzi, 1918: 82; Emery, 1921f: 40; Soudek, 1922: 44; Soudek, 1925b: 14.

Junior synonym of *lobicornis*: Dalla Torre, 1893: 111.

Subspecies of *lobicornis*: André, 1883a: 318.

Subspecies of *rubra*: Emery, 1895c: 314.

Subspecies of *scabrinodis*: Wasmann, 1906: 119 (in key); Bondroit, 1910: 495; Krausse, 1912b: 164; Donisthorpe, 1914: 38; Emery, 1914d: 156; Forel, 1915d: 29 (in key); Donisthorpe, 1915d: 132; Emery, 1916b: 120; Wheeler, W.M. 1916m: 587; Wheeler, W.M. 1917i: 461; Nadig, 1918: 339; Menozzi, 1922b: 325; Finzi, 1923: 2; Finzi, 1924a: 12; Schkaff, 1925: 274; Finzi, 1926: 101; Stärcke, 1926: 92 (in key); Donisthorpe, 1927b: 143; Karavaiev, 1929b: 208; Karavaiev, 1930b: 145; Karavaiev, 1931e: 211; Zimmermann, 1935: 10; Menozzi, 1936d: 270; Dennis, 1938: 289; Ceballos, 1956: 297.

Status as species: Roger, 1863b: 28; Mayr, 1863: 435; Bondroit, 1918: 102; Betrem, 1926: 216; Santschi, 1931b: 345; Karavaiev, 1934: 80 (redescription); Grandi, 1935: 99; Stitz, 1939: 94; Weber, 1939b: 144; Holgersen, 1940: 184; Novák & Sadil, 1941: 79 (in key); Holgersen, 1943b: 170 (in key); Holgersen, 1944: 177; van Boven, 1947: 177 (in key); Weber, 1948a: 288; Sadil, 1952: 246; Consani & Zangheri, 1952: 40; Collingwood, 1958b: 73; Baroni Urbani, 1964b: 28; Bernard, 1967: 117 (redescription); Kutter, 1968a: 59; Collingwood & Yarrow, 1969: 58; Arnol'di, 1970b: 1837 (in key); Baroni Urbani, 1971c: 31; Collingwood, 1971: 158; Banert & Pisarski, 1972: 350; Bolton & Collingwood, 1975: 5 (in key); Pisarski, 1975: 14; van Boven, 1977: 120; Kutter, 1977c: 68; Arnol'di & Dlussky, 1978: 534 (in key); Collingwood, 1978: 79 (in key); Elmes, 1978: 137; Collingwood, 1979:

54; Dlussky, 1981a: 17; Agosti & Collingwood, 1987a: 53; Agosti & Collingwood, 1987b: 268 (in key); Seifert, 1988b: 31 (redescription); Casevitz-Weulersse, 1990c: 435; Le Moli & Rosi, 1991: 29; Atanassov & Dlussky, 1992: 97; Radchenko, 1994c: 144 (in key); Radchenko, 1994e: 80; Bolton, 1995b: 282; Douwes, 1995: 86; Poldi, *et al.* 1995: 2; Espadaler, 1997b: 31; Radchenko, *et al.* 1997: 490; Collingwood & Prince, 1998: 12 (in key); Gallé, *et al.* 1998: 214; Czechowski, *et al.* 2002: 29; Markó & Csösz, 2002: 112; Bolton, 2005: 14 (in key); Seifert, 2005: 7; Karaman, G.S. & Karaman, 2005: 54; Bračko, 2006: 138; Markó, Sipos, *et al.* 2006: 70; Petrov, 2006: 88 (in key); Bračko, 2007: 18; Seifert, 2007: 199; Werner & Wiezik, 2007: 139; Zryanin & Zryanina, 2007: 231; Paknia, *et al.* 2008: 155; Casevitz-Weulersse & Galkowski, 2009: 491; Boer, 2010: 57; Lapeva-Gjonova, *et al.* 2010: 10; Radchenko & Elmes, 2010: 250; Csösz, *et al.* 2011: 56; Karaman, M.G. 2011b: 45; Legakis, 2011: 5; Borowiec, L. & Salata, 2012: 523; Czechowski, *et al.* 2012: 89; Czakes, *et al.* 2012: 46 (in key); Kiran & Karaman, 2012: 22; Borowiec, L. 2014: 133; Lebas, *et al.* 2016: 318; Radchenko, 2016: 148; Salata & Borowiec, 2018c: 47; Seifert, 2018: 159.

Senior synonym of *scabrinodolobicornis*: Radchenko, 1994e: 80; Bolton, 1995b: 283; Radchenko & Elmes, 2010: 250; Radchenko, 2016: 148.

saevissima Smith, F. 1855; see under **SOLENOPSIS**.

salina. *Myrmica scabrinodis* var. *salina* Ruzsky, 1905b: 687 (w.q.m.) RUSSIA (Orenburgskaya oblast, Tobolskaya), KAZAKHSTAN.

As unavailable (infrasubspecific) name: Emery, 1908a: 177.

Subspecies of *scabrinodis*: Finzi, 1926: 102.

Subspecies of *schencki*: Weber, 1948a: 302.

Junior synonym of *lonae*: Novák & Sadil, 1941: 80 (in key); Sadil, 1952: 249.

Junior synonym of *lacustris*: Radchenko, 1994f: 77.

Status as species: Arnol'di, 1970b: 1837 (in key), 1841; Arnol'di, 1976a: 557 (in key); Arnol'di & Dlussky, 1978: 534 (in key); Dlussky, 1981a: 17; Seifert, 1988: 25 (redescription); Seifert, 1994: 13; Bolton, 1995b: 283; Gallé, *et al.* 1998: 214; Markó & Csösz, 2002: 113; Seifert, 2002a: 96, 99; Radchenko & Elmes, 2004: 228; Bračko, 2006: 138; Markó, Sipos, *et al.* 2006: 70; Bračko, 2007: 18; Seifert, 2007: 201; Werner & Wiezik, 2007: 140; Zryanin & Zryanina, 2007: 230; Casevitz-Weulersse & Galkowski, 2009: 491; Radchenko & Elmes, 2009c: 515 (redescription); Radchenko & Elmes, 2010: 254; Seifert, 2011: 183; Kiran & Karaman, 2012: 23; Borowiec, L. 2014: 134.

Senior synonym of *ahngeri*: Seifert, 2011: 183.

Senior synonym of *georgica*: Seifert, 2011: 183.

Senior synonym of *tobiasi*: Seifert, 2011: 183.

sallei Guérin-Méneville, 1852; see under **TEMNOTHORAX**.

samnitica. *Myrmica samnitica* Mei, 1987: 457, figs. 1-15 (q.m.) ITALY.

Status as species: Bolton, 1995b: 283; Poldi, *et al.* 1995: 2.

Junior synonym of *laurae*: Radchenko & Elmes, 2003a: 224; Radchenko & Elmes, 2010: 181.

sancta. *Myrmica scabrinodis* var. *sancta* Karavaiev, 1926f: 67, fig. 4 (w.) RUSSIA (Crimea).

Seifert, 1988b: 21 (q.m.).

Subspecies of *scabrinodis*: Karavaiev, 1927a: 285; Weber, 1950b: 208.

Status as species: Arnol'di, 1970b: 1835 (in key); Arnol'di, 1976a: 553; Arnol'di & Dlussky, 1978: 532 (in key); Seifert, 1988b: 21 (redescription).

Junior synonym of *scabrinodis*: Karavaiev, 1934: 77; Stitz, 1939: 90; Sadil, 1952: 249.

Junior synonym of *bessarabicus*: Dlussky, Soyunov & Zabelin, 1990: 182; Atanassov & Dlussky, 1992: 93; Arakelian, 1994: 22; Radchenko, 1994e: 77; Bolton, 1995b: 283.

Junior synonym of *specioides*: Kutter, 1977c: 70; Gallé, *et al.* 1998: 214; Seifert, 2002a: 95 (by implication); Radchenko & Elmes, 2004: 229 (by implication); Radchenko & Elmes, 2010: 284; Csösz, *et al.* 2011: 56; Seifert, 2011: 183; Kiran & Karaman, 2012: 23; Radchenko, 2016: 136.

saposhnikovi. *Myrmica lobicornis* r. *saposhnikovi* Ruzsky, 1904b: 3 (w.) KAZAKHSTAN.

Kuznetsov-Ugamsky, 1927e: 194 (q.m.).

Subspecies of scabrinodis: Ruzsky, 1905b: 701; Emery, 1908a: 180; Emery, 1921f: 41; Kuznetsov-Ugamsky, 1927e: 193; Karavaiev, 1931b: 28; Teranishi, 1940: 14; Weber, 1950b: 209.

Status as species: Pisarski, 1969a: 228; Pisarski, 1969b: 296; Arnol'di, 1976a: 553; Tarbinsky, 1976: 35 (redescription); Pisarski & Krzysztofiak, 1981: 155; Radchenko, 1994c: 139 (in key); Radchenko, 1994g: 85; Bolton, 1995b: 283; Schultz, R. *et al.* 2006: 203; Radchenko & Elmes, 2009c: 521; Radchenko & Elmes, 2010: 256; Guénard & Dunn, 2012: 48; Chen, Zhou & Huang, 2016: 117 (in key).

Senior synonym of bergiana: Radchenko, 1994g: 85; Radchenko & Elmes, 2010: 257.

saxicola Buckley, 1867; see under **SOLENOPSIS**.

scabrata. *Myrmica (Diplorhoptrum) scabrata* Buckley, 1867: 343 (w.) U.S.A. (Connecticut).

Combination in *Solenopsis*: Cresson, 1887: 262.

Status as species: Cresson, 1887: 262; Dalla Torre, 1893: 116.

Unidentifiable to genus: Wheeler, W.M. 1902f: 28;

unidentifiable taxon; *incertae sedis* in Myrmicinae: Smith, M.R. 1951a: 833; Smith, D.R. 1979: 1414;

unidentifiable taxon; *incertae sedis* in *Myrmica*: Bolton, 1995b: 283.

scabrinodis. *Myrmica scabrinodis* Nylander, 1846a: 930 (w.q.m.) FINLAND.

Wheeler, G.C. & Wheeler, J. 1953a: 119 (l.); Hauschteck, 1965: 325 (k.); Wasmann, 1891: 298 (gynandromorph).

Subspecies of rubra: Forel, 1874: 76; Emery & Forel, 1879: 460; Lameere, 1892: 68; Emery, 1895c: 313; Saunders, E. 1896: 40 (in key); Wheeler, W.M. in Viereck, 1903: 73; Forel, 1904a: 154; Forel, 1904b: 374; Wheeler, W.M. 1905f: 384; Wheeler, W.M. 1906b: 7; Wheeler, W.M. 1906d: 340; Wheeler, W.M. 1908f: 621; Wheeler, W.M. 1908g: 406; Wheeler, W.M. 1910g: 566; Gösswald, 1932: 78; Dennis, 1938: 288.

Status as species: Nylander, 1846b: 1052; Foerster, 1850a: 67; Schenck, 1852: 78; Mayr, 1855: 410 (redescription); Smith, F. 1855b: 115; Nylander, 1856b: 81; Gredler, 1858: 22; Smith, F. 1858b: 115; Mayr, 1861: 64 (in key); Meinert, 1861: 325; Roger, 1863b: 28; Mayr, 1863: 435; Emery, 1869b: 16; Smith, F. 1871b: 3; Dours, 1873: 168; André, 1874: 194 (in key); Mayr, 1877: 15; Emery, 1878b: 52; Mayr, 1880: 34; Saunders, E. 1880: 215; André, 1883a: 319 (in key); Costa, 1883: 60; White, W.F. 1884: 260; Mayr, 1886d: 451; Cresson, 1887: 261; Forel, 1889: 257; Nasonov, 1889: 36; Emery, 1891b: 7; Forel, 1892i: 315; Dalla Torre, 1893: 113 (footnote), 116; Forel, 1895d: 227; Ruzsky, 1896: 73; Emery, 1898c: 126; Ruzsky, 1902d: 30; Ruzsky, 1902e: 16; Ruzsky, 1905b: 680; Wasmann, 1906: 118 (in key); Emery, 1908a: 174; Forel, 1909c: 103; Bondroit, 1910: 494; Bondroit, 1912: 351; Karavaiev, 1912b: 583; Krausse, 1912b: 164; Stitz, 1914: 71; Donisthorpe, 1915d: 125; Forel, 1915d: 29 (in key); Karavaiev, 1916: 504; Emery, 1916b: 120; Escherich, 1917: 326 (in key); Wheeler, W.M. 1917a: 504; Bondroit, 1918: 101; Nadig, 1918: 339; Emery, 1921f: 40; Santschi, 1921a: 110; Soudek, 1922: 43; Menozzi, 1922b: 325; Kuznetsov-Ugamsky, 1923: 255; Müller, 1923b: 43; Soudek, 1923: 113; Kutter, 1924: 8; Ruzsky, 1925a: 288; Menozzi, 1925d: 25; Soudek, 1925b: 14; Finzi, 1926: 98; Karavaiev, 1926b: 95; Karavaiev, 1926f: 65; Stärcke, 1926: 93 (in key); Donisthorpe, 1927b: 135; Karavaiev, 1927a: 285; Karavaiev, 1927c: 259 (in key); Karavaiev, 1927d: 335; Kutter, 1927: 98; Kuznetsov-Ugamsky, 1927e: 193; Lomnicki, 1928: 5; Karavaiev, 1929b: 206; Kuznetsov-

Ugamsky, 1929b: 45; Karavaiev, 1930b: 145; Santschi, 1931b: 341; Karavaiev, 1931e: 211; Soudek, 1931: 9; Santschi, 1932c: 69; Arnol'di, 1933b: 599 (in key); Karavaiev, 1934: 77 (redescription); Grandi, 1935: 99; Ruzsky, 1936: 94; Cole, 1937b: 135; Novák & Sadil, 1941: 78 (in key); Holgersen, 1942: 9; Holgersen, 1943b: 170 (in key); Holgersen, 1944: 177; Ruzsky, 1946: 70; van Boven, 1947: 177 (in key); Donisthorpe, 1950e: 1058; Weber, 1950b: 202; Chapman & Capco, 1951: 129; Sadil, 1952: 249; Consani & Zangheri, 1952: 40; Azuma, 1953: 2; Ceballos, 1956: 297; Collingwood, 1958b: 70; Bernard, 1967: 116 (redescription); Kutter, 1968a: 59; Collingwood & Yarrow, 1969: 57; Cagniant, 1970a: 414; Arnol'di, 1970b: 1837 (in key); Baroni Urbani, 1971c: 33; Collingwood, 1971: 158; Banert & Pisarski, 1972: 350; Bolton & Collingwood, 1975: 5 (in key); Pisarski, 1975: 13; Tarbinsky, 1976: 41 (redescription); Arnol'di, 1976a: 556 (in key); Aktaç, 1977: 119; van Boven, 1977: 120; Kutter, 1977c: 69; Arnol'di & Dlussky, 1978: 534 (in key); Collingwood, 1978: 79 (in key); Elmes, 1978: 137; Collingwood, 1979: 55; Dlussky, 1981a: 17; Seifert, 1984b: 1; Agosti & Collingwood, 1987a: 53; Agosti & Collingwood, 1987b: 268 (in key); Nilsson & Douwes, 1987: 65; Seifert, 1988b: 27 (redescription); Casevitz-Weulersse, 1990a: 137; Le Moli & Rosi, 1991: 29; Atanassov & Dlussky, 1992: 95; Arakelian, 1994: 26; Radchenko, 1994b: 107 (in key); Radchenko, 1994c: 144 (in key); Radchenko, 1994e: 79; Bolton, 1995b: 283; Douwes, 1995: 86; Poldi, *et al.* 1995: 2; Espadaler, 1997b: 31; Radchenko, *et al.* 1997: 489; Collingwood & Prince, 1998: 12 (in key); Gallé, *et al.* 1998: 214; Czechowski, *et al.* 2002: 27; Markó & Csösz, 2002: 112; Bolton, 2005: 14 (in key); Karaman, G.S. & Karaman, 2005: 54; Bračko, 2006: 139; Markó, Sipos, *et al.* 2006: 70; Petrov, 2006: 89 (in key); Schultz, R. *et al.* 2006: 206; Bračko, 2007: 18; Seifert, 2007: 197; Radchenko, 2007: 29; Werner & Wiezik, 2007: 139; Zryanin & Zryanina, 2007: 230; Gratiashvili & Barjadze, 2008: 141; Casevitz-Weulersse & Galkowski, 2009: 491; Lapeva-Gjonova, *et al.* 2010: 10; Boer, 2010: 58; Radchenko & Elmes, 2010: 259; Csösz, *et al.* 2011: 56; Karaman, M.G. 2011b: 46; Legakis, 2011: 5; Borowiec, L. & Salata, 2012: 523; Czechowski, *et al.* 2012: 84; Czakes, *et al.* 2012: 46 (in key); Ellison, *et al.* 2012: 294; Guénard & Dunn, 2012: 48; Kiran & Karaman, 2012: 23; Csösz, 2012: 28; Borowiec, L. 2014: 134; Lebas, *et al.* 2016: 320; Radchenko, 2016: 133; Chen, Zhou & Huang, 2016: 116 (in key); Salata & Borowiec, 2018c: 47; Seifert, 2018: 157; Ebsen, *et al.* 2019: 1.

Senior synonym of ahngeri: Radchenko, 1994e: 79; Radchenko & Elmes, 2010: 259; Radchenko, 2016: 133.

Senior synonym of pilosiscapus: Collingwood, 1958b: 72 (in text); Kutter, 1977c: 69; Collingwood, 1979: 55; Seifert, 1988b: 27; Casevitz-Weulersse, 1990b: 137; Radchenko, 1994e: 79; Bolton, 1995b: 283; Werner & Wiezik, 2007: 139; Casevitz-Weulersse & Galkowski, 2009: 491; Radchenko & Elmes, 2010: 259; Radchenko, 2016: 133.

Senior synonym of rugulosoides: Bernard, 1967: 116; Collingwood, 1971: 158; Banert & Pisarski, 1972: 350; Collingwood, 1979: 55; Seifert, 1984b: 1; Seifert, 1988b: 27; Radchenko, 1994e: 79; Bolton, 1995b: 283; Poldi, *et al.* 1995: 2; Radchenko, *et al.* 1997: 489; Gallé, *et al.* 1998: 214; Czechowski, *et al.* 2002: 27; Casevitz-Weulersse & Galkowski, 2009: 491; Radchenko & Elmes, 2010: 259; Csösz, *et al.* 2011: 56; Czechowski, *et al.* 2012: 84; Radchenko, 2016: 133.

Senior synonym of scabrinodosabuleti: Radchenko & Elmes, 2010: 259; Radchenko, 2016: 133.

Senior synonym of symbiotica: Csösz, 2012: 28.

Material of the *nomen nudum* *rugosa* referred here by Mayr, 1855: 411; Bolton, 1995b: 283. *scabrinodoides*. *Myrmica (Myrmica) balcanica* var. *scabrinodoides* Sadil, 1952: 255, figs. V, 9-13; VII, 37; IX, 34; XI, 10, 11 (w.q.m.) CZECH REPUBLIC.

[Misspelled as *scabrioides* by Collingwood, 1979: 56.]

Junior synonym of *bessarabicus*: Atanassov & Dlussky, 1992: 93; Radchenko, 1994e: 77; Bolton, 1995b: 283.

Junior synonym of *specioides*: Pisarski, 1975: 12; Kutter, 1977c: 70; Collingwood, 1979: 56; Seifert, 1988b: 16; Seifert, 2002a: 95 (by implication); Radchenko & Elmes, 2004: 229 (by implication); Radchenko & Elmes, 2010: 284; Seifert, 2011: 183; Radchenko, 2016: 136.

scabrinodolobicornis. *Myrmica rubra* var. *scabrinodolobicornis* Forel, 1874: 77 (w.q.m.) SWITZERLAND.

As unavailable (infrasubspecific) name: Emery & Forel, 1879: 461; Lameere, 1892: 68; Emery, 1921f: 40; Santschi, 1931b: 347; Grandi, 1935: 99.

Status as species: Emery, 1917b: 28.

Subspecies of *rubra*: André, 1883a: 319.

Subspecies of *lobicornis*: Dalla Torre, 1893: 112.

Subspecies of *scabrinodis*: Ruzsky, 1896: 73; Emery, 1921f: 40.

Subspecies of *sabuleti*: Weber, 1948a: 296; Baroni Urbani, 1971c: 32.

Junior synonym of *lonae*: Sadil, 1952: 249; Bolton, 1995b: 283.

Junior synonym of *sabuleti*: Radchenko, 1994e: 80; Radchenko & Elmes, 2010: 250; Radchenko, 2016: 148.

scabrinodorugulosa. *Myrmica rugulosa* var. *scabrinodorugulosa* Nasonov, 1892: 9. *Nomen nudum*.

scabrinodosabuleti. *Myrmica (Myrmica) scabrinodis* var. *scabrinodosabuleti* Sadil, 1952: 253, figs. IV, 13-15; VII, 17-19 (w.m.) CZECH REPUBLIC.

Subspecies of *scabrinodis*: Bolton, 1995b: 283.

Junior synonym of *sabuleti*: Radchenko, 1994e: 80.

Junior synonym of *scabrinodis*: Radchenko & Elmes, 2010: 259; Radchenko, 2016: 133.

scabrosa Smith, F. 1859; see under **TETRAMORIUM**.

scalpturata Nylander, 1856; see under **MESSOR**.

schencki. *Myrmica rubra* var. *schencki* Viereck, 1903: 72.

[First available use of *Myrmica rubra* subsp. *scabrinodis* var. *schencki* Emery, 1895c: 315 (w.q.m.) U.S.A. (Maine, New Jersey, New Hampshire, Carolina); unavailable (infrasubspecific) name.]

[Note: type-locality properly Europe (no state data), after Baroni Urbani, 1971c: 35. Emery, 1895c: 315, indicates that *schencki* was based on material misidentified as *lobicornis* by Foerster, 1850: 69, Schenck, 1852: 82, and Mayr, 1855: 412. Localities given by these authors for the taxon include Germany, Austria, Czech Republic, Italy, and Slovenia.]

[Misspelled as *schenkei* by Arnol'di, 1933b: 600; misspelled as *schrencki* by Ruzsky, 1936: 94.]

Wheeler, G.C. & Wheeler, J. 1953a: 120 (l.).

As unavailable (infrasubspecific) name: Wheeler, W.M. 1900c: 48; Ruzsky, 1905b: 699; Wheeler, W.M. 1905f: 384; Wheeler, W.M. 1906b: 7; Wheeler, W.M. 1910g: 566; Gösswald, 1932: 79.

Subspecies of rugulosa: Kulmatycki, 1922: 78.

Subspecies of lobicornis: Ruzsky, 1936: 94; Ruzsky, 1946: 70.

Subspecies of scabrinodis: Emery, 1908a: 178; Bondroit, 1910: 495; Karavaiev, 1912b: 583; Wheeler, W.M. 1913c: 113; Stitz, 1914: 72; Forel, 1914c: 617; Forel, 1915d: 29 (in key); Emery, 1916b: 120; Wheeler, W.M. 1916m: 587; Stitz, 1917: 347; Wheeler, W.M. 1917a: 504; Escherich, 1917: 326 (in key); Emery, 1921f: 41; Soudek, 1922: 44; Soudek, 1923: 115; Wheeler, W.M. 1927g: 103; Stitz, 1934: 2; Chapman & Capco, 1951: 129.

Status as species: Bondroit, 1911: 11; Bondroit, 1912: 351; Donisthorpe, 1915c: 265 (redescription); Bondroit, 1918: 103; Müller, 1923b: 44; Betrem, 1926: 216; Finzi, 1926: 109; Karavaiev, 1926b: 95; Stärcke, 1926: 90 (in key); Stärcke, 1927: 84; Donisthorpe, 1927b: 150; Karavaiev, 1927c: 259 (in key); Lomnicki, 1928: 6; Karavaiev, 1929b: 208;

Karavaiev, 1930b: 145; Santschi, 1931b: 351; Karavaiev, 1931e: 210; Soudek, 1931: 9; Arnol'di, 1933b: 600 (in key); Karavaiev, 1934: 93 (redescription); Arnol'di, 1934: 171 (redescription), Grandi, 1935: 99; Holgersen, 1940: 184; Novák & Sadil, 1941: 80 (in key); Stärcke, 1942a: 22; Holgersen, 1943b: 170 (in key); Holgersen, 1944: 175; van Boven, 1947: 176 (in key); Weber, 1948a: 296; Sadil, 1952: 260; Wellenius, 1955: 4; Collingwood, 1958b: 74; Bernard, 1967: 118 (redescription); Kutter, 1968a: 59; Collingwood & Yarrow, 1969: 58; Arnol'di, 1970b: 1838 (in key); Baroni Urbani, 1971c: 35; Collingwood, 1971: 158; Bolton & Collingwood, 1975: 5 (in key); Pisarski, 1975: 15; Arnol'di, 1976a: 557 (in key); Tarbinsky, 1976: 42 (redescription); van Boven, 1977: 118; Kutter, 1977c: 70; Arnol'di & Dlussky, 1978: 535 (in key); Báez & Ortega, 1978: 190; Collingwood, 1978: 78 (in key); Collingwood, 1979: 56; Barquin Diez, 1981: 62; Dlussky, 1981a: 17; Kupyanskaya, 1986a: 87; Agosti & Collingwood, 1987a: 53; Agosti & Collingwood, 1987b: 268 (in key); Seifert, 1988b: 35 (redescription); Kupyanskaya, 1990: 109; Atanassov & Dlussky, 1992: 99; Radchenko, 1994b: 107 (in key); Radchenko, 1994c: 140 (in key); Radchenko, 1994f: 77; Bolton, 1995b: 283; Douwes, 1995: 87; Poldi, *et al.* 1995: 2; Espadaler, 1997b: 31; Radchenko, *et al.* 1997: 492; Gallé, *et al.* 1998: 214; Czechowski, *et al.* 2002: 32; Markó & Csösz, 2002: 113; Seifert, 2003b: 145 (redescription); Bolton, 2005: 13 (in key); Karaman, G.S. & Karaman, 2005: 54; Bračko, 2006: 139; Markó, Sipos, *et al.* 2006: 70; Petrov, 2006: 88 (in key); Radchenko, Elmes & Alicata, 2006: 513; Schultz, R. *et al.* 2006: 203; Bračko, 2007: 18; Seifert, 2007: 210; Werner & Wiezik, 2007: 140; Zryanin & Zryanina, 2007: 231; Gratiashvili & Barjadze, 2008: 141; Casevitz-Weulersse & Galkowski, 2009: 491; Lapeva-Gjonova, *et al.* 2010: 10; Boer, 2010: 58; Radchenko & Elmes, 2010: 266; Csösz, *et al.* 2011: 56; Karaman, M.G. 2011b: 47; Borowiec, L. & Salata, 2012: 523; Czechowski, *et al.* 2012: 107; Czekes, *et al.* 2012: 41 (in key); Guénard & Dunn, 2012: 48; Kiran & Karaman, 2012: 23; Borowiec, L. 2014: 134; Bračko, *et al.* 2014: 15; Chen, Zhou & Huang, 2016: 117 (in key); Lebas, *et al.* 2016: 322; Radchenko, 2016: 127; Salata & Borowiec, 2018c: 47; Seifert, 2018: 173.

Senior synonym of betuliana: Radchenko, 1994f: 77; Radchenko, Elmes & Alicata, 2006: 513; Radchenko & Elmes, 2010: 266; Radchenko, 2016: 127.

Senior synonym of kutteri: Bernard, 1967: 118; Radchenko, 1994f: 77; Bolton, 1995b: 283; Seifert, 2003b: 145; Radchenko, Elmes & Alicata, 2006: 513; Radchenko & Elmes, 2010: 266; Radchenko, 2016: 127.

Senior synonym of schenckiooides: Radchenko & Elmes, 2010: 266; Radchenko, 2016: 127.

Senior synonym of subopaca: Arnol'di, 1970b: 1843; Radchenko, 1994f: 77; Bolton, 1995b: 283; Seifert, 2003b: 145; Radchenko, Elmes & Alicata, 2006: 513; Radchenko & Elmes, 2010: 266; Radchenko, 2016: 127.

schenckiooides. *Myrmica schenckiooides* Boer & Noordijk, 2005: 120 figs. 1-4 (q.) NETHERLANDS.

Status as species: Radchenko, Elmes & Alicata, 2006: 527; Boer, 2010: 59.

Junior synonym of *schencki*: Radchenko & Elmes, 2010: 266; Radchenko, 2016: 127.

schoedli. *Myrmica schoedli* Radchenko, Elmes & Bui, 2006: 36, figs. 1-10 (w.q.) VIETNAM.
Radchenko & Elmes, 2010: 272 (m.).

Status as species: Radchenko & Elmes, 2010: 272.

schulzi. *Myrmica schulzi* Radchenko & Elmes, 2009a: 72, figs. 16-20 (w.) CHINA (Shaanxi).
[Misspelled as *schultzi* by Guénard & Dunn, 2012: 48.]

Status as species: Radchenko & Elmes, 2010: 273; Guénard & Dunn, 2012: 48; Chen, Zhou & Huang, 2016: 113, 121 (in key).

sculptiventris. *Myrmica sculptiventris* Radchenko & Elmes, 2009a: 72, figs. 11-15 (w.) CHINA (Sichuan).

Status as species: Radchenko & Elmes, 2010: 274; Guénard & Dunn, 2012: 48; Chen, Zhou & Huang, 2016: 115, 120 (in key).

seminigra Cresson, 1865; see under **POGONOMYRMEX**.

semiparasitica. *Myrmica semiparasitica* Francoeur, 2007: 161, figs. 14 – 19 (w.q.m.) U.S.A. (New York), CANADA (Québec).

Status as species: Ellison, *et al.* 2012: 295.

semipolita Nylander, 1856; see under **APHAENOGASTER**.

serica. *Myrmica margaritae* var. *serica* Wheeler, W.M. 1928c: 8 (w.) CHINA (Yunnan).

Radchenko & Elmes, 1998: 9 (m.); Weber, 1950b: 223 (q.).

Subspecies of margaritae: Wheeler, W.M. 1930h: 62; Chapman & Capco, 1951: 127.

Subspecies of ritae: Weber, 1950b: 222 (redescription).

Status as species: Radchenko, 1994a: 44; Bolton, 1995b: 283; Radchenko & Elmes, 1998: 7; Elmes & Radchenko, 1998: 222; Radchenko, Zhou & Elmes, 2001: 217; Lin & Wu, 2003: 64; Radchenko, Elmes & Bui, 2006: 39; Terayama, 2009: 160; Radchenko & Elmes, 2010: 275; Guénard & Dunn, 2012: 48; Chen, Zhou & Huang, 2016: 118 (in key).

siciliana. *Myrmica siciliana* Radchenko, Elmes & Alicata, 2006: 502, figs. 2-21 (w.q.m.) ITALY (Sicily).

Status as species: Radchenko & Elmes, 2010: 277; Borowiec, L. 2014: 134; Lebas, *et al.* 2016: 322.

silvestrianum. *Tetramorium silvestrianum* Emery, 1924c: 167, fig. A1 (w.) SPAIN.

Combination in *Myrmica*: Güsten, *et al.* 2006: 29.

Junior synonym of *Tetramorium forte*: Collingwood, 1978: 71; Bolton, 1995b: 414.

Status as species: Santschi, 1927a: 58; Ceballos, 1956: 308; López, 1991a: 31.

Junior synonym of *specioides*: Güsten, *et al.* 2006: 29; Radchenko & Elmes, 2010: 284; Radchenko, 2016: 136.

silvestrii. *Myrmica ruginodis* var. *silvestrii* Wheeler, W.M. 1928d: 100 (w.) JAPAN.

Collingwood, 1976: 300 (q.m.).

As unavailable (infrasubspecific) name: Chapman & Capco, 1951: 129.

Subspecies of *rubra*: Weber, 1947: 451; Onoyama, 1980: 197.

Status as species: Collingwood, 1976: 300; Collingwood, 1981: 26; Bolton, 1995b: 283.

Junior synonym of *ruginodis*: Radchenko & Elmes, 2010: 236; Radchenko, 2016: 120.

simillima Smith, F. 1851; see under **TETRAMORIUM**.

simpliciuscula Nylander, 1856; see under **TEMNOTHORAX**.

sinensis. *Myrmica sinensis* Radchenko, Zhou & Elmes, 2001: 212, figs. 1-5 (w.) CHINA (Guangxi).

Status as species: Radchenko & Elmes, 2010: 278; Guénard & Dunn, 2012: 48; Chen, Zhou & Huang, 2016: 118 (in key).

sinica. *Myrmica sinica* Wu, J. & Wang, 1995: 94, figs. 137, 145, 146 (w.q.) CHINA (Shandong).

Status as species: Wei, Zhou, *et al.* 2001: 562 (in key).

Junior synonym of *excelsa*: Radchenko, Zhou, *et al.* 2008: 783; Radchenko & Elmes, 2010: 131; Chen, Zhou & Huang, 2016: 89.

sinoschencki. *Myrmica sinoschencki* Radchenko & Elmes, in Radchenko, Zhou, *et al.* 2008: 778, figs. 31-38 (w.) CHINA (Sichuan).

Status as species: Radchenko & Elmes, 2010: 279; Guénard & Dunn, 2012: 48; Chen, Zhou & Huang, 2016: 117 (in key).

slobodensis. *Myrmica rugulosa* var. *slobodensis* Karavaiev, 1936: 274.

[First available use of *Myrmica rugulosa* subsp. *rugulosa* var. *slobodensis* Arnol'di, 1934: 162 (w.m.) UKRAINE (attributed to Karavaiev); unavailable (infrasubspecific) name].

Subspecies of *rugulosa*: Weber, 1948a: 307.

Synonym of *constricta*: Karavaiev, 1936: 274; Bolton, 1995b: 283.

[Note: Karavaiev, and Bolton, give *slobodensis* as senior synonym, but *constricta* has priority.]
Junior synonym of *rugulosa*: Arnol'di, 1970b: 1840; Radchenko, 1994e: 75; Bolton, 1995b: 283.

Junior synonym of *hellenica*: Radchenko, 2009: 70.

Junior synonym of *constricta*: Seifert, *et al.* 2009: 72; Radchenko & Elmes, 2010: 113; Czechowski, *et al.* 2012: 102; Radchenko, 2016: 154.

slovaca. *Myrmica (Myrmica) slovaca* Sadil, 1952: 259, figs. VI, 8-14; VIII, 35, 36; IX, 35; X, 10, XI, 13 (w.q.m.) CZECH REPUBLIC, SLOVAKIA, BULGARIA.

Status as species: Kutter, 1968a: 59; Arnol'di, 1970b: 1837 (in key); Kutter, 1977c: 71; Arnol'di & Dlussky, 1978: 534 (in key); Agosti & Collingwood, 1987a: 53; Agosti & Collingwood, 1987b: 268 (in key); Radchenko, 1994c: 144 (in key); Radchenko, 1994e: 80; Petrov, 2006: 88 (in key); Radchenko & Elmes, 2009c: 521; Lapeva-Gjonova, *et al.* 2010: 11; Radchenko & Elmes, 2010: 280; Csösz, *et al.* 2011: 56; Czechowski, *et al.* 2012: 98; Czakes, *et al.* 2012: 43 (in key); Borowiec, L. 2014: 134; Radchenko, 2016: 142.

Junior synonym of *salina*: Seifert, 1988b: 25; Seifert, 1994: 13; Bolton, 1995b: 283; Seifert, 2002a: 96; Radchenko & Elmes, 2004: 228; Werner & Wiezik, 2007: 140.

Junior synonym of *curvithorax*: Radchenko & Elmes, 2010: 281 (in text); Seifert, 2011: 170 (in text).

[Note: although Radchenko & Elmes, 2010: 280 recognise *slovaca*, in their text (p. 281) they say that the holotype of *curvithorax* was examined and found to be indistinguishable from *slovaca*.]

smythiesii. *Myrmica smythiesii* Forel, 1902c: 226 (w.) INDIA (Uttarakhand; also no state data, “Diverses localités de l’Himalaya”, and “N.-O. Himalaya”).

[Misspelled as *smithiesi* by Weber, 1947: 458.]

Radchenko & Elmes, 2002: 37 (q.).

Subspecies of rugosa: Ruzsky, 1905b: 659; Kuznetsov-Ugamsky, 1927e: 193.

Status as species: Forel, 1903a: 698; Bingham, 1903: 269; Ruzsky, 1904b: 3; Forel, 1904b: 374; Forel, 1904c: 22; Forel, 1906b: 87; Emery, 1908a: 168; Ruzsky, 1915a: 438; Emery, 1921f: 41; Menozzi, 1939a: 295 (in key); Weber, 1947: 456 (redescription); Chapman & Capco, 1951: 129; Bolton, 1995b: 283; Radchenko & Elmes, 2001a: 253; Radchenko & Elmes, 2002: 37; Radchenko & Elmes, 2010: 282; Guénard & Dunn, 2012: 48; Bharti, Guénard, *et al.* 2016: 41; Bharti, Sasi & Radchenko, 2016: 969.

Senior synonym of himalayana: Radchenko & Elmes, 2001a: 253; Radchenko & Elmes, 2010: 282; Bharti, Sasi & Radchenko, 2016: 969.

sontica. *Myrmica kurokii* var. *sontica* Santschi, 1937h: 367 (w.) JAPAN.

Subspecies of *kurokii*: Santschi, 1941: 273; Weber, 1947: 470; Azuma, 1951: 86; Onoyama, 1980: 197; Bolton, 1995b: 283.

Junior synonym of *ruginodis*: Radchenko & Elmes, 2010: 236; Radchenko, 2016: 120.

sordidula Nylander, 1849; see under **CREMATOGASTER**.

spatulata. *Myrmica schencki* var. *spatulata* Smith, M.R. 1930c: 566, figs. 1-4 (w.q.) U.S.A. (Mississippi).

Subspecies of schencki: Smith, M.R. 1931a: 21; Weber, 1948a: 303; Smith, M.R. 1951a: 790; Smith, M.R. 1967: 350.

Status as species: Creighton, 1950a: 105; Yensen, *et al.* 1977: 182; Smith, D.R. 1979: 1351; Bolton, 1995b: 283; Coovert, 2005: 39.

specioides. *Myrmica specioides* Bondroit, 1918: 100 (w.q.m.) BELGIUM.

[Misspelled as *specivides* by Karavaiev, 1934: 77.]

Junior synonym of *scabrinodis*: Emery, 1921f: 40; Betrem, 1926: 216; Finzi, 1926: 99; Sadil, 1952: 249; Bernard, 1967: 116; van Boven, 1977: 120.

Junior synonym of *rugulosoides*: Santschi, 1931b: 342; Weber, 1950b: 208.

Junior synonym of *scabrinodis*: Karavaiev, 1934: 77.

Junior synonym of *bessarabicus*: Atanassov & Dlussky, 1992: 93; Bolton, 1995b: 283.

Status as species: Bondroit, 1920a: 146; Collingwood & Yarrow, 1969: 57; Collingwood, 1971: 157; Bolton & Collingwood, 1975: 5 (in key); Pisarski, 1975: 12; Kutter, 1977c: 70; Collingwood, 1978: 79 (in key); Collingwood, 1979: 56; Agosti & Collingwood, 1987a: 53; Agosti & Collingwood, 1987b: 268 (in key); Seifert, 1988b: 16 (redescription); Seifert, 1994: 11; Douwes, 1995: 87; Poldi, *et al.* 1995: 2; Seifert, 1996b: 146 (in key); Espadaler, 1997b: 31; Radchenko, *et al.* 1997: 488; Collingwood & Prince, 1998: 12 (in key); Gallé, *et al.* 1998: 214; Czechowski, *et al.* 2002: 26; Markó & Csösz, 2002: 112; Seifert, 2002a: 95; Radchenko & Elmes, 2004: 229; Bolton, 2005: 14 (in key); Bračko, 2006: 139; Güsten, *et al.* 2006: 29; Markó, Sipos, *et al.* 2006: 70; Petrov, 2006: 88 (in key); Bračko, 2007: 18; Seifert, 2007: 197; Werner & Wiezik, 2007: 140; Casevitz-Weulersse & Galkowski, 2009: 491; Boer, 2010: 58; Lapeva-Gjonova, *et al.* 2010: 11; Paknia, *et al.* 2010: 34; Radchenko & Elmes, 2010: 284; Seifert, 2011: 183; Csösz, *et al.* 2011: 56; Karaman, M.G. 2011b: 47; Legakis, 2011: 5; Borowiec, L. & Salata, 2012: 524; Czechowski, *et al.* 2012: 96; Czakes, *et al.* 2012: 46 (in key); Kiran & Karaman, 2012: 23; Borowiec, L. 2014: 135; Lebas, *et al.* 2016: 324; Radchenko, 2016: 136; Salata & Borowiec, 2018c: 47; Seifert, 2018: 156.

Senior synonym of *balcanica*: Collingwood, 1971: 157; Pisarski, 1975: 12; Kutter, 1977c: 70; Collingwood, 1979: 56; Seifert, 1988b: 16; Seifert, 2002a: 95 (by implication); Radchenko & Elmes, 2004: 229 (by implication); Güsten, *et al.* 2006: 29; Werner & Wiezik, 2007: 140; Radchenko & Elmes, 2010: 284; Seifert, 2011: 183; Radchenko, 2016: 136.

Senior synonym of *dolens*: Radchenko & Elmes, 2010: 284; Seifert, 2011: 183; Radchenko, 2016: 136.

Senior synonym of *nevodovskii*: Seifert, 2002a: 95 (by implication); Radchenko & Elmes, 2004: 229 (by implication); Radchenko & Elmes, 2010: 284; Radchenko, 2016: 136.

Senior synonym of *puerilis*: Collingwood & Yarrow, 1969: 57; Collingwood, 1971: 157; Bolton & Collingwood, 1975: 18; Pisarski, 1975: 12; Collingwood, 1979: 56; Seifert, 1988b: 16; Seifert, 2002a: 95 (by implication); Radchenko & Elmes, 2004: 229 (by implication); Güsten, *et al.* 2006: 29; Casevitz-Weulersse & Galkowski, 2009: 491; Radchenko & Elmes, 2010: 284; Seifert, 2011: 183; Radchenko, 2016: 136.

Senior synonym of *sancta*: Kutter, 1977c: 70; Gallé, *et al.* 1998: 214; Seifert, 2002a: 95 (by implication); Radchenko & Elmes, 2004: 229 (by implication); Radchenko & Elmes, 2010: 284; Csösz, *et al.* 2011: 56; Seifert, 2011: 183; Kiran & Karaman, 2012: 23; Radchenko, 2016: 136.

Senior synonym of *scabrinodoides*: Pisarski, 1975: 12; Kutter, 1977c: 70; Collingwood, 1979: 56; Seifert, 1988b: 16; Seifert, 2002a: 95 (by implication); Radchenko & Elmes, 2004: 229 (by implication); Güsten, *et al.* 2006: 29; Radchenko & Elmes, 2010: 284; Seifert, 2011: 183; Radchenko, 2016: 136.

Senior synonym of *silvestriatum*: Güsten, Schulz & Sanetra, 2006: 29; Radchenko, 2016: 136.

Senior synonym of *striata*: Collingwood, 1979: 56; Seifert, 2002a: 95 (by implication); Radchenko & Elmes, 2004: 229 (by implication); Güsten, *et al.* 2006: 29; Radchenko & Elmes, 2010: 284; Radchenko, 2016: 136.

Senior synonym of *tschuliensis*: Seifert, 2002a: 95 (by implication); Radchenko & Elmes, 2004: 229 (by implication); Radchenko & Elmes, 2010: 284; Radchenko, 2016: 136.

Senior synonym of *turcica*: Seifert, 2011: 183; Kiran & Karaman, 2012: 23.

Material of the *nomina nuda atlantica, neglecta* referred here by Güsten, *et al.* 2006: 29.

***speciolosa*.** *Myrmica speciolosa* Seifert, 1988b: 14; unavailable name.

[Unavailable name (published as junior synonym): Bolton, 1995b: 283.]

***specularis*.** *Myrmica specularis* Donisthorpe, 1929a: 446 (w.) CHINA (Tibet), INDIA (Sikkim).

Status as species: Menozzi, 1939a: 293 (in key); Weber, 1950b: 224; Chapman & Capco, 1951: 130; Bolton, 1995b: 283.

Junior synonym of *kozlovi*: Radchenko & Elmes, 2001a: 259; Radchenko & Elmes, 2010: 175; Bharti, Sasi & Radchenko, 2016: 966.

spinosior. *Myrmica sabuleti* var. *spinosior* Santschi, 1931a: 3 (w.q.m.) FRANCE, SPAIN, ITALY (mainland and Sardinia), CROATIA, CZECH REPUBLIC.

[Note: Santschi, 1931a: 3, cites as *spinosior* the material incorrectly recorded as *wesmaeli* by Finzi, 1926: 97; the countries above are those noted by Finzi. Santschi, 1931b: 346, mentions only Spain, France (Corsica) and Italy.]

[Also described as new by Santschi, 1931b: 346.]

Subspecies of *sabuleti*: Weber, 1948a: 296; Ceballos, 1956: 297; Baroni Urbani, 1971c: 32.

Junior synonym of *sabuleti*: Seifert, 1988b: 31; Casevitz-Weulersse, 1990b: 137; Radchenko, 1994e: 80; Bolton, 1995b: 283; Poldi, *et al.* 1995: 2.

Status as species: Seifert, 2005: 7; Casevitz-Weulersse & Galkowski, 2009: 491; Radchenko & Elmes, 2010: 289; Kiran & Karaman, 2012: 23; Seifert, *et al.* 2014: 178; Borowiec, L. 2014: 135; Lebas, *et al.* 2016: 318.

Senior synonym of *reticulata*: Seifert, *et al.* 2014: 178 (in text).

stangeana. *Myrmica stangeana* Ruzsky, 1902a: 234 (w.) RUSSIA, KAZAKHSTAN.

[Also described as new by Ruzsky, 1902b: 474.]

Seifert, 1988b: 23 (q.m.).

Subspecies of *bergi*: Ruzsky, 1903b: 314; Ruzsky, 1905b: 678; Soudek, 1923: 117.

Subspecies of *scabrinodis*: Emery, 1908a: 178; Ruzsky, 1916: 11; Emery, 1921f: 41; Soudek, 1922: 46; Weber, 1950b: 210.

Status as species: Arnol'di, 1970b: 1835 (in key), 1841; Arnol'di & Dlussky, 1978: 533 (in key); Agosti & Collingwood, 1987b: 268 (in key); Seifert, 1988b: 23 (redescription); Radchenko, 1994e: 78; Bolton, 1995b: 283; Petrov, 2006: 89 (in key); Zryanin & Zryanina, 2007: 230; Radchenko & Elmes, 2009c: 509 (redescription); Radchenko & Elmes, 2010: 291; Czekes, *et al.* 2012: 46 (in key); Guénard & Dunn, 2012: 48; Borowiec, L. 2014: 135; Radchenko, 2016: 141; Chen, Zhou & Huang, 2016: 116 (in key).

Senior synonym of *lacustris*: Radchenko & Elmes, 2009c: 509; Radchenko & Elmes, 2010: 291; Radchenko, 2016: 141.

Senior synonym of *medvedevi*: Seifert, 1988b: 23; Radchenko, 1994c: 144 (in key); Radchenko, 1994e: 78; Bolton, 1995b: 283; Radchenko & Elmes, 2009c: 509; Radchenko & Elmes, 2010: 291; Radchenko, 2016: 141.

starki. *Myrmica (Myrmica) schencki* var. *starki* Karavaiev, 1929b: 208 (w.) RUSSIA.

Subspecies of *schencki*: Karavaiev, 1931b: 29; Weber, 1948a: 304; Pisarski & Krzysztofiak, 1981: 156.

Junior synonym of *lobicornis*: Arnol'di, 1970b: 1842; Seifert, 1988b: 38; Radchenko, 1994g: 87; Bolton, 1995b: 283; Radchenko & Elmes, 2010: 185; Radchenko, 2016: 122.

strandi. *Myrmica rugulosa* subsp. *limanica* nat. *strandi* Arnol'di, 1934: 164, fig. 16 (w.) UKRAINE; unavailable (infrasubspecific) name.

As unavailable (infrasubspecific) name: Karavaiev, 1936: 274; Weber, 1947: 442.

Declared as unavailable (infrasubspecific) name: Bolton, 1995b: 283.

Material referred to *limanica* by Arnol'di, 1970b: 1840.

Material referred to *gallienii* by Radchenko, 1994e: 76; Radchenko & Elmes, 2010: 664.

striata. *Myrmica rugulosoides* var. *striata* Finzi, 1926: 96, fig. 7 (w.q.m.) ITALY.

As unavailable (infrasubspecific) name: Weber, 1950b: 208.

Subspecies of *scabrinodis*: Santschi, 1931b: 344; Consani & Zangheri, 1952: 40.

Subspecies of *rugulosoides*: Zimmermann, 1935: 10; Baroni Urbani, 1971c: 30.

Status as species: Poldi, *et al.* 1995: 2.

Junior synonym of *hellenica*: Seifert, *et al.* 2009: 68.

Junior synonym of *specioides*: Collingwood, 1979: 56; Bolton, 1995b: 283; Seifert, 2002a: 95 (by implication); Radchenko & Elmes, 2004: 229 (by implication); Güsten, *et al.* 2006: 29; Radchenko & Elmes, 2010: 284; Radchenko, 2016: 136.

striatula Nylander, 1849; see under **MYRMECINA**.

striolagaster. *Myrmica striolagaster* Cole, 1953a: 81 (w.) U.S.A. (New Mexico).

Cole, 1957c: 208 (q.m.); Wheeler, G.C. & Wheeler, J. 1972b: 234 (l.).

Status as species: Cole, 1953e: 243; Cole, 1957c: 208; Smith, M.R. 1958c: 113; Gregg, R.E. 1961: 211; Smith, M.R. 1967: 350; Hunt & Snelling, 1975: 21; Smith, D.R. 1979: 1351; Mackay, Lowrie, *et al.* 1988: 92 (in key); Bolton, 1995b: 283; Mackay & Mackay, 2002: 166.

subacuta. *Myrmica rugosa* subsp. *dshungarica* var. *subacuta* Kuznetsov-Ugamsky, 1927e: 192 (m.) KYRGYZSTAN; unavailable (infrasubspecific) name.

Declared as unavailable (infrasubspecific) name: Bolton, 1995b: 283.

Material referred to *dshungarica* by Tarbinsky, 1976: 29; Radchenko, 1994f: 73; Radchenko & Elmes, 2010: 664.

subalpina. *Myrmica kozlovi* subsp. *subalpina* Ruzsky, 1915a: 438, fig. 14 (w.) CHINA (Tibet).

As unavailable (infrasubspecific) name: Emery, 1921f: 37; Chapman & Capco, 1951: 126.

Subspecies of *kozlovi*: Menozzi, 1939a: 294 (in key); Bolton, 1995b: 283.

Junior synonym of *kozlovi*: Radchenko & Elmes, 2010: 175; Bharti, Sasi & Radchenko, 2016: 966; Chen, Zhou & Huang, 2016: 90.

subalpina. *Myrmica brevinodis* var. *subalpina* Wheeler, W.M. 1917a: 503.

[First available use of *Myrmica rubra* subsp. *brevinodis* var. *subalpina* Wheeler, W.M. 1907b: 77 (w.q.m.) U.S.A. (Colorado); unavailable (infrasubspecific) name.]

[Unresolved junior primary homonym of *Myrmica kozlovi* subsp. *subalpina* Ruzsky, 1915a: 438 (Bolton, 1995b: 283).]

As unavailable (infrasubspecific) name: Wheeler, W.M. 1910g: 566.

Subspecies of *brevinodis*: Emery, 1921f: 37; Essig, 1926: 862.

Junior synonym of *brevinodis*: Weber, 1950b: 189; Creighton, 1950a: 96; Smith, M.R. 1951a: 789.

Junior synonym of *incompleta*: Francoeur & Béique, 1966: 141 (by implication); Smith, D.R. 1979: 1349; Bolton, 1995b: 279.

subaltaica. *Myrmica scabrinodis* subsp. *kasczenkoi* var. *subaltaica* Ruzsky, 1925b: 45 (w.) RUSSIA; unavailable (infrasubspecific) name.

Declared as unavailable (infrasubspecific) name: Bolton, 1995b: 284.

Material referred to *kasczenkoi* by Radchenko, 1994g: 82; Radchenko & Elmes, 2010: 664.

subbrevispinosa. *Myrmica kozlovi* subsp. *subbrevispinosa* Ruzsky, 1915a: 437, fig. 13 (w.) CHINA (Tibet).

Subspecies of *kozlovi*: Emery, 1921f: 37; Menozzi, 1939a: 294 (in key); Eidmann, 1941: 14; Weber, 1947: 472; Chapman & Capco, 1951: 126; Bolton, 1995b: 284.

Junior synonym of *kozlovi*: Radchenko & Elmes, 2010: 175; Bharti, Sasi & Radchenko, 2016: 966; Chen, Zhou & Huang, 2016: 90.

sublaevis Nylander, 1849; see under **HARPAGOXENUS**.

sublanuginosa. *Myrmica (Atta) sublanuginosa* Buckley, 1867: 343 (w.) U.S.A. (Texas).

Combination in *Aphaenogaster*: Cresson, 1887: 260; Dalla Torre, 1893: 106.

Status as species: Cresson, 1887: 260; Dalla Torre, 1893: 106.

Unidentifiable to genus: Wheeler, W.M. 1902f: 28;

unidentifiable taxon; *incertae sedis* in Myrmicinae: Emery, 1915d: 69; Smith, M.R. 1951a: 833; Smith, D.R. 1979: 1414;

unidentifiable taxon; *incertae sedis* in *Myrmica*: Bolton, 1995b: 284.

subopaca Smith, F. 1858; see under **MONOMORIUM**.

subopaca. *Myrmica (Myrmica) schencki* var. *subopaca* Karavaiev, 1934: 96 (w.) UKRAINE (attributed to Arnol'di; date of publication 27.ix.1934).

[Also described as new, as *Myrmica schencki* nat. *subopaca* Arnol'di, 1934: 172; date of publication 10.x.1934].

[Unresolved junior primary homonym of *Myrmica subopaca* Smith, F. 1858b: 127 (Bolton, 1995b: 284).]

Subspecies of *schencki*: Weber, 1948a: 304.

Junior synonym of *schencki*: Arnol'di, 1970b: 1843; Radchenko, 1994f: 77; Bolton, 1995b: 284; Seifert, 2003b: 145; Radchenko, Elmes & Alicata, 2006: 513; Radchenko & Elmes, 2010: 266; Radchenko, 2016: 127.

subrubra Buckley, 1867; see under **APHAENOGASTER**.

sulcinodis. *Myrmica sulcinodis* Nylander, 1846a: 934 (w.q.) FINLAND.

[Misspelled as *sulcidonis* by Santschi, 1926f: 286.]

Mayr, 1855: 409 (m.); Hauschteck, 1965: 323 (k.); Donisthorpe, 1919: 1 (ergatandromorph); Santschi, 1931b: 351 (ergatandromorph).

Subspecies of rubra: Forel, 1874: 76; Emery & Forel, 1879: 460; Lameere, 1892: 68; Saunders, E. 1896: 39 (in key); Wheeler, W.M. 1908g: 406; Santschi, 1911d: 5.

Status as species: Mayr, 1855: 408 (redescription); Smith, F. 1855b: 119; Nylander, 1856b: 80; Gredler, 1858: 22; Smith, F. 1858b: 116; Mayr, 1861: 63 (in key); Meinert, 1861: 325; Roger, 1863b: 28; Mayr, 1863: 435; Smith, F. 1871b: 3; Dours, 1873: 168; André, 1874: 194 (in key); Mayr, 1877: 20 (in list); Emery, 1878b: 52; Saunders, E. 1880: 215; André, 1883a: 317 (in key); White, W.F. 1884: 261; Mayr, 1886d: 451; Cresson, 1887: 261; Forel, 1889: 257; Nasonov, 1889: 35; Forel, 1892i: 315; Dalla Torre, 1893: 113 (footnote), 117; Forel, 1895d: 227; Ruzsky, 1896: 73; Ruzsky, 1902d: 30; Ruzsky, 1903c: 207; Ruzsky, 1905b: 703; Emery, 1908a: 173; Bondroit, 1910: 495; Bondroit, 1912: 351; Ruzsky, 1914b: 105; Stitz, 1914: 72; Forel, 1915d: 29 (in key); Donisthorpe, 1915d: 122; Emery, 1916b: 119; Ruzsky, 1916: 5; Escherich, 1917: 326 (in key); Nadig, 1918: 339; Bondroit, 1918: 104; Emery, 1921f: 42; Soudek, 1922: 42; Finzi, 1923: 2; Müller, 1923b: 42; Soudek, 1923: 110; Kiseleva, 1925: 75; Ruzsky, 1925b: 46; Santschi, 1926f: 286; Finzi, 1926: 86; Stärcke, 1926: 91 (in key); Donisthorpe, 1927b: 132; Karavaiev, 1927a: 283; Kuznetsov-Ugamsky, 1929b: 45; Karavaiev, 1930b: 145; Karavaiev, 1931e: 210; Santschi, 1931b: 351; Arnol'di, 1933b: 600 (in key); Arnol'di, 1934: 157 (redescription); Grandi, 1935: 99; Ruzsky, 1936: 95; Finzi, 1939b: 88; Teranishi, 1940: 14; Novák & Sadil, 1941: 77 (in key); Holgersen, 1942: 9; Holgersen, 1943b: 170 (in key); Holgersen, 1944: 174; Ruzsky, 1946: 70; van Boven, 1947: 180; Weber, 1948a: 267; Donisthorpe, 1950e: 1058; Sadil, 1952: 242; Consani & Zangheri, 1952: 40; Ceballos, 1956: 297; Collingwood, 1958b: 70; Collingwood, 1962: 217; Bernard, 1967: 121 (redescription); Kutter, 1968a: 59; Collingwood & Yarrow, 1969: 56; Pisarski, 1969a: 227; Pisarski, 1969b: 296; Arnol'di, 1970b: 1833 (in key); Baroni Urbani, 1971c: 36; Collingwood, 1971: 157; Banert & Pisarski, 1972: 349; Bolton & Collingwood, 1975: 5 (in key); Pisarski, 1975: 12; Arnol'di, 1976a: 556 (in key); Collingwood, 1976: 301; Aktaç, 1977: 119; van Boven, 1977: 117; Kutter, 1977c: 70; Arnol'di & Dlussky, 1978: 531; Collingwood, 1978: 78 (in key); Collingwood, 1979: 57; Kupyanskaya, 1986b: 94; Agosti & Collingwood, 1987a: 53; Agosti & Collingwood, 1987b: 267 (in key); Nilsson & Douwes, 1987: 64; Seifert, 1988b: 7 (redescription); Atanassov & Dlussky, 1992: 87; Arakelian, 1994: 27; Radchenko, 1994b: 109 (in key); Radchenko, 1994c: 139 (in key); Radchenko, 1994g: 81; Bolton, 1995b: 284; Douwes, 1995: 88; Poldi, et al. 1995: 2; Wu, J. & Wang, 1995: 94; Espadaler, 1997b: 31; Radchenko, et al. 1997: 485; Gallé, et al. 1998: 214; Wei, Zhou, et al. 2001: 562 (in key); Czechowski, et al. 2002: 21; Markó & Csösz, 2002: 112; Bolton, 2005: 14 (in key); Radchenko, 2005b: 144; Bračko, 2006: 139; Markó, Sipos, et al. 2006: 70; Petrov, 2006: 87

(in key); Bračko, 2007: 18; Seifert, 2007: 203; Radchenko, 2007: 28; Werner & Wiezik, 2007: 140; Zryanin & Zryanina, 2007: 230; Gratiashvili & Barjadze, 2008: 141; Casevitz-Weulersse & Galkowski, 2009: 491; Lapeva-Gjonova, *et al.* 2010: 12; Boer, 2010: 58; Radchenko & Elmes, 2010: 293; Karaman, M.G. 2011b: 48; Legakis, 2011: 5; Borowiec, L. & Salata, 2012: 524; Guénard & Dunn, 2012: 48; Yamane & Aibek, 2012: 181; Czechowski, *et al.* 2012: 83; Czakes, *et al.* 2012: 41 (in key); Kiran & Karaman, 2012: 23; Borowiec, L. 2014: 135; Lebas, *et al.* 2016: 310; Radchenko, 2016: 124; Chen, Zhou & Huang, 2016: 119 (in key); Salata & Borowiec, 2018c: 47; Seifert, 2018: 165.

Senior synonym of *derzhavini*: Kupyanskaya, 1986b: 94; Radchenko, 1994g: 81; Bolton, 1995b: 284; Radchenko & Elmes, 2010: 294; Radchenko, 2016: 124.

Senior synonym of *eximia*: Radchenko, 1994g: 81; Radchenko, 2005b: 144; Radchenko & Elmes, 2010: 294; Radchenko, 2016: 124.

Senior synonym of *myrmecophila*: van Boven, 1970a: 130; Bolton, 1988a: 4; Seifert, 1988b: 7; Radchenko, 1994g: 81; Bolton, 1995b: 284; Radchenko & Elmes, 2003a: 239; Radchenko & Elmes, 2010: 294; Radchenko, 2016: 124.

Senior synonym of *nigripes*: Collingwood, 1971: 157; Seifert, 1988b: 7; Radchenko, 1994g: 81; Bolton, 1995b: 284; Radchenko & Elmes, 2010: 294; Radchenko, 2016: 124.

Senior synonym of *perelegans*: Mayr, 1855: 408; Nylander, 1856b: 80; Smith, F. 1855b: 120; Smith, F. 1858b: 116; Mayr, 1863: 435; Roger, 1863b: 28; Smith, F. 1871b: 3; André, 1874: 203 (in list); Forel, 1874: 101 (in list); Emery & Forel, 1879: 460; Dalla Torre, 1893: 117; Ruzsky, 1905b: 703; Donisthorpe, 1915d: 122; Emery, 1921f: 42; Donisthorpe, 1927b: 132; Radchenko, 1994g: 81; Bolton, 1995b: 284; Radchenko & Elmes, 2010: 294; Radchenko, 2016: 124.

Senior synonym of *sulcinodoruginodis*: Bernard, 1967: 121; Bolton, 1995b: 284; Radchenko & Elmes, 2010: 294; Radchenko, 2016: 124.

Senior synonym of *sulcinodoscabrinodis* Forel: Bernard, 1967: 121; Radchenko, 1994g: 81; Bolton, 1995b: 284; Radchenko, *et al.* 1997: 485; Czechowski, *et al.* 2002: 21; Radchenko & Elmes, 2010: 294; Czechowski, *et al.* 2012: 83; Radchenko, 2016: 124.

Senior synonym of *sulcinodoscabrinodis* Ruzsky: Radchenko & Elmes, 2010: 294.

Senior synonym of *sulcinodoscabrinodis* Ruzsky: Radchenko & Elmes, 2010: 294.

Senior synonym of *vicaria*: Radchenko & Elmes, 2010: 294; Radchenko, 2016: 124.

sulcinodoides. *Myrmica sulcinodoides* Pergande, 1900: 521.

[First available use of *Myrmica rubra* subsp. *brevinodis* var. *sulcinodoides* Emery, 1895c: 313 (w.) U.S.A. (South Dakota, Utah, Maine); unavailable (infrasubspecific) name.]

[Misspelled as *sulcinodis* by Menozzi, 1932b: 310.]

Wheeler, W.M. 1907b: 76 (q.m.).

As unavailable (infrasubspecific) name: Wheeler, W.M. 1906b: 7; Wheeler, W.M. 1907b: 75; Wheeler, W.M. 1910g: 566; Santschi, 1911d: 5.

Subspecies of *rubra*: Wheeler, W.M. in Viereck, 1903: 73.

Subspecies of *brevinodis*: Wheeler, W.M. 1917a: 502; Wheeler, W.M. 1917e: 16; Emery, 1921f: 37; Menozzi, 1932b: 310; Cole, 1936a: 36; Cole, 1937b: 135; Wing, 1939: 162; Cole, 1942: 368; Weber, 1950b: 195 (redescription); Smith, M.R. 1951a: 789; Smith, M.R. 1958c: 113; Smith, M.R. 1967: 349.

Subspecies of *incompleta*: Hunt & Snelling, 1975: 21; Smith, D.R. 1979: 1349.

Junior synonym of *brevinodis*: Creighton, 1950a: 96.

Status as species: Mackay, Lowrie, *et al.* 1988: 92 (in key).

Senior synonym of *frigida*: Wheeler, W.M. 1917e: 16; Weber, 1950b: 195; Smith, M.R. 1951a: 789; Smith, D.R. 1979: 1349; Bolton, 1995b: 284.

Synonym of *whymeri*: Wheeler, W.M. 1917a: 502; Wheeler, W.M. 1917e: 16; Emery, 1921f: 37; Weber, 1950b: 195; Smith, M.R. 1951a: 789; Smith, D.R. 1979: 1349.

[Note: Wheeler, Emery, Weber, Smith, M.R., and Smith, D.R. give *sulcinodoides* as senior synonym, but *whymperi* has priority (Bolton, 1995b: 284).]

Junior synonym of *incompleta*: Shattuck & Cover, 2016: 18.

sulcinodolobicornis. *Myrmica f. sulcinodolobicornis* Ruzsky, 1895: 31. *Nomen nudum*.

sulcinodoruginodis. *Myrmica ruginodis* var. *sulcinodoruginodis* Donisthorpe, 1915d: 121 (w.) GREAT BRITAIN.

[*Myrmica rubra* var. *sulcinodoruginodis* Emery & Forel, 1879: 461. *Nomen nudum* (attributed to Forel).]

[*Myrmica rubra* r. *sulcinododruginodis* André, 1883a: 319. *Nomen nudum*.]

[*Myrmica rubra* r. *sulcinododruginodis* Dalla Torre, 1893: 116. *Nomen nudum*.]

As unavailable (infrasubspecific) name: Stärcke, 1926: 89 (in key).

Status as species: Emery, 1917b: 28.

Subspecies of *ruginodis*: Donisthorpe, 1927b: 131.

Subspecies of *sulcinodis*: Emery, 1921f: 42; Finzi, 1926: 88; Weber, 1947: 441; Weber, 1948a: 268.

Junior synonym of *sulcinodis*: Bernard, 1967: 121; Bolton, 1995b: 284; Radchenko & Elmes, 2010: 294; Radchenko, 2016: 124.

sulcinodorugulosa. *Myrmica rugulosa* var. *sulcinodorugulosa* Nasonov, 1889: 35 (w.) LATVIA, ESTONIA, RUSSIA.

Subspecies of *sulcinodis*: Emery, 1921f: 42; Finzi, 1926: 88; Weber, 1947: 441; Weber, 1948a: 268.

Subspecies of *rugulosa*: Bolton, 1995b: 284.

Junior synonym of *rugulosa*: Radchenko, 1994e: 75; Radchenko & Elmes, 2010: 244; Radchenko, 2016: 153.

sulcinodoscabrinodis. *Myrmica sulcinodoscabrinodis* Ruzsky, 1895: 32 (w.q.m.) RUSSIA.

[Also described as new: *M. sulcinodis* f.intrm. *sulcinodoscabrinodis* Ruzsky, 1896: 73.]

Subspecies of *sulcinodis*: Emery, 1921f: 42.

Junior synonym of *sulcinodis*: Radchenko & Elmes, 2010: 294.

sulcinodoscabrinodis. *Myrmica sulcinodis* var. *sulcinodoscabrinodis* Forel, 1915d: 29 (diagnosis in key) (w.) SWITZERLAND.

[*Myrmica rubra* var. *sulcinodoscabrinodis* Forel, 1874: 77. *Nomen nudum*.]

[Unresolved junior primary homonym of *Myrmica sulcinodoscarbinodis* Ruzsky, 1895: 32.]

Status as species: Emery, 1917b: 28.

Subspecies of *sulcinodis*: Emery, 1916b: 119; Menozzi, 1918: 82; Kulmatycki, 1922: 78; Soudek, 1923: 110; Donisthorpe, 1926a: 6; Finzi, 1926: 89; Stärcke, 1926: 91 (in key); Teranishi, 1940: 14; Holgersen, 1943b: 170 (in key); Weber, 1947: 441; Weber, 1948a: 270; Baroni Urbani, 1971c: 37.

Junior synonym of *sulcinodis*: Bernard, 1967: 121; Radchenko, 1994g: 81; Bolton, 1995b: 284; Radchenko, et al. 1997: 485; Czechowski, et al. 2002: 21; Radchenko & Elmes, 2010: 294; Czechowski, et al. 2012: 83; Radchenko, 2016: 124.

suspiciosa Smith, F. 1859; see under **PHEIDOLE**.

svartshevskii. *Leptothorax* (*Leptothorax*) *svartshevskii* Karavaiev, 1916: 500, fig. 2 (w.q.) UZBEKISTAN.

[Misspelled as *swartschewskii* by Kuznetsov-Ugamsky, 1927d: 40, Radchenko, 1994f: 73.]

Status as species: Kuznetsov-Ugamsky, 1927d: 40; Bolton, 1995b: 245 (error).

Junior synonym of *dshungarica*: Radchenko, 1994f: 73; Radchenko & Elmes, 2010: 124.

symbiotica. *Sommimyrma symbiotica* Menozzi, 1925d: 25, fig. 1 (w.) ITALY.

Combination in *Myrmica*: Bolton, 1988a: 4.

Status as species: Stärcke, 1926: 85; Kutter, 1968b: 202; Baroni Urbani, 1971c: 74; Kutter, 1973c: 256; Bolton, 1988a: 4 (in table); Bolton, 1995b: 284; Radchenko & Elmes, 2003a: 224; Radchenko & Elmes, 2010: 299.

Junior synonym of *scabrinodis*: Csösz, 2012: 28.

taediosa. *Myrmica taediosa* Bolton, 1995b: 284.

Replacement name for *Myrmica carinata* Kupyanskaya, 1990: 114. [Junior primary homonym of *Myrmica carinata* Smith, F. 1859a: 148.]

Status as species: Radchenko, 2005b: 145.

Junior synonym of *transsibirica*: Radchenko & Elmes, 2010: 308; Yamane & Aibek, 2012: 182.

tahoensis. *Myrmica schencki* var. *tahoensis* Weber, 1948a: 304.

[First available use of *Myrmica scabrinodis* subsp. *schencki* var. *tahoensis* Wheeler, W.M. 1917a: 504 (w.q.m.) U.S.A. (California); unavailable (infrasubspecific) name.]

[Misspelled as *thaoensis* by Emery, 1921f: 41.]

As unavailable (infrasubspecific) name: Emery, 1921f: 41.

Subspecies of schencki: Smith, M.R. 1951a: 790; Smith, M.R. 1958c: 113.

Subspecies of emeryana: Creighton, 1950a: 99; Cole, 1966: 3; Hunt & Snelling, 1975: 21; Smith, D.R. 1979: 1349.

Status as species: Yensen, *et al.* 1977: 182; Wheeler, G.C. & Wheeler, J. 1978: 391; Wheeler, G.C. & Wheeler, J. 1986g: 24; Bolton, 1995b: 284; Mackay & Mackay, 2002: 167; Ward, 2005: 66.

taibaiensis. *Myrmica taibaiensis* Wei, Zhou & Liu, in Wei, Zhou, *et al.* 2001: 562, figs. 2, 3 (w.q.) CHINA (Shaanxi).

[Misspelled as *taibaensis* by Radchenko & Elmes, 2009a: 69.]

Status as species: Radchenko & Elmes, 2009a: 69; Radchenko & Elmes, 2010: 301; Guénard & Dunn, 2012: 48; Chen, Zhou & Huang, 2016: 113, 121 (in key).

tamarae. *Myrmica tamarae* Elmes, Radchenko & Aktaç, 2002: 165, figs. 34-43 (w.q.) TURKEY.

Status as species: Radchenko & Elmes, 2010: 302; Kiran & Karaman, 2012: 23; Borowiec, L. 2014: 135.

tarbinskii. *Myrmica minuta* subsp. *tarbinskii* Arnol'di, 1976a: 549 (w.) KYRGYZSTAN.

Subspecies of *minuta*: Bolton, 1995b: 284 (error).

Junior synonym of *dshungarica*: Radchenko, 1994f: 73; Radchenko & Elmes, 2010: 124.

tarda Jerdon, 1851; see under **MERANOPLUS**.

tenuispina. *Myrmica laevinodis* var. *tenuispina* Ruzsky, 1905b: 670.

[First available use of *Myrmica rubra* r. *laevinodis* var. *tenuispina* Forel, 1904b: 374 (w.) UZBEKISTAN, TAJIKISTAN; unavailable (infrasubspecific) name.]

Arnol'di, 1976a: 552 (m.); Radchenko & Elmes, 2002: 35 (q.).

As unavailable (infrasubspecific) name: Emery, 1908a: 170; Emery, 1921f: 39; Kuznetsov-Ugamsky, 1927e: 193.

Subspecies of laevinodis: Weber, 1947: 455 (redescription).

Status as species: Arnol'di, 1976a: 551; Tarbinsky, 1976: 25 (redescription); Drussky, Soyunov & Zabelin, 1990: 184; Radchenko, 1994c: 142 (in key); Radchenko, 1994e: 81; Bolton, 1995b: 284; Radchenko & Elmes, 2001a: 258; Radchenko & Elmes, 2002: 35; Schultz, R. *et al.* 2006: 203; Radchenko & Elmes, 2010: 303; Bharti, Sasi & Radchenko, 2016: 970; Seifert, Schultz, *et al.* 2018: 96.

terminalis Shuckard, 1838; see under **CREMATOGASTER**.

tertiaria* Heer, 1849; see under *PARAPHAENOGASTER**.

testaceopilosa Lucas, 1849; see under **APHAENOGASTER**.

testaceus. *Myrmica balcanica* var. *testaceus* Sadil, 1953c: 207. *Nomen nudum*.

texana Buckley, 1860; see under **ATTA**.

thaoensis, misspelling, see under *tahoensis*.

thoracica Smith, 1859; see under **CARDIOCONDYLA**.

tianshanica. *Myrmica tianshanica* Arnol'di, 1976a: 550, fig. 5 (w.m.) KYRGYZSTAN.

Status as species: Bolton, 1995b: 284 (error).

Junior synonym of *juglandeti*: Radchenko, 1994f: 74; Radchenko & Elmes, 2010: 158.

tibetana. *Myrmica tibetana* Mayr, 1889: 279 (w.) CHINA (Tibet).

[Misspelled as *thibetana* by Forel, 1903a: 697, Forel, 1906b: 87.]

Ruzsky, 1915a: 440 (m.); Collingwood, 1961a: 56 (q.).

Status as species: Dalla Torre, 1893: 118; Forel, 1903a: 697; Forel, 1906b: 87; Emery, 1908a: 181; Ruzsky, 1915a: 440; Emery, 1921f: 42; Menozzi, 1939a: 293 (in key); Weber, 1947: 465; Chapman & Capco, 1951: 130; Collingwood, 1961a: 56; Bolton, 1995b: 284; Radchenko & Elmes, 2001a: 257; Radchenko & Elmes, 2010: 304; Guénard & Dunn, 2012: 48; Chen, Zhou & Huang, 2016: 119 (in key); Seifert, Schultz, *et al.* 2018: 94.

tigrensis Guérin-Méneville, 1849; see under **MYRMICARIA**.

tipuna. *Myrmica kurokii* st. *tipuna* Santschi, 1937h: 367 (w.) TAIWAN.

Subspecies of *kurokii*: Weber, 1947: 470; Bolton, 1995b: 284.

Junior synonym of *arisana*: Elmes & Radchenko, 1998: 222; Terayama, 2009: 160; Radchenko & Elmes, 2010: 92.

titanica. *Myrmica titanica* Radchenko & Elmes, 2001b: 222, figs. 1-7 (w.) VIETNAM.

Status as species: Radchenko, Elmes & Bui, 2006: 39; Radchenko & Elmes, 2010: 306.

tobiasi. *Myrmica tobiasi* Radchenko & Elmes, 2004: 224, figs. 1-17 (w.q.m.) KAZAKHSTAN.

Status as species: Schultz, R. *et al.* 2006: 206; Radchenko & Elmes, 2010: 307.

Junior synonym of *salina*: Seifert, 2011: 183.

trachylissa Smith, F. 1858; see under **PRISTOMYRMEX**.

transsibirica. *Myrmica transsibirica* Radchenko, 1994h: 212, figs. 23-32 (w.q.m.) RUSSIA.

[*Myrmica transsiberica* Radchenko, 1994b: 109 (in key); Radchenko, 1994c: 139 (in key); Radchenko, 1994g: 90: published without designation of type-material and hence unavailable.]

Status as species: Radchenko, 1994b: 109 (in key); Radchenko, 1994c: 139 (in key); Radchenko, 1994g: 90; Bolton, 1995b: 284; Radchenko & Elmes, 2010: 308; Yamane & Aibek, 2012: 182; Chen, Zhou & Huang, 2016: 112 (in key).

Senior synonym of taediosa: Radchenko & Elmes, 2010: 308; Yamane & Aibek, 2012: 182.

transversa Smith, F. 1858; see under **POGONOMYRMEX**.

transversinodis Enzmann, 1946; see under **TETRAMORIUM**.

trinodis Losana, 1834; see under **PHEIDOLE**.

triplarina Weddell, 1850; see under **PSEUDOMYRMEX**.

tristis Smith, F. 1858; see under **PHEIDOLE**.

trullicornis. *Myrmica sabuleti* subsp. *trullicornis* Buren, 1944a: 281 (w.q.) U.S.A. (Iowa).

Junior synonym of *americana*: Weber, 1948a: 288; Smith, M.R. 1951a: 790.

Subspecies of hamulata: Creighton, 1950a: 99; Smith, D.R. 1979: 1349; Bolton, 1995b: 284.

Status as species: Shattuck & Cover, 2016: 17.

tschekanovskii. *Myrmica tschekanovskii* Radchenko, 1994h: 215, figs. 33-39 (w.m.) RUSSIA.

[*Myrmica tschekanovskii* Radchenko, 1994b: 105 (in key); Radchenko, 1994c: 130 (in key); Radchenko, 1994f: 77: published without designation of type-material and hence unavailable.]

Status as species: Radchenko, 1994b: 105 (in key); Radchenko, 1994c: 130 (in key); Radchenko, 1994f: 77; Bolton, 1995b: 284; Radchenko & Elmes, 2010: 310.

tshuliensis. *Myrmica sancta* subsp. *tshuliensis* Arnol'di, 1976a: 553 (w.q.m.) TURKMENISTAN.

Junior synonym of *bessarabicus*: Dlussky, Soyunov & Zabelin, 1990: 182; Radchenko, 1994e: 77; Bolton, 1995b: 284.

Junior synonym of *specioides*: Seifert, 2002a: 95 (by implication); Radchenko & Elmes, 2004: 229 (by implication); Radchenko & Elmes, 2010: 284; Radchenko, 2016: 136.

tulinae. *Myrmica tulinae* Elmes, Radchenko & Aktaç, 2002: 158, figs. 1-18 (w.q.m.) TURKEY.

Status as species: Casevitz-Weulersse & Galkowski, 2009: 491; Radchenko & Elmes, 2010: 311; Borowiec, L. & Salata, 2012: 524; Czechowski, *et al.* 2012: 87; Czakes, *et al.* 2012: 46 (in key); Guénard & Dunn, 2012: 48; Kiran & Karaman, 2012: 23; Borowiec, L. 2014: 136.

turcica. *Myrmica scabrinodis* var. *turcica* Santschi, 1931b: 343 (w.q.) TURKEY, MOLDOVA.

Radchenko & Elmes, 2010: 314 (m.).

Subspecies of *scabrinodis*: Weber, 1950b: 210.

Status as species: Seifert, 1988b: 18 (redescription); Arakelian, 1994: 27; Bolton, 1995b: 284; Radchenko & Elmes, 2004: 230; Markó, Sipos, *et al.* 2006: 70; Gratiashvili & Barjadze, 2008: 141; Radchenko & Elmes, 2010: 312.

Junior synonym of *specioides*: Seifert, 2011: 183; Kiran & Karaman, 2012: 23.

typhlops. *Myrmica typhlops* Lund, 1831a: 128 (w.) BRAZIL. *Nomen nudum*.

[Also as new in Lund, 1831b: 102. *Nomen nudum*.]

Myrmica typhlops Lund: Forel, 1895b: 125. *Nomen nudum*.

umbripennis Smith, F. 1863; see under **PRISTOMYRMEX**.

unifasciata Bostock, 1838; see comments in Bolton, 1987: 356.

urbanii. *Myrmica urbanii* Radchenko & Elmes, 1998: 16, fig. 4 (1-5) (w.) INDIA (Meghalaya).

Status as species: Wang, W., Zhou & Huang, 2005: 836; Radchenko & Elmes, 2001a: 242; Radchenko & Elmes, 2010: 314; Guénard & Dunn, 2012: 48; Bharti, Guénard, *et al.* 2016: 41; Bharti, Sasi & Radchenko, 2016: 970; Chen, Zhou & Huang, 2016: 118 (in key).

ussuriensis. *Myrmica scabrinodis* subsp. *ussuriensis* Kuznetsov-Ugamsky, 1928b: 36 (w.) RUSSIA.

Subspecies of *scabrinodis*: Kuznetsov-Ugamsky, 1929a: 33; Weber, 1950b: 211; Radchenko, 1994g: 91; Bolton, 1995b: 284.

Unidentifiable taxon, *incertae sedis* in *Myrmica*: Radchenko & Elmes, 2010: 662.

vagans Fabricius, *sensu* Zetterstedt, 1838, and *sensu* Curtis, 1854; see under **FORMICA**.

vandeli. *Myrmica vandeli* Bondroit, 1920a: 148, figs. 1, 2 (q.m.) FRANCE.

[Also described as new by Bondroit, 1920b: 301.]

Kutter, 1977c: 71 (w.).

Subspecies of scabrinodis: Weber, 1950b: 211.

Status as species: Finzi, 1926: 115; Santschi, 1931b: 347; Bernard, 1967: 122 (redescription); Kutter, 1968a: 59; Kutter, 1977c: 71; Elmes & Thomas, 1985: 97; Agosti & Collingwood, 1987a: 53; Agosti & Collingwood, 1987b: 268 (in key); Seifert, 1988b: 33 (redescription); Bolton, 1995b: 284; Espadaler, 1997b: 31; Radchenko & Elmes, 2003a: 230; Bolton, 2005: 14 (in key); Karaman, G.S. & Karaman, 2005: 54; Markó, Sipos, *et al.* 2006: 70; Petrov, 2006: 88 (in key); Bračko, 2007: 18; Seifert, 2007: 197; Werner & Wiezik, 2007: 140; Casevitz-Weulersse & Galkowski, 2009: 491; Radchenko, 2009: 70; Lapeva-Gjonova, *et al.* 2010: 12; Boer, 2010: 60; Radchenko & Elmes, 2010: 315; Csösz, *et al.* 2011: 56; Karaman, M.G. 2011b: 48; Czechowski, *et al.* 2012: 93; Czakes, *et al.* 2012: 43 (in key); Guénard & Dunn, 2012: 48; Borowiec, L. 2014: 136; Lebas, *et al.* 2016: 320; Radchenko, 2016: 151; Chen, Zhou & Huang, 2016: 116 (in key); Seifert, 2018: 158.

varisculpta. *Myrmica varisculpta* Radchenko & Rigato, in Radchenko & Elmes, 2009a: 76, figs. 31-35 (w.) INDIA (Jammu & Kashmir).

Status as species: Radchenko & Elmes, 2010: 317; Bharti & Sharma, 2011a: 57 (in key); Bharti, Guénard, *et al.* 2016: 41; Bharti, Sasi & Radchenko, 2016: 970; Chen, Zhou & Huang, 2016: 122 (in key).

vastator Smith, F. 1857; see under **MONOMORIUM**.

venusta Smith, F. 1858; see under **MONOMORIUM**.

**venusta*. **Myrmica venusta* Heer, 1867: 31, pl. 2, fig. 12 (q.) CROATIA (Miocene).

[Unresolved junior primary homonym of *Myrmica venusta* Smith, F. 1858b: 126 (Bolton, 1995b: 284).]

Status as species: Mayr, 1867b: 60; Scudder, 1891: 720, 731; Dalla Torre, 1893: 118; Bolton, 1995b: 284.

[Note: Mayr, 1867b: 60, and Handlirsch, 1907: 873, suggest a possible combination in *Solenopsis*.]

Unidentifiable taxon, *incertae sedis* in *Myrmica*: Radchenko, Dlussky & Elmes, 2007: 1494; Dlussky & Putyatina, 2014: 277.

vesmaeli, misspelling, see under *wesmaeli*.

vexator Smith, F. 1861; see under **TRICHOMYRMEX**.

vicaria. *Myrmica sulcinodis* subsp. *vicaria* Kuznetsov-Ugamsky, 1928b: 33 (w.) RUSSIA.

Subspecies of *sulcinodis*: Kuznetsov-Ugamsky, 1929a: 32; Weber, 1947: 441; Weber, 1948a: 270; Radchenko, 1994g: 91; Bolton, 1995b: 284.

Junior synonym of *sulcinodis*: Radchenko & Elmes, 2010: 294; Radchenko, 2016: 124.

villosa. *Myrmica villosa* Radchenko & Elmes, 1999a: 31, fig. 1 (6-12) (w.q.) BHUTAN.

Status as species: Radchenko & Elmes, 2001a: 257; Radchenko & Elmes, 2009a: 69; Radchenko & Elmes, 2010: 318; Bharti, Sasi & Radchenko, 2016: 970; Chen, Zhou & Huang, 2016: 120 (in key).

virulens Smith, F. 1858; see under **SOLENOPSIS**.

vittata. *Myrmica vittata* Radchenko & Elmes, 1999a: 33, fig. 2 (1-4) (w.) PAKISTAN.

Status as species: Radchenko & Elmes, 2001a: 260; Radchenko & Elmes, 2010: 319; Bharti, Sasi & Radchenko, 2016: 970.

wangi. *Myrmica wangi* Chen, Zhou & Huang, 2016: 107, figs. 26-28 (w.) CHINA (Shaanxi).

wardi. *Myrmica wardi* Radchenko & Elmes, 1999a: 38, fig. 4 (1-10) (w.q.m.) INDIA (Jammu & Kashmir, Himachal Pradesh), PAKISTAN.

Status as species: Radchenko & Elmes, 2001a: 252; Radchenko & Elmes, 2010: 320; Bharti, Guénard, *et al.* 2016: 41; Bharti, Sasi & Radchenko, 2016: 970.

weberi. *Myrmica weberi* Elmes & Radchenko, 2009: 112, fig. 1 (w.q.) NEPAL.

Status as species: Radchenko & Elmes, 2010: 321; Bharti, Guénard, *et al.* 2016: 41; Bharti, Sasi & Radchenko, 2016: 971.

wei. *Myrmica wei* Radchenko & Zhou, in Radchenko, Zhou, *et al.* 2008: 779, figs. 39-43 (w.) CHINA (Shaanxi).

Status as species: Radchenko & Elmes, 2009a: 72; Radchenko & Elmes, 2010: 322; Guénard & Dunn, 2012: 49; Chen, Zhou & Huang, 2016: 115, 121 (in key).

wesmaeli. *Myrmica wesmaeli* Bondroit, 1918: 106, fig. 54 (w.) FRANCE.

[Misspelled as *vesmaeli* by Novák & Sadil, 1941: 78; misspelled as *wasmaeli* by Bernard, 1967: 122.]

Radchenko & Elmes, 2010: 324 (m.).

Subspecies of sulcinodis: Emery, 1921f: 42; Santschi, 1931b: 340; Ceballos, 1956: 297.

Subspecies of scabrinodis: Weber, 1950b: 211.

Junior synonym of *lobicornis*: Bernard, 1967: 122; Collingwood, 1978: 67.

Status as species: Bondroit, 1920a: 151; Finzi, 1926: 97; Stärcke, 1926: 93 (in key); Arnol'di, 1934: 158; Novák & Sadil, 1941: 78 (in key); Seifert, 1988b: 39 (redescription); Bolton, 1995b: 284; Espadaler, 1997b: 31; Seifert, 2005: 4; Werner & Wiezik, 2007: 147;

Casevitz-Weulersse & Galkowski, 2009: 491; Radchenko & Elmes, 2010: 323; Guénard & Dunn, 2012: 49; Borowiec, L. 2014: 136; Lebas, *et al.* 2016: 310.

wheeleri. *Myrmica wheeleri* Weber, 1939b: 150 (w.q.m.) U.S.A. (Arizona).

Status as species: Creighton, 1950a: 105; Weber, 1950b: 212 (redescription); Smith, M.R. 1951a: 791; Hunt & Snelling, 1975: 21; Smith, D.R. 1979: 1351; Bolton, 1995b: 284; Mackay & Mackay, 2002: 167.

wheelerorum. *Myrmica wheelerorum* Francoeur, 2007: 166, figs. 32 – 35 (w.q.) U.S.A. (Nevada, Colorado).

whymperi. *Myrmica brevinodis* var. *whymperi* Forel, 1913l: 215.

[First available use of *Myrmica rubra* r. *brevinodis* var. *whymperi* Forel, 1904a: 154 (w.) CANADA (Alberta, British Columbia); unavailable (infrasubspecific) name.]

As unavailable (infrasubspecific) name: Wheeler, W.M. 1910g: 566.

Synonym of *sulcinodoides*: Wheeler, W.M. 1917a: 502; Wheeler, W.M. 1917e: 16; Emery, 1921f: 37; Weber, 1950b: 195; Smith, M.R. 1951a: 789.

[Note: Wheeler, Emery, Weber, and Smith, M.R., give *sulcinodoides* as senior synonym, but *whymperi* has priority (Bolton, 1995b: 284).]

Subspecies of *brevinodis*: Essig, 1926: 862.

Junior synonym of *brevinodis*: Creighton, 1950a: 96.

Status as species: Bolton, 1995b: 284; Mackay & Mackay, 2002: 168.

Junior synonym of *incompleta*: Shattuck & Cover, 2016: 18.

williamsi. *Myrmica williamsi* Radchenko & Elmes, 1999a: 34, fig. 2 (5-8) (w.) INDIA (Jammu & Kashmir).

Status as species: Radchenko & Elmes, 2001a: 260; Radchenko & Elmes, 2010: 325; Bharti, Guénard, *et al.* 2016: 41; Bharti, Sasi & Radchenko, 2016: 971.

winterae. *Sifolinia winterae* Kutter, 1973c: 263, figs. 1, 2, 8, 9, 13-15 (q.m.) SWITZERLAND.

Combination in *Myrmica*: Bolton, 1988a: 4.

Status as species: Mei, 1987: 466 (in table); Bolton, 1988a: 4 (in table); Bolton, 1995b: 284.

Junior synonym of *karavajevi*: Seifert, 1994: 15; Radchenko & Elmes, 2003a: 231; Radchenko & Elmes, 2010: 163; Radchenko, 2016: 159.

wittmeri. *Myrmica wittmeri* Radchenko & Elmes, 1999a: 38, fig. 3 (11-14) (w.) INDIA (Himachal Pradesh), PAKISTAN.

Status as species: Radchenko & Elmes, 2001a: 255; Radchenko & Elmes, 2010: 326; Bharti, Guénard, *et al.* 2016: 41; Bharti, Sasi & Radchenko, 2016: 971.

xavieri. *Myrmica xavieri* Radchenko, Elmes & Savolainen, 2008: 51, figs. 1-3 (w.q.m.) SPAIN.

Status as species: Radchenko & Elmes, 2010: 327; Borowiec, L. 2014: 136; Lebas, *et al.* 2016: 310.

yamanei. *Myrmica yamanei* Radchenko & Elmes, 2001b: 223, figs. 8-12 (w.) VIETNAM.

Status as species: Radchenko, Elmes & Bui, 2006: 39; Radchenko & Elmes, 2010: 328.

yani. *Myrmica yani* Chen, Zhou & Huang, 2016: 109, figs. 29-34 (w.q.) CHINA (Guizhou).

yessensis, misspelling, see under *jessensis*.

yezomonticola. *Myrmica yezomonticola* Terayama, 2013: 9, figs. 20, 21 (w.) JAPAN.

yoshiokai. *Myrmica rubra* subsp. *yoshiokai* Weber, 1947: 451 (w.) JAPAN.

Collingwood, 1981: 26 (m.).

Subspecies of *rubra*: Onoyama, 1980: 197.

Status as species: Collingwood, 1981: 26; Bolton, 1995b: 284.

Junior synonym of *ruginodis*: Radchenko & Elmes, 2010: 236; Radchenko, 2016: 120.

yunnanensis. *Myrmica yunnanensis* Radchenko & Elmes, 2009a: 82, figs. 56-60 (w.) CHINA (Yunnan).

Status as species: Radchenko & Elmes, 2010: 329; Guénard & Dunn, 2012: 49; Chen, Zhou & Huang, 2016: 115, 121 (in key).

zhengi. *Myrmica zhengi* Ma & Xu, 2011: 795, figs. 1-5 (w.m.) CHINA (Shaanxi).

Junior synonym of *luteola*: Chen, Zhou & Huang, 2016: 94.

zojae. *Myrmica zojae* Radchenko, 1994h: 210, figs. 13-22 (w.q.m.) RUSSIA.

[*Myrmica zojae* Radchenko, 1994b: 107 (in key); Radchenko, 1994c: 141 (in key); Radchenko, 1994g: 90: published without designation of type-material and hence unavailable.]

[Misspelled as *zoiae* by Radchenko, 1994g: 90.]

Status as species: Radchenko, 1994b: 107 (in key); Radchenko, 1994c: 141 (in key); Radchenko, 1994g: 90; Bolton, 1995b: 284; Radchenko & Elmes, 2010: 330.