\****FALLOMYRMA***

\****transversa****. \*Fallomyrma transversa* Dlussky & Radchenko, 2006a: 156, figs. 1-6 UKRAINE (Rovno Amber).

***FEROPONERA***

***ferox****. Feroponera ferox* Bolton & Fisher, 2008c: 28, figs. 27, 28 (w.) CAMEROUN.

*FLORENCEA*: see under ***POLYRHACHIS***.

\****FONSECAHYMEN***

\****stigmata****. \*Fonsecahymen stigmata* Martins-Neto & Mendes, 2002: 29, pl. 1C, fig. 1E (wing) BRAZIL (Oligocene)

*FORELIFIDIS*: see under ***OXYEPOECUS***.

***FORELIUS***

***albiventris****. Forelius chalybaeus* r. *albiventris* Forel, 1912h: 45 (w.) ARGENTINA. Cuezzo, 2000: 216 (q.m.). Raised to species: Kusnezov, 1954b: 37; Kusnezov, 1957b: 16 (in key). See also: Gallardo, 1916a: 89; Cuezzo, 2000: 215.

*analis. Tapinoma anale* André, 1893b: 148 (w.) MEXICO. Combination in *Iridomyrmex*: Forel, 1908b: 62; in *Forelius*: Wheeler, G.C. & Wheeler, J. 1986g: 13. Subspecies of *pruinosus*: Emery, 1895c: 333; Wheeler, W.M. 1913b: 497; Creighton, 1950a: 343; Shattuck, 1994: 96. Junior synonym of *pruinosus*: Wheeler, G.C. & Wheeler, J. 1986g: 13; Bolton, 1995b: 190. Status as species: Forel, 1908b: 62; Emery, 1913a: 26; Cuezzo, 2000: 222. Junior synonym of *pruinosus*: Ward, 2005: 9.

***andinus****. Forelius andinus* Kusnezov, 1957b: 15 (w.q.) ARGENTINA. Cuezzo, 2000: 226 (m.).

*andrei. Forelius maccooki* r. *andrei* Forel, 1912h: 44 (w.) U.S.A. Subspecies of *foetidus*: Smith, M.R. 1951a: 836. Junior synonym of *foetidus*: Wheeler, W.M. 1901b: 520; of *mccooki*: Smith, D.R. 1979: 1419.

***bahianus****. Forelius bahianus* Cuezzo, 2000: 227, figs. 12, 35 (w.q.) BRAZIL.

*basalis. Forelius chalybaeus* st. *grandis* var. *basalis* Santschi, 1922b: 375 (w.q.m.) ARGENTINA. **Unavailable name** (Shattuck, 1994: 97); material referred to *grandis* by Cuezzo, 2000: 242.

***brasiliensis****. Iridomyrmex (Forelius) maccooki* var. *brasiliensis* Forel, 1908c: 396 (w.) BRAZIL. Wheeler, G.C. & Wheeler, J. 1966: 730 (l.). Cuezzo, 2000: 231 (q.m.). Combination in *Forelius*: Emery, 1913a: 36. Subspecies of *mccooki*: Forel, 1912h: 43. Raised to species: Santschi, 1922b: 373; Kusnezov, 1957b: 17. Senior synonym of *fiebrigi, pilipes* and material of the unavailable name *carmelitana* referred here: Cuezzo, 2000: 229.

***breviscapus****. Forelius maccooki* r. *breviscapus* Forel, 1914d: 286 (w.) ARGENTINA. [First available use of *Forelius maccooki* r. *fiebrigi* var. *breviscapa* Forel, 1913l: 241; unavailable name.] Raised to species: Santschi, 1922b: 374; Kusnezov, 1957b: 16. Senior synonym of *obscurata, instabilis*: Cuezzo, 2000: 235.

*carmelitana. Forelius maccooki* subsp. *brasiliensis* var. *carmelitana* Gallardo, 1916a: 79, fig. 35 (w.) ARGENTINA. **Unavailable name** (Shattuck, 1994: 97); material referred to *brasiliensis* by Cuezzo, 2000: 229.

***chalybaeus****. Forelius chalybaeus* Emery, 1906c: 176 (w.q.m.) ARGENTINA. Senior synonym of *minor, paucistricta, personata*: Cuezzo, 2000: 239. See also: Gallardo, 1916a: 84.

***damiani.*** *Forelius damiani* Guerrero & Fernández, 2008: 53, figs. 1-3 (w.) COLOMBIA.

*debenedettii. Forelius chalybaeus* st. *debenedettii* Santschi, 1919f: 53 (w.) ARGENTINA. Subspecies of *grandis*: Kempf, 1972a: 109. Junior synonym of *grandis*: Cuezzo, 2000: 242.

*eidmanni* Goetsch, 1933; see under ***TAPINOMA***.

*fiebrigi. Forelius maccooki* r. *fiebrigi* Forel, 1912h: 44 (w.) PARAGUAY. Raised to species: Kempf, 1972a: 109. Junior synonym of *brasiliensis*: Cuezzo, 2000: 229.

*foetida. Formica foetida* Buckley, 1866: 167 (w.q.) U.S.A. Crozier, 1970: 113 (k.); Wheeler, G.C. & Wheeler, J. 1974b: 401 (l.). [Junior primary homonym of *Formica foetida* Linnaeus, 1758: 582 (now in *Pachycondyla*).] Replacement name: *mccooki* McCook, 1880: 187.

*golbachi* Kusnezov, 1953; see under ***AMYRMEX***.

***grandis****. Forelius chalybaeus* r. *grandis* Forel, 1912h: 46 (w.) ARGENTINA. Forel, 1914d: 285 (q.m.). Raised to species: Kusnezov, 1954b: 37; Kusnezov, 1957b: 18 (in key). [Santschi, 1916e: 393 erroneously refers to this taxon as *major*.] Senior synonym of *debenedettii* and material of the unavailable names *basalis, symbiotica* referred here: Cuezzo, 2000: 242.

*instabilis. Forelius maccooki* st. *instabilis* Santschi, 1920d: 382 (w.q.m.) ARGENTINA. Junior synonym of *obscuratus*: Santschi, 1922b: 374. Revived from synonymy and raised to species: Kusnezov, 1957b: 16 (in key). Junior synonym of *breviscapus*: Cuezzo, 2000: 235.

***keiferi****. Forelius foetidus* subsp. *keiferi* Wheeler, W.M. 1934f: 141 (w.q.m.) MEXICO. Subspecies of *mccooki*: Shattuck, 1994: 94. Raised to species: Cuezzo, 2000: 246.

***lilloi****. Forelius lilloi* Cuezzo, 2000: 248, figs. 18, 34 (w.) ARGENTINA.

***macrops****. Forelius macrops* Kusnezov, 1957b: 14 (w.) ARGENTINA. See also: Cuezzo, 2000: 253.

*major* Santschi, 1916; see under *grandis*, above.

***maranhaoensis****. Forelius maranhaoensis* Cuezzo, 2000: 255, figs. 11, 27, 38 (w.) BRAZIL.

***mccooki****. Iridomyrmex mccooki* McCook, 1880: 187 (w.) U.S.A. Junior synonym of *foetida* Buckley: Wheeler, W.M. 1901b: 520 and hence first available replacement name for *Formica foetida* Buckley, 1866: 167. [Junior primary homonym of *Formica foetida* Linnaeus, 1758: 582.] [*Iridomyrmex maccooki* Forel, 1878: 382. *Nomen nudum*.] Mayr, 1886d: 432 (q.m.); Forel, 1886b: xxxix (w.). Combination in *Forelius*: Emery, 1888d: 389. Senior synonym of *andrei*: Smith, D.R. 1979: 1419. See also: Cuezzo, 2000: 249; Ward, 2005: 9.

*minor. Forelius chalybaeus* var. *minor* Forel, 1913l: 241 (w.) ARGENTINA. Raised to species: Kusnezov, 1957b: 16 (in key). Junior synonym of *chalybaeus*: Cuezzo, 2000: 239.

*modesta. Forelius nigriventris* var. *modesta* Santschi, 1922b: 374 (w.) ARGENTINA. Junior synonym of *nigriventris*: Cuezzo, 2000: 257.

***nigriventris****. Forelius nigriventris* Forel, 1912h: 44 (w.) ARGENTINA. Brèthes, 1914b: 233 (q.); Cuezzo, 2000: 259 (m.). Senior synonym of *modesta, transiens*: Cuezzo, 2000: 257. See also: Gallardo, 1916a: 81.

*obscurata. Forelius breviscapus* var. *obscurata* Santschi, 1922b: 374 (w.q.m.) ARGENTINA. [First available use of *Forelius maccooki* r. *breviscapus* var. *obscurata* Forel, 1914d: 286; unavailable name.] Junior synonym of *breviscapus*: Cuezzo, 2000: 235.

*paucistricta. Forelius chalybaeus* var. *paucistricta* Santschi, 1916e: 391 (w.) ARGENTINA. [Misspelled as *paucistriatus* by Kempf, 1972a: 109.] Junior synonym of *chalybaeus*: Cuezzo, 2000: 239.

*personata. Forelius chalybaeus* var. *personata* Santschi, 1922b: 375 (w.) ARGENTINA. Junior synonym of *chalybaeus*: Cuezzo, 2000: 239.

*pilipes. Forelius rufus* var. *pilipes* Santschi, 1920d: 382 (w.) ARGENTINA. [*Forelius rufus* var. *pilipes* Santschi, 1919f: 53. *Nomen nudum*.] Subspecies of *brasiliensis*: Santschi, 1922b: 374. Junior synonym of *brasiliensis*: Cuezzo, 2000: 229.

***pruinosus****. Tapinoma pruinosum* Roger, 1863a: 165 (w.) CUBA. Wheeler, G.C. & Wheeler, J. 1951: 185 (l.). Combination in *Iridomyrmex*: Wheeler, W.M. 1913b: 497; in *Forelius*: Wheeler, G.C. & Wheeler, J. 1986g: 13; Shattuck, 1992c: 95. Senior synonym of *testaceus*: Cuezzo, 2000: 261; of *analis*: Ward, 2005: 9. See also: Creighton, 1950a: 342; Petralia & Vinson, 1980: 386; Guerrero & Fernández, 2008: 57.

***pusillus****. Forelius breviscapus* var. *pusillus* Santschi, 1922b: 374 (w.) ARGENTINA. Raised to species and senior synonym of *tucumanus*: Cuezzo, 2000: 263.

***rubriceps****. Forelius chalybaeus* var. *rubriceps* Gallardo, 1916a: 85 (w.q.m.) ARGENTINA. [First available use of *Forelius chalybaeus* r. *grandis* var. *rubriceps* Forel, 1914d: 286; unavailable name.] Raised to species: Kusnezov, 1957b: 17 (in key). See also:Cuezzo, 2000: 265.

***rufus****. Forelius rufus* Gallardo, 1916a: 77 (w.) ARGENTINA. Santschi, 1922b: 373 (q.m.). See also: Cuezzo, 2000: 268.

*symbiotica. Forelius chalybaeus* st. *grandis* var. *symbiotica* Santschi, 1916e: 391 (w.q.) ARGENTINA. **Unavailable name** (Shattuck, 1994: 97); material referred to *grandis* by Cuezzo, 2000: 242.

*testaceus. Iridomyrmex pruinosus* var. *testaceus* Cole, 1936b: 121 (w.q.) U.S.A. Junior synonym of *analis*: Creighton, 1950a: 343; of *pruinosus*: Cuezzo, 2000: 261.

*transiens. Forelius nigriventris* var. *transiens* Santschi, 1922b: 374 (w.) ARGENTINA. Junior synonym of *nigriventris*: Cuezzo, 2000: 257.

*tucumanus. Neoforelius tucumanus* Kusnezov, 1953b: 330, figs. 1-12 (w.q.m.) ARGENTINA. Combination in *Forelius*: Shattuck, 1992c: 95. Junior synonym of *pusillus*: Cuezzo, 2000: 263.

*FORELOMYRMEX*: see under ***POGONOMYRMEX***.

***FORELOPHILUS***

***overbecki****. Forelophilus overbecki* Kutter, 1931b: 193, figs. (w.q.) INDONESIA (Java). See also: Zettel & Zimmermann, 2007: 26.

***philippinensis****. Forelophilus philippinensis* Zettel & Zimmermann, 2007: 24, figs. 3, 10-15 (w.) PHILIPPINES (Luzon).

***stefanschoedli****. Forelophilus stefanschoedli* Zettel & Zimmermann, 2007: 22, figs. 1, 2, 4-9 (s.w.) PHILIPPINES (Mindanao).

***FORMICA***

***abdominalis****. Formica abdominalis* Latreille, 1802c: 175, pl. 3, fig. 13 (q.) "Grandes Indes". **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 190.

*abdominalis* Fabricius, 1804; see under ***CAMPONOTUS***.

*aberrans* Mayr, 1877; see under ***ALLOFORMICA***.

*abrupta* Smith, F. 1858; see under ***DOLICHODERUS***.

***accreta****. Formica accreta* Francoeur, 1973: 182, figs. 308-323 (w.q.m.) CANADA. Junior synonym of *fusca*: Wheeler, G.C. & Wheeler, J. 1986g: 16. Revived from synonymy: Bolton, 1995b: 190.

*acervorum* Fabricius, 1793; see under ***LEPTOTHORAX***.

*aculeata. Formica rubra aculeata* Retzius, 1783: 76 (w.) no locality given. **Unavailable name** (published as junior synonym; Bolton, 1995b: 190).

*aculeata. Formica fusca aculeata* Retzius, 1783: 76 (w.) no locality given. **Unavailable name** (published as junior synonym; Bolton, 1995b: 190).

*aculeata* Olivier, 1792; see under ***PARAPONERA***.

\****acuminata****. \*Formica acuminata* Heer, 1849: 142, pl. 11, figs. 13, 14 (m.) CROATIA (Miocene). [Also described as new by Heer, 1850: 142.]

*acuta* Fabricius, 1804; see under ***CREMATOGASTER***.

***adamsi****. Formica adamsi* Wheeler, W.M. 1909e: 84 (w.) U.S.A. [*Formica adamsi* Wheeler, W.M. 1908g: 408. *Nomen nudum*.] Subspecies of *whymperi*: Wheeler, W.M. 1917a: 544; Creighton, 1950a: 509. [First available name is *adamsi* as this has priority over *whymperi* (see there): Bolton, 1995b: 191.] Current subspecies: nominal plus *alpina, whymperi*.

***adelungi****. Formica adelungi* Forel, 1904b: 385 (m.) MONGOLIA. See also: Wheeler, W.M. 1913f: 450.

*advena* Smith, F. 1862; see under ***PROLASIUS***.

*aedificator* Schilling, 1839; see under ***MESSOR***.

***aegyptiaca****. Formica aegyptiaca* Fabricius, 1775: 393 (w.) EGYPT. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 191.

\****aemula****. \*Formica aemula* Heer, 1867: 18, pl. 1, fig. 19 (caste?) CROATIA (Miocene).

*aeneovirens* Lowne, 1865; see under ***MELOPHORUS***.

*aenescens* Nylander, 1849; see under ***CATAGLYPHIS***.

***aequalis****. Formica aequalis* Walker, 1871: 9 (q.) SAUDI ARABIA. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 191.

***aerata****. Formica aerata* Francoeur, 1973: 116, figs. 183-189 (w.q.) U.S.A.

*aerea* Roger, 1859; see under ***PROFORMICA***.

*aethiops* Latreille, 1798; see under ***CAMPONOTUS***.

***affinis****. Formica affinis* Leach, 1825: 290 (w.q.) FRANCE. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 191.

*affinis* Le Guillou, 1842; see under ***POLYRHACHIS***.

*affinis* Schenck, 1852; see under ***LASIUS***.

*aggerans. Formica rufa* subsp. *aggerans* Wheeler, W.M. 1912c: 90 (w.) U.S.A. Wheeler, W.M. 1913f: 430 (q.m.). Junior synonym of *obscuripes*: Forel, 1914c: 619; Creighton, 1940a: 1.

*agilis* Smith, F. 1858; see under ***CAMPONOTUS***.

*agra* Smith, F. 1858; see under ***CAMPONOTUS***.

*albicans* Roger, 1859; see under ***CATAGLYPHIS***.

***albipennis****. Formica albipennis* Fabricius, 1793: 354 (m.) ANTILLES. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 191.

*albipes* Smith, F. 1861; see under ***TECHNOMYRMEX***.

*albofasciata* Smith, F. 1862; see under ***CAMPONOTUS***.

*algida. Formica fusca* var. *algida* Wheeler, W.M. 1915f: 205 (w.q.) U.S.A. Combination in *F. (Serviformica*): Emery, 1925b: 248. Subspecies of *neorufibarbis*: Creighton, 1950a: 537. Junior synonym of *neorufibarbis*: Francoeur, 1973: 215.

*aliena* Foerster, 1850; see under ***LASIUS***.

***alpicola****. Formica fusca* var. *alpicola* Gredler, 1858: 10 (w.) AUSTRIA.

***alpina****. Formica adamsi* var. *alpina* Wheeler, W.M. 1909e: 85 (w.) U.S.A. Subspecies of *whymperi*: Wheeler, W.M. 1917a: 544; Creighton, 1950a: 509; Smith, D.R. 1979: 1463. Relationship with *densiventris*: Cole, 1954a: 89. Subspecies of *adamsi*: Bolton, 1995b: 191.

*alpina. Formica rufa* var. *alpina* Santschi, 1911j: 349 (w.) ITALY. [Junior primary homonym of *alpina* Wheeler, above.] Replacement name: *santschii* Wheeler, 1913f: 428. Raised to species: Bondroit, 1918: 59.

\****alsatica****. \*Formica alsatica* Théobald, 1937b: 215, pl. 15, figs. 9-13; pl. 4, fig. 3 (q.) FRANCE (Oligocene).

***altayensis****. Formica altayensis* Xia & Zheng, 1997b: 391 (w.) CHINA. [*Formica altayensis* Xia & Zheng, 1997a: 65. *Nomen nudum*.]

*alticola. Formica munda* var. *alticola* Wheeler, W.M. 1917a: 534 (w.) U.S.A. Combination in *F. (Raptiformica*): Creighton, 1950a: 466. Subspecies of *obtusopilosa*: Creighton, 1950a: 466. Junior synonym of *obtusopilosa*: Wilson & Brown, 1955: 128.

***altipetens****. Formica cinerea* var. *altipetens* Wheeler, W.M. 1913f: 399 (diagnosis in key) (w.) U.S.A. [*Formica cinerea* subsp. *cinerea* var. *altipetens* Wheeler, W.M. 1913f: 523 (w.q.m.); unavailable name.] Wheeler, G.C. & Wheeler, J. 1953c: 160 (l.). Subspecies of *cinerea*: Wheeler, W.M. 1917a: 550; Wheeler, G.C. & Wheeler, E.W. 1944: 259. Raised to species: Creighton, 1950a: 531. See also: Francoeur, 1973: 52.

*americana* Buckley, 1866; see under ***CAMPONOTUS***.

*ammon* Fabricius, 1775; see under ***POLYRHACHIS***.

***amyoti****. Formica amyoti* Le Guillou, 1842: 315 (w.) AUSTRALIA. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 191.

*analis* Latreille, 1802; see under ***PACHYCONDYLA***.

***anatolica****. Formica anatolica* Seifert & Schultz, 2009: 267, fig. 8 (w.) TURKEY.

*anceps* Roger, 1863; see under ***IRIDOMYRMEX***.

*angulata* Smith, F. 1859; see under ***CAMPONOTUS***.

*angustata* Latreille, 1798; see under ***CAMPONOTUS***.

***angusticeps****. Formica rufa* var. *angusticeps* Stärcke, 1947: 146 (w.) NETHERLANDS.

*angusticollis* Jerdon, 1851; see under ***CAMPONOTUS***.

***animosa****. Formica animosa* Forskål, 1775: 85 (w.) EGYPT ?. **Unidentifiable to genus**; *incertae* *sedis* in *Formica*: Bolton, 1995b: 191.

*antiguensis* Fabricius, 1793; see under ***MONOMORIUM***.

\**antiqua. \*Formica (Serviformica) antiqua* Dlussky, 1967b: 82, fig. 1 (w.) BALTIC AMBER (Eocene). Junior synonym of \**flori*: Dlussky, 2002a: 292.

*aphidicola* Walsh, 1863; see under ***LASIUS***.

*apicalis* Latreille, 1802; see under ***PACHYCONDYLA***.

*apicalis. Formica apicalis* Smith, F. 1858b: 49 (q.) "South America"; locality in error. [**Unresolved junior primary homonym** of *apicalis* Latreille, 1802c: 204, above.] Junior synonym of *rufa*: Roger, 1862c: 287.

***approximans****. Formica truncorum* var. *approximans* Wheeler, W.M. 1933c: 65 (w.) CHINA. Raised to species: Wu, 1990: 4.

***aquilonia****. Formica aquilonia* Yarrow, 1955a: 31 (diagnosis in key), figs. 21, 25, 29, 33, 37, 41, 45, 49, 53, 57, 61, 65 (w.q.m.) GREAT BRITAIN. Synonymous with *schmidti* Ruzsky, 1920: 78 [Junior primary homonym of \**schmidtii* Heer, 1849: 138.]: Dlussky, 1967a: 90 and hence first available replacement name. See also: Kutter, 1977c: 271; Kupyanskaya, 1986a: 98; Gösswald, 1989: 19; Kupyanskaya, 1990: 197; Atanassov & Dlussky, 1992: 276.

*arborea* Smith, F. 1858; see under ***CAMPONOTUS***.

\****arcana****. \*Formica arcana* Scudder, 1877b: 266 (wing) CANADA. Carpenter, 1930: 21 treats this taxon as (Formicidae) *arcana* (Scudder).

***archboldi****. Formica pallidefulva* subsp. *archboldi* Smith, M.R. 1944d: 16 (w.) U.S.A. Trager, MacGown & Trager, 2007: 615 (q.m.). Combination in *F. (Neoformica*): Creighton, 1950a: 549. Raised to species: Creighton, 1950a: 549.

*arcuata* Le Guillou, 1842; see under ***POLYRHACHIS***.

*ardens* Smith, F. 1858; see under ***CAMPONOTUS***.

*arenaria* Fabricius, 1787; see under ***MESSOR***.

***arenicola****. Formica arenicola* Buckley, 1866; 160 (w.) U.S.A. **Unidentifiable taxon**; *incertae sedis* in Formicinae: Smith, D.R. 1979: 1467. **Unidentifiable to genus**; *incertae* *sedis* in *Formica*: Bolton, 1995b: 191.

*arenicola. Formica sanguinea* subsp. *arenicola* Kuznetsov-Ugamsky, 1928b: 15 (w.) RUSSIA. [**Unresolved junior primary homonym** of *arenicola* Buckley, above.] Junior synonym of *sanguinea*: Dlussky, 1965a: 16.

*argentata* Fabricius, 1804; see under ***POLYRHACHIS***.

*argentata. Formica fusca* var. *argentata* Wheeler, W.M. 1902e: 952 (footnote) (w.) U.S.A. [Junior primary homonym of *argentata* Fabricius, above.] Replacement name: *argentea* Wheeler, W.M. 1912c: 90.

***argentea****. Formica fusca* var. *argentea* Wheeler, W.M. 1912c: 90. Replacement name for *argentata* Wheeler, W.M., above. [Junior primary homonym of *argentata* Fabricius, 1804: 413.] Wheeler, W.M. 1913f: 502 (q.m.). Combination in *F. (Serviformica*): Emery, 1925b: 248. Subspecies of *fusca*: Buren, 1944a: 301. Junior synonym of *fusca*: Creighton, 1950a: 532. Revived from synonymy, raised to species and senior synonym of *blanda*: Francoeur, 1973: 141.

*armata* Le Guillou, 1842; see under ***POLYRHACHIS***.

*armenica. Formica cinerea* var. *armenica* Ruzsky, 1905b: 406 (w.q.) ARMENIA. Combination in *F. (Serviformica*): Emery, 1925b: 246. Subspecies of *cinerea*: Dlussky, 1967a: 66; Arakelian, 1994: 92. Junior synonym of *cinerea*: Seifert, 2002b: 251.

*armigera* Latreille, 1802; see under ***DACETON***.

*arrogans* Smith, F. 1858; see under ***CAMPONOTUS***.

***aserva****. Formica sanguinea* r. *aserva* Forel, 1901g: 395 (w.q.) CANADA. Wheeler, W.M. 1913f: 405 (m.). Combination in *F. (Raptiformica*): Emery, 1925b: 260. Synonym of *subnuda*: Creighton, 1950a: 469; Wilson & Brown, 1955: 118; Buren, 1968a: 33. [All these authors give *subnuda* as the senior name but the date of availability of *subnuda* makes it clear that *aserva* has seniority: Bolton, 1995b: 191; see also under *subnuda*.]

***aseta****. Formica aseta* Chang & He, 2002a: 55, figs. 20, 21, 62 (w.) CHINA.

*assimilis* Jerdon, 1851; see under ***NYLANDERIA***.

\****atavina****. \*Formica atavina* Heer, 1849: 143, pl. 11, fig. 10 (m.) CROATIA (Miocene). [Also described as new by Heer, 1850: 143.]

***aterrima****. Formica aterrima* Cresson, 1865: 426 (m.) U.S.A. See also: Mayr, 1886d: 429 (footnote); Brown, 1947: 8.

*atomus* Latreille, 1798; see under ***TAPINOMA***.

*atra* Zetterstedt, 1838; see under ***CAMPONOTUS***.

***atra****. Formica atra* Schilling, 1839: 54 (w.) POLAND. [**Unresolved junior primary homonym** of *atra* Zetterstedt, 1838: 450, above (Bolton, 1995b: 191).] **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 191.

*atra* Buckley, 1866; see under ***CAMPONOTUS***.

*atrata* Linnaeus, 1758; see under ***CEPHALOTES***.

*atriceps* Smith, F. 1858; see under ***CAMPONOTUS***.

*atricolor* Nylander, 1849; see under ***CAMPONOTUS***.

*atriventris* Smith, F. 1858; see under ***LASIOPHANES***.

*attelaboides* Fabricius, 1775; see under ***DOLICHODERUS***.

*attenuata. Formica attenuata* Schilling, 1830: 55. *Nomen nudum*.

*aurocincta* Smith, F. 1858; see under ***CAMPONOTUS***.

*aurulenta* Latreille, 1802; see under ***CAMPONOTUS***.

*australis* Fabricius, 1775; see under ***DIACAMMA***.

*austriaca* Mayr, 1853; see under ***LIOMETOPUM***.

\****auxillacensis****. \*Formica auxillacensis* Piton, in Piton & Théobald, 1935: 91, pl. 3, fig. 8 (wing) FRANCE (Miocene).

*axillaris* Spinola, 1808; see under ***CAMPONOTUS***.

*bacchus* Smith, F. 1858; see under ***CAMPONOTUS***.

*badia* Latreille, 1802; see under ***POGONOMYRMEX***.

*badia* Smith, F. 1857; see under ***CAMPONOTUS***.

*balcanina. Formica balcanina* Petrov & Collingwood, 1993: 349, figs. 1-5 (w.q.m.) YUGOSLAVIA. Junior synonym of *cinerea*: Seifert, 2002b: 251.

\**baltica. \*Formica (Serviformica) baltica* Dlussky, 1967b: 81, fig. 1 (w.) BALTIC AMBER (Eocene). Junior synonym of \**flori*: Dlussky, 2002a: 292.

*barbara* Linnaeus, 1767; see under ***MESSOR***.

*barbata. Formica barbata* Razoumowski, 1789: 225, fig. 12 (w.) SWITZERLAND. Junior synonym of *fusca*: Emery & Forel, 1879: 451.

\****bauckhorni****. \*Formica bauckhorni* Meunier, 1915: 214, pl. 23, fig. 3 (m.) GERMANY. See also: Meunier, 1917: 8.

***beijingensis****. Formica beijingensis* Wu, 1990: 2, figs. 1, 15 (w.) CHINA.

*belgarum* Bondroit, 1918 [*Formicina*]; see under ***LASIUS***.

*berthoudi* Forel, 1876; see under ***ANOPLOLEPIS***.

*bicolor* Fabricius, 1793; see under ***CATAGLYPHIS***.

*bicolor* Latreille, 1798; see under ***CAMPONOTUS***.

***bicolor****. Formica bicolor* Leach, 1825: 289 (q.m.) FRANCE. [**Unresolved junior primary homonym** of *bicolor* Fabricius, 1793: 351, above (Bolton, 1995b: 192).] **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 192.

*bicolor. Formica bicolor* Schilling, 1830: 55. *Nomen nudum*.

*bicornis* Foerster, 1850; see under ***LASIUS***.

*bidens* Linnaeus, 1758; see under ***DOLICHODERUS***.

*bihamata* Drury, 1773; see under ***POLYRHACHIS***.

*bimaculata* Smith, F. 1858; see under ***CAMPONOTUS***.

*binodis* Linnaeus, 1763; see under ***TETRAMORIUM***.

*binodis* Fabricius, 1775; see under ***MESSOR***.

***biophilica****. Formica biophilica* Trager, J.C., in Trager, MacGown & Trager, 2007: 617, figs. 4b, 5b, 6b (w.q.m.) U.S.A.

*bipartita* Smith, F. 1861; see under ***LEPISIOTA***.

*bipilosa. Formica (Serviformica) cinerea* var. *bipilosa* Karavaiev, 1926e: 199 (w.) RUSSIA. Raised to species: Collingwood, 1961a: 70; Collingwood, 1961b: 289. Junior synonym of *subpilosa*: Dlussky, 1965a: 28.

*biscutata* Fabricius, 1775; see under ***ACROMYRMEX***.

*bispinosa* Olivier, 1792; see under ***DOLICHODERUS***.

*bituberculata* Fabricius, 1798; see under ***MEGALOMYRMEX***.

*blanda* Smith, F. 1858; see under ***CAMPONOTUS***.

*blanda. Formica fusca* var. *blanda* Wheeler, W.M. 1913f: 398 (in key) (w.) U.S.A. [**Unresolved junior primary homonym** of *blanda* Smith, F. 1858b: 43, above.] Subspecies of *fusca*: Wheeler, W.M. 1917a: 548. Junior synonym of *argentea*: Francoeur, 1973: 141.

*bombycina* Roger, 1859; see under ***CATAGLYPHIS***.

*bondroiti. Formica rufa* subsp. *polyctena* ab. *bondroiti* Stärcke, 1942b: 43 (w.) SPAIN. **Unavailable name**; material referred to *rufa* by Yarrow, 1955a: 4.

*borea. Formica (Raptiformica) sanguinea* var. *borea* Santschi, 1925g: 351 (w.m.) FINLAND. Junior synonym of *sanguinea*: Dlussky, 1965a: 16.

*borealis. Formica fusca* subsp. *borealis* Vashkevich, 1924b: 147 (w.) RUSSIA. Junior synonym of *lemani*: Dlussky, 1965a: 35.

***bradleyi****. Formica bradleyi* Wheeler, W.M. 1913f: 423 (w.m.) U.S.A. Wheeler, W.M. 1917a: 535 (q.); Wheeler, G.C. & Wheeler, J. 1953c: 168 (l.). Combination in *F. (Raptiformica*): Emery, 1925b: 259. Senior synonym of *morbida*: Wilson & Brown, 1955: 126. See also: Smith, D.R. 1979: 1449.

***breviscapa****. Formica breviscapa* Chang & He, 2002a: 54, figs. 23, 24, 63 (w.) CHINA.

***brevisetosa****. Formica rufa* subsp. *brevisetosa* Ruzsky, 1926: 110 (w.) RUSSIA.

*brevisetosa. Formica (Serviformica) cinerea* var. *brevisetosa* Karavaiev, 1927a: 302 (w.) UKRAINE. [**Unresolved junior primary homonym** of *brevisetosa* Ruzsky, above.] Junior synonym of *cinerea*: Finzi, 1928a: 68. See also comment in Seifert, 2002b: 267.

***browni****. Formica browni* Francoeur, 1973: 229, figs. 398-404 (w.q.) MEXICO.

*brullei* Smith, F. 1858; see under ***CAMPONOTUS***.

***bruni****. Formica (Coptoformica) bruni* Kutter, 1967a: 229, figs. 1-14 (w.q.m.) SWITZERLAND. See also: Kutter, 1977c: 284; Seifert, 2000a: 538.

*brunnea* Latreille, 1798; see under ***LASIUS***.

*brunneonitida. Formica (Coptoformica) brunneonitida* Dlussky, 1964: 1034, figs. (w.q.) MONGOLIA. Junior synonym of *forsslundi*: Seifert, 2000a: 552. See also: Dlussky, 1965a: 23.

*bucephala* Roger, 1859; see under ***CAMPONOTUS***.

*buddhaensis* Ruzsky, 1915; see under ***PROFORMICA***.

\****buphthalma****. \*Formica buphthalma* Novak, O. 1878: 91, pl. 3, fig. 2 (m.?) GERMANY (Oligocene).

*caduca* Victor, 1839; see under ***MESSOR***.

*caerulescens* Losana, 1834; see under ***TAPINOMA***.

*caespitum* Linnaeus, 1758; see under ***TETRAMORIUM***.

*californica. Formica microgyna* subsp. *californica* Wheeler, W.M. 1917a: 543 (w.) U.S.A. Subspecies of *whymperi* and material of the unavailable name *hybrida* referred here: Creighton, 1950a: 510. Junior synonym of *whymperi*: Wheeler, G.C. & Wheeler, J. 1986g: 15.

***californica****. Myrmecocystus melliger* subsp. *californicus* Creighton, 1950a: 445 (w.) U.S.A. [First available use of *Myrmecocystus melliger* subsp. *mimicus* var. *californicus* Cole, 1936b: 118; unavailable name.] [**Unresolved junior secondary homonym** of *californica* Wheeler, W.M., above (Bolton, 1995b: 192).] Combination in *Formica*: Snelling, R.R. 1969a: 2. [Identity and status of this taxon have not been ascertained.]

*callida* Smith, F. 1858; see under ***CAMPONOTUS***.

***calviceps****. Formica calviceps* Cole, 1954c: 164 (w.) U.S.A.

*camelina* Smith, F. 1857; see under ***CAMPONOTUS***.

*camponoticeps. Formica subpolita* var. *camponoticeps* Wheeler, W.M. 1913f: 535 (w.) U.S.A. Subspecies of *subpolita*: Creighton, 1950a: 542. Junior synonym of *subpolita*: Francoeur, 1973: 107.

***canadensis****. Formica cinerea* var. *canadensis* Santschi, 1914a: 435 (w.q.) CANADA. Wheeler, W.M. 1917a: 550 (q.); Francoeur, 1973: 63 (m.). Combination in *F. (Serviformica*): Emery, 1925b: 246. Junior synonym of *lepida*: Smith, M.R. 1961a: 252. Revived from synonymy and raised to species: Francoeur, 1973: 60.

***candida****. Formica candida* Smith, F. 1878b: 11 (q.) KYRGYZSTAN. [Smith's description is repeated by Bingham, 1903: 335 (footnote).] Probable synonym of *picea* Nylander: Emery, 1925b: 249. Junior synonym of *picea* Nylander: Dlussky, 1967a: 61. Hence *candida* first available replacement name for *Formica picea* Nylander, 1846a: 917 [Junior primary homonym of *Formica picea* Leach, 1825: 292 (now in *Camponotus*).]: Bolton, 1995b: 192. Valid species, not synonymous with *picea* Nylander: Seifert, 2004: 35. Current subspecies: nominal plus *formosae*.

***\*cantalica.*** *\*Formica cantalica* Piton, in Piton & Théobald, 1935: 68, pl. 1, fig. 10 (m.?) FRANCE (Mio-Pliocene).

*capitata* Latreille, 1798; see under ***MESSOR***.

\****capito****. \*Formica capito* Heer, 1867: 14, pl. 1, fig. 13 (q.) CROATIA (Miocene).

*capsincola. Formica capsincola* Schilling, 1839: 54 (w.q.) POLAND. Junior synonym of *gagates*: Mayr, 1855: 248; Nylander, 1856b: 65.

*carbonaria* Latreille, 1802; see under ***CAMPONOTUS***.

*carinata* Fabricius, 1804; see under ***POLYRHACHIS***.

*carinata* Brullé, 1840; see under ***CAMPONOTUS***.

*caryae* Fitch, 1855; see under ***CAMPONOTUS***.

*castanea* Latreille, 1802; see under ***CAMPONOTUS***.

*castanea* Lepeletier, 1835; see under ***CAMPONOTUS***.

*castaneipes* Leach, 1825; see under ***CAMPONOTUS***.

*caucasica. Formica rufibarbis* var. *caucasica* Wheeler, W.M. 1913f: 517 (w.) CAUCASUS. [First available use of *Formica rufibarbis* subsp. *clara* var. *caucasica* Ruzsky, 1905b: 401; unavailable name.] Subspecies of *rufibarbis*: Stitz, 1930: 238. Junior synonym of *glauca*: Dlussky, 1967a: 74; of *clara*: Seifert & Schultz, 2009: 263..

*caustica* Kollar, 1832; see under ***CEPHALOTES***.

\**cephalica. \*Formica cephalica* Scudder, 1891: 699, no caste mentioned, BALTIC AMBER. *Nomen nudum*, attributed to Burmeister. [Name may be based on a misinterpretation. Burmeister, 1831: 1100, does not name a species but mentions that he has a number of ants’ heads (*formicae cephalicae*) in amber.]

*cephalotes* Linnaeus, 1758; see under ***ATTA***.

\****ceps****. \*Formica ceps* Zhang, 1989: 288, fig. 289 (m.) CHINA (Miocene).

*chartifex* Smith, F. 1860; see under ***CAMPONOTUS***.

*chelifera* Latreille, 1802; see under ***ODONTOMACHUS***.

***chevrolatii*** Romand, 1846; see under ***FORMILA***.

*chilensis* Spinola, 1851; see under ***CAMPONOTUS***.

***chufejif****. Formica chufejif* Forskål, 1775: xxiii (w.) YEMEN. **Unidentifiable to genus**; *incertae* *sedis* in *Formica*: Bolton, 1995b: 192. See: Emery, 1892b: 160.

***ciliata****. Formica ciliata* Mayr, 1886d: 428 (q.) U.S.A. Wheeler, W.M. 1903e: 640 (w.m.). See also: Wheeler, W.M. 1913f: 452.

*ciliata. Formica pratensis* var. *ciliata* Ruzsky, 1926: 110 (w.q.) RUSSIA. [First available use of *Formica rufa* subsp. *pratensis* var. *ciliata* Ruzsky, 1915b: 7; unavailable name.] [**Unresolved junior primary homonym** of *ciliata* Mayr, above.] Junior synonym of *pratensis*: Dlussky & Pisarski, 1971: 177.

*cinctella* Gerstäcker, 1859; see under ***CAMPONOTUS***.

*cinerascens* Fabricius, 1787; see under ***CAMPONOTUS***.

***cinerea****. Formica cinerea* Mayr, 1853c: 281 (w.q.) AUSTRIA. Mayr, 1855: 344 (m.). Combination in *F. (Serviformica*): Forel, 1915d: 64. Subspecies of *fusca*: Forel, 1874: 54; Emery & Forel, 1879: 451; Mayr, 1886d: 427; Forel, 1892i: 307; Emery, 1909b: 199; Bondroit, 1910: 483; Emery, 1914d: 159. Status as species: Mayr, 1861: 48; Emery, 1898c: 126; Ruzsky, 1902d: 12; Forel, 1904b: 385; Wheeler, W.M. 1913f: 521; Forel, 1915d: 64; Emery, 1916b: 255; Wheeler, W.M. 1917a: 550; Menozzi, 1918: 88; Bondroit, 1918: 53; Müller, 1923: 141; Emery, 1925b: 246; Karavaiev, 1929b: 214; Karavaiev, 1936: 224; Dlussky, 1967a: 65; Bernard, 1967: 300; Dlussky & Pisarski, 1971: 157; Pisarski, 1975: 42; Kutter, 1977c: 252; Collingwood, 1979: 124; Atanassov & Dlussky, 1992: 264. Senior synonym of *brevisetosa*: Finzi, 1928a: 68; of *subrufoides*: Agosti & Collingwood, 1987a: 59. Material of the *nomen nudum cinereoglebaria* referred here: Dlussky & Pisarski, 1971: 157. Senior synonym of *armenica, balcanina, iberica, imitans, italica, novaki*: Seifert, 2002b: 251. Current subspecies: nominal plus *cinereoimitans*.

***cinereofusca****. Formica (Serviformica) cinerea* var. *cinereofusca* Karavaiev, 1929b: 214 (w.) CAUCASUS. Raised to species: Dlussky, 1967a: 60; Arnol'di & Dlussky, 1978: 553; Agosti & Collingwood, 1987a: 59.

*cinereofuscoides. Formica fusca* r. *gagates* var. *cinereofuscoides* Forel, 1892i: 307. **Unavailable name** (Bolton, 1995b: 193).

*cinereoglebaria. Formica cinerea* var. *cinereoglebaria* Kulmatycki, 1922: 85, no caste given, POLAND. *Nomen nudum*; material referred to *cinerea* by Dlussky & Pisarski, 1971: 157.

*cinereoides. Formica fusca* subsp. *rufibarbis* var. *cinereoides* Forel, 1874: 312, no caste given, SWITZERLAND. **Unavailable name** (Bolton, 1995b: 193).

***cinereoimitans****. Formica cinerea* var. *cinereoimitans* Ruzsky, 1905b: 405 (w.) RUSSIA. See also comment in Seifert, 2002b: 267.

*cinereorufibarbis. Formica fusca* var. *cinereorufibarbis* Forel, 1874: 55 (w.q.m.) SWITZERLAND. Combination in *F. (Serviformica*): Forel, 1915d: 64. Subspecies of *rufibarbis*: Dalla Torre, 1893: 210; of *cinerea*: Forel, 1915d: 64; Emery, 1916b: 255; Emery, 1925b: 246. Junior synonym of *rufibarbis*: Bernard, 1967: 297; of *fuscocinerea*: Dlussky & Pisarski, 1971: 161. Revived from synonymy and raised to species: Kutter, 1977c: 253. Junior synonym of *rufibarbis*: Collingwood, 1978: 73; Seifert & Schultz, 2009: 260.

*circumspecta* Smith, F. 1861; see under ***CAMPONOTUS***.

***clara****. Formica rufibarbis* var. *clara* Forel, 1886f: 206 (w.) RUSSIA. Ruzsky, 1902b: 471 (q.m.). Combination in *F. (Serviformica*): Emery, 1925b: 250. Subspecies of *rufibarbis*: Forel, 1901h: 65. Raised to species: Collingwood, 1961a: 68; Dlussky, 1967a: 77. Material of the unavailable names *transversa, clara* referred here by Dlussky, 1967a: 77. Senior synonym of *rizadaghi*: Dlussky, Soyunov & Zabelin, 1990: 139; of *caucasica, lusatica*: Seifert & Schultz, 2009: 263. See also: Czechowski, Radchenko, *et al*. 2012: 220. Current subspecies: nominal plus *sinae*.

*clara. Formica rufibarbis* subsp. *montana* var. *clara* Kuznetsov-Ugamsky, 1926b: 98 (w.) KAZAKHSTAN. **Unavailable name**; material referred to *clara* Forel (above) by Dlussky, 1967a: 77.

*clara. Formica rufibarbis* subsp. *subpilosa* var. *clara* Kuznetsov-Ugamsky, 1926b: 98 (w.) KAZAKHSTAN. **Unavailable name**; material referred to *subpilosa* by Dlussky, 1965a: 28.

*clara. Formica (Raptiformica) sanguinea* var. *clara* Karavaiev, 1927d: 345 (w.) UKRAINE. [Junior primary homonym of *clara* Forel, 1886f: 206.] Replacement name: *leninei* Santschi, 1928b: 46.

*clarior. Formica (Raptiformica) sanguinea* var. *clarior* Ruzsky, 1905b: 420 (w.) CAUCASUS. Junior synonym of *sanguinea*: Dlussky, 1965a: 16.

*clarior. Formica rufibarbis* subsp. *subpilosa* var. *clarior* Ruzsky, 1915a: 421 (w.) RUSSIA. **Unavailable name**; material referred to *clarissima* Emery, 1925b: 250.

***clarissima****. Formica (Serviformica) rufibarbis* var. *clarissima* Emery, 1925b: 250 (w.) RUSSIA. [First available name for material formerly referred to *clarior* Ruzsky, 1915a: 421, above; unavailable name.] Senior synonym of *ruzskyi* (unnecessary replacement name): Bolton, 1995b: 193. Subspecies of *subpilosa*: Dlussky, 1965a: 30 (under the name *ruzskyi*). Raised to species: Seifert & Schultz, 2008: 79.

***clarorufibarbis****. Formica rufibarbis* var. *clarorufibarbis* Wheeler, W.M. & Mann, 1916: 173 (w.) RUSSIA. [First available use of *Formica rufibarbis* subsp. *clara* var. *clarorufibarbis* Ruzsky, 1905b: 400; unavailable name.]

*clavata* Fabricius, 1775; see under ***PARAPONERA***.

*clavigera* Roger, 1862; see under ***ACANTHOMYOPS***.

***clivia****. Formica rufa* subsp. *clivia* Creighton, 1940a: 8, fig. 1 (w.q.m.) U.S.A. Currently subspecies of *obscuriventris*: Creighton, 1950a: 494.

\**clymene. \*Formica clymene* Wheeler, W.M. 1915h: 127 (w.) BALTIC AMBER (Eocene). [\**Formica clymene* Wheeler, W.M. 1913f: 383. *Nomen nudum*.] Junior synonym of \**phaethusa*: Dlussky, 2008a: 52. See also: Dlussky, 1967b: 80.

*coarctata* Latreille, 1802; see under ***PONERA***.

\****cockerelli****. \*Formica cockerelli* Carpenter, 1930: 57, pl. 4, fig. 3 (q.m.) U.S.A. (Oligocene).

*coeca* Latreille, 1802; see under ***LABIDUS***.

*cognata. Formica cognata* Stephens, 1829: 357. *Nomen nudum*.

*cognata* Smith, F. 1858; see under ***CAMPONOTUS***.

***coloradensis****. Formica rufa* subsp. *coloradensis* Creighton, 1940a: 1, fig. 1 (w.q.) U.S.A. [First available use of *Formica truncicola* subsp. *integroides* var. *coloradensis* Wheeler, W.M. 1913f: 440; unavailable name.] Subspecies of *integroides*: Creighton, 1950a: 489. Raised to species: Wheeler, G.C. & Wheeler, J. 1986g: 81; Mackay, Lowrie, *et al*. 1988: 111 (in key).

***comata****. Formica comata* Wheeler, W.M. 1909e: 85 (w.q.m.) U.S.A. See also: Wheeler, W.M. 1913f: 454.

*compressa* Fabricius, 1787; see under ***CAMPONOTUS***.

***comptula****. Formica oreas* var. *comptula* Wheeler, W.M. 1913f: 460 (w.q.) U.S.A. Currently subspecies of *oreas*: Creighton, 1950a: 494.

*congerens. Formica congerens* Nylander, 1846a: 906 (w.) FINLAND. Nylander, 1849: 30 (m.); Foerster, 1850a: 17 (q.). Junior synonym of *pratensis*: Emery & Forel, 1879: 450; Nasonov, 1889: 17; Wheeler, W.M. 1913f: 428; Forel, 1915d: 57; Emery, 1916b: 256; Müller, 1923: 142. Revived from synonymy: Betrem, 1953: 324. Junior synonym of *lugubris*: Yarrow, 1955a: 5; Dlussky, 1967a: 91; Radchenko, 2007: 36.

***conica****. Formica conica* Fabricius, 1798: 279 (m.) INDIA. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 193. [Dalla Torre, 1893: 183 places this in *Lasius*, which is certainly incorrect. Forel, 1905b: 161 suggests that it may be the male of *Camponotus compressus*, but there is little in the original description to confirm this.]

***connecticutensis****. Formica connecticutensis* Buckley, 1866: 154 (w.q.) U.S.A. **Unidentifiable** but possibly a *Formica*; see Wheeler, W.M. 1902f: 19. **Unidentifiable taxon**; *incertae sedis* in Formicinae: Smith, D.R. 1979: 1467; *incertae sedis* in *Formica*: Bolton, 1995b: 193.

*consanguinea* Smith, F. 1861; see under ***CAMPONOTUS***.

*consectator* Smith, F. 1858; see under ***CAMPONOTUS***.

*consobrina* Erichson, 1842; see under ***CAMPONOTUS***.

*consocians. Formica difficilis* var. *consocians* Wheeler, W.M. 1904f: 371 (w.q.m.) U.S.A. Junior synonym of *difficilis*: Cole, 1943a: 389.

*conspicua* Smith, F. 1858; see under ***CAMPONOTUS***.

***constricta****. Formica (Formica) rufa* var. *constricta* Karavaiev, 1929b: 215, fig. 6 (w.) RUSSIA.

*consultans* Walker, 1859; see under ***ANOCHETUS***.

*contracta* Latreille, 1802; see under ***PONERA***.

\**cordata* Holl, 1829; see under ***PHEIDOLE***.

*cordata* Smith, F. 1859; see under ***PHILIDRIS***.

*cordieri. Formica pratensis* var. *cordieri* Bondroit, 1917a: 174 (diagnosis in key) (q.) FRANCE. Raised to species: Betrem, 1960b: 77. Junior synonym of *nigricans*: Betrem, 1962: 38; Kutter, 1965: 140.

*coronata* Fabricius, 1804; see under ***ACROMYRMEX***.

***corsica****. Formica corsica* Seifert, 2002b: 264, fig. 3 (w.) FRANCE (Corsica).

*corusca* Smith, F. 1862; see under ***CAMPONOTUS***.

*cosmica* Smith, F. 1858; see under ***CAMPONOTUS***.

*coxalis* Smith, F. 1859; see under ***CAMPONOTUS***.

*crassinoda* Latreille, 1802; see under ***PACHYCONDYLA***.

***creightoni****. Formica (Raptiformica) creightoni* Buren, 1968a: 35, fig. 3 (w.) U.S.A.

*crepusculascens* Roger, 1859; see under ***PRENOLEPIS***.

*crinita* Smith, F. 1858; see under ***LASIUS***.

*crinita. Formica crinita* Wheeler, W.M. 1909e: 87 (w.q.) U.S.A. [Junior primary homonym of *crinita* Smith, F. 1858b: 13, above.] Replacement name: *criniventris* Wheeler, W.M. 1912c: 90. [*Formica crinita* Wheeler, W.M. 1908g: 408. *Nomen nudum*.]

***criniventris****. Formica criniventris* Wheeler, W.M. 1912c: 90. Replacement name for *crinita* Wheeler, W.M., above. [Junior primary homonym of *crinita* Smith, F. 1858b: 13.]

*cruda* Smith, F. 1860; see under ***PHILIDRIS***.

*cruentata* Latreille, 1802; see under ***CAMPONOTUS***.

*cuneata* Perty, 1833; see under ***CAMPONOTUS***.

***cunicularia****. Formica cunicularia* Latreille, 1798: 40 (w.q.m.) FRANCE. Combination in *F*. (*Serviformica*): Forel, 1915d: 64. Junior synonym of *rufibarbis*: Walckenaer, 1802: 161; Dalla Torre, 1893: 209; Ruzsky, 1905b: 385; Forel, 1915d: 64; Emery, 1916b: 255; Emery, 1925b: 250. Revived from synonymy and status as species: Yarrow, 1954a: 231. Senior synonym of *rubescens*: Yarrow, 1954a: 231; Dlussky, 1967a: 73; Bernard, 1967: 296; Seifert & Schultz, 2009: 261; of *fuscorufibarbis*: Dlussky, 1967a: 73; Dlussky & Pisarski, 1971: 166; of *glebaria*: Bernard, 1967: 296; Boven, 1977: 164; Agosti & Collingwood, 1987a: 59; of *glauca* (and its junior synonyms *caucasica, katuniensis, montivaga, montaniformis, volgensis*): Atanassov & Dlussky, 1992: 267; of *fuscoides*: Arakelian, 1994: 94; Seifert & Schultz, 2009: 261.

***curiosa****. Formica curiosa* Creighton, 1935: 5, fig. 2 (w.q.) U.S.A. Senior synonym of *parcipappa*: Snelling, R.R. 1969b: 194.

*cursor* Fonscolombe, 1846; see under ***CATAGLYPHIS***.

*curvidentata* Latreille, 1802; see under ***ECITON***.

*custodiens* Smith, F. 1858; see under ***ANOPLOLEPIS***.

*cylindrica* Fabricius, 1798; see under ***CAMPONOTUS***.

***dachaidanensis****. Formica dachaidanensis* Chang & He, 2002a: 53, figs. 22, 60 (w.) CHINA.

***dakotensis****. Formica dakotensis* Emery, 1893i: 652, pl. 22, fig. 5 (w.) U.S.A. Wasmann, 1902a: 4 (q.m.); Wheeler, W.M. 1913f: 462 (q.). Senior synonym of *saturata, wasmanni* (and its junior synonym *specularis*): Creighton, 1950a: 484; of *montigena*: Brown, 1957f: 167.

*dalailamae. Formica (Neoformica) dalailamae* Ruzsky, 1915a: 431, fig. 9 (w.) TIBET. Combination in *F. (Serviformica*): Emery, 1925b: 246. Junior synonym of *sentschuensis*: Dlussky, 1965a: 17.

*dalcqi. Formica dalcqi* Bondroit, 1918: 63 (w.) FRANCE. Subspecies of *exsecta*: Emery, 1925b: 257. Junior synonym of *exsecta*: Bernard, 1967: 323.

*dalmatica* Nylander, 1849; see under ***CAMPONOTUS***.

*davisi. Formica exsectoides* var. *davisi* Wheeler, W.M. 1913f: 396 (in key) (w.q.) U.S.A. [*Formica exsectoides* subsp. *exsectoides* var. *davisi* Wheeler, W.M. 1913f: 484; unavailable name.] Junior synonym of *exsectoides*: Creighton, 1950a: 513.

***decipiens****. Formica decipiens* Bondroit, 1918: 52 (w.q.) FRANCE. Espadaler, 1986b: 46 (m.). Combination in *F. (Serviformica*): Emery, 1925b: 247. Subspecies of *fusca*: Menozzi, 1922b: 331. Revived status as species: Bernard, 1967: 298. See also: Kutter, 1977c: 255.

*decora* Smith, F. 1858; see under ***CAMPONOTUS***.

*defensor. Formica defensor* Smith, F. 1878b: 11 (w.) CHINA. Junior synonym of *rufibarbis*: Forel, 1894c: 403.

*delicata. Formica pallidefulva* subsp. *delicata* Cole, 1938c: 369 (w.q.) U.S.A. Junior synonym of *nitidiventris*: Creighton, 1950a: 551.

***delinghaensis****. Formica delinghaensis* Chang & He, 2002a: 56, figs. 31, 32, 55 (w.) CHINA.

\****demersa****. \*Formica demersa* Heer, 1849: 140, pl.11, fig. 7 (m.) SWITZERLAND (Miocene). [Also described as new by Heer, 1850: 140.]

***densiventris****. Formica fusca* var. *densiventris* Viereck, 1903: 74 (w.) U.S.A. Cole, 1954a: 90 (m.). Junior synonym of *subaenescens*: Wheeler, W.M. 1913f: 504. Revived from synonymy as subspecies of *fusca*: Brown, 1947: 7. Raised to species: Creighton, 1950a: 499. Senior synonym of *spicata*: Cole, 1954a: 89; Cole, 1955b: 50; of *rasilis*: Mackay, Lowrie, *et al*. 1988: 114.

*depilis* Santschi, 1925; see under ***PROFORMICA***.

*depressa* Latreille, 1802; see under ***CREMATOGASTER***.

*desecta* Smith, F. 1860; see under ***CAMPONOTUS***.

*destructor* Fabricius, 1804; see under ***GIGANTIOPS***.

*detecta* Smith, F. 1858; see under ***IRIDOMYRMEX***.

*detorquens* Walker, 1859; see under ***TECHNOMYRMEX***.

*devastator. Formica devastator* Christ, 1791: 517 (w.) INDIA. *Nomen nudum*.

***didyma****. Formica didyma* Fabricius, 1782: 489 (w.) ITALY. **Unidentifiable to genus**; *incertae* *sedis* in *Formica*: Bolton, 1995b: 194.

***difficilis****. Formica rufa* subsp. *difficilis* Emery, 1893i: 651, pl. 22, figs. 9, 14 (w.q.m.) U.S.A. Wheeler, G.C. & Wheeler, J. 1953c: 164 (l.). Raised to species: Wheeler, W.M. 1904e: 305; Wheeler, W.M. 1904f: 348. Senior synonym of *consocians, habrogyna*: Cole, 1943a: 389.

*diffidens* Walker, 1859; see under ***PHEIDOLE***.

*diligens* Smith, F. 1857; see under ***CAMPONOTUS***.

***dirksi****. Formica dirksi* Wing, 1949: 13 (q.) U.S.A.

*discolor* Buckley, 1866; see under ***CAMPONOTUS***.

***dislocata****. Formica dislocata* Say, 1836: 288 (q.m.) U.S.A. **Unidentifiable taxon**; *incertae sedis* in Formicidae: Smith, D.R. 1979: 1467. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 194.

*distinguenda* Spinola, 1851; see under ***CAMPONOTUS***.

*distinguenda* Emery, 1916 [*Formicina*]; see under ***LASIUS***.

*dlusskyi. Formica dlusskyi* Bolton, 1995b: 194. Replacement name for *longiceps* Dlussky, 1964: 1036. [Junior primary homonym of *longiceps* Smith, F. 1863: 13.] Junior synonym of *manchu*: Seifert, 2000a: 534.

***dolosa****. Formica (Neoformica) pallidefulva* subsp. *dolosa* Buren, 1944a: 309 (w.) U.S.A. [First available use of *Formica pallidefulva* subsp. *schaufussi* var. *dolosa* Wheeler, W.M. 1912c: 90; unavailable name and unnecessary replacement name for *meridionalis* Wheeler, W.M. 1904f: 370, unavailable name; see there.] Wheeler, W.M. 1913f: 554 (q.). Subspecies of *schaufussi*: Creighton, 1950a: 551. Raised to species: Trager, MacGown & Trager, 2007: 619.

*dominula. Formica dominula* Nylander, 1846a: 905, pl. 18, fig. 15 (w.q.m.) FINLAND. Junior synonym of *sanguinea*: Smith, F. 1851: 115; Schenck, 1852: 36; Mayr, 1855: 337; Radchenko, 2007: 37.

*dorsata. Formica dorsata* Panzer, 1798: no. 1651 (q.) AUSTRIA. Junior synonym of *rufa*: Stephens, 1829: 357; Nylander, 1846a: 902.

*dorycus* Smith, F. 1860; see under ***CAMPONOTUS***.

*dryas. Formica dryas* Wheeler, W.M. 1905c: 268 (w.q.) U.S.A. Junior synonym of *obscuriventris*: Wheeler, W.M. 1913f: 446.

***dusmeti****. Formica rufa* subsp. *dusmeti* Emery, 1909b: 188 (w.) SPAIN. Bondroit, 1920a: 145 (q.); Santschi, 1932g: 5 (q.m.); Espadaler & Gómez, 2002: 39 (m.). Subspecies of *truncicola*: Wheeler, W.M. 1913f: 438; Stitz, 1939: 346; of *rufa*: Emery, 1925b: 254. Raised to species: Bondroit, 1918: 60; Santschi, 1931a: 13. Junior synonym of *nigricans*: Bernard, 1967: 314. Revived from synonymy and status as species: Collingwood & Yarrow, 1969: 94; Collingwood, 1978: 74.

*edax* Forskål, 1775; see under ***PHEIDOLE***.

*\*egecomerta. \*Formica egecomerta* Özdikmen, 2010c: 988. Replacement name for \**parvula* Dlussky, 1967b: 83. [Junior primary homonym of \**parvula* Presl, 1822: 196.] Name proposed subsequent to Dlussky, 2002a: 292 synonymy of \**parvula* Dlussky with \**flori,* and hence \**egecomerta* automatic junior synonym of \**flori*.

*egregia* Smith, F. 1858; see under ***CAMPONOTUS***.

*elata. Formica elata* Lund, 1831a: 130 (w.) BRAZIL. *Nomen nudum*.

***elevata****. Formica elevata* Fabricius, 1782: 492 (w.) "East Indies". **Unidentifiable to genus**; *incertae* *sedis* in *Formica*: Bolton, 1995b: 194.

***elongata****. Formica elongata* Fabricius, 1787: 308 (w.) INDIA. **Unidentifiable to genus**; *incertae* *sedis* in *Formica*: Bolton, 1995b: 194.

*emarginata* Olivier, 1792; see under ***LASIUS***.

***emeryi****. Formica emeryi* Wheeler, W.M. 1913f: 419 (w.q.) U.S.A. Combination in *F. (Raptiformica*): Emery, 1925b: 259. Junior synonym of *subnuda*: Wilson & Brown, 1955: 118. Revived from synonymy: Buren, 1968a: 34.

*emeryi. Formica rufa* ab. *emeryi* Krausse, 1926a: 108 (w.) GERMANY. **Unavailable name**. See also: Stitz, 1939: 337. Material referred to *rufa* by Yarrow, 1955a: 4.

*emmae* Forel, 1909; see under ***CATAGLYPHIS***.

\****eoptera****. \*Formica eoptera* Cockerell, 1923b: 399, fig. 1 (wing) U.S.A. (Eocene).

*ephippium* Smith, F. 1858; see under ***CAMPONOTUS***.

*erratica* Latreille, 1798; see under ***TAPINOMA***.

*erythrocephala* Fabricius, 1775; see under ***LEPTOMYRMEX***.

*esuriens* Smith, F. 1858; see under ***CAMPONOTUS***.

*etrusca. Formica exsecta* var. *etrusca* Emery, 1909b: 191, fig. 5 (w.) ITALY. Raised to species: Bondroit, 1918: 64. Subspecies of *exsecta*: Emery, 1925b: 257; Karavaiev, 1926e: 196. Junior synonym of *exsecta*: Bernard, 1967: 323.

*europaea* Christ, 1791; see under ***CATAGLYPHIS***.

*exasperata* Smith, F. 1857; see under ***CAMPONOTUS***.

*exercita* Walker, 1859; see under ***POLYRHACHIS***.

***exsecta****. Formica exsecta* Nylander, 1846a: 909, pl. 18, fig. 20 (w.q.m.) FINLAND. Combination in *F. (Coptoformica*): Müller, 1923: 146. Senior synonym of *dalcqi, etrusca*: Bernard, 1967: 323; of *exsectopressilabris*: Bernard, 1967: 323; Dlussky & Pisarski, 1971: 194; of *kontuniemii, sudetica, wheeleri* Stitz: Dlussky, 1967a: 100; Dlussky & Pisarski, 1971: 194; of *rubens*: Dlussky, 1964: 1027; of *nemoralis*: Seifert, 2000a: 526. See also: Donisthorpe, 1915d: 273; Parapura, 1972: 763; Kutter, 1977c: 283; Agosti & Hauschteck-Jungen, 1988: 280; Kupyanskaya, 1990: 200; Atanassov & Dlussky, 1992: 282; Seifert, 2000a: 525; Radchenko, 2007: 36.

***exsectoides****. Formica exsectoides* Forel, 1886b: xxxviii (w.q.) U.S.A. Emery, 1893i: 653 (m.). Senior synonym of *davisi, hesperia*: Creighton, 1950a: 513. See also: Wheeler, W.M. 1913f: 481; Smith, D.R. 1979: 1456.

*exsectopressilabris. Formica exsecta* var. *exsectopressilabris* Forel, 1874: 52 (w.q.m.) SWITZERLAND. Subspecies of *pressilabris*: Dalla Torre, 1893: 205. Raised to species: Bondroit, 1912: 352; Bondroit, 1918: 63. Subspecies of *exsecta*: Karavaiev, 1927c: 284; Karavaiev, 1936: 255; Boven, 1947: 189. Junior synonym of *exsecta*: Bernard, 1967: 323; Dlussky & Pisarski, 1971: 194.

***exsectorubens****. Formica exsecta* var. *exsectorubens* Ruzsky, 1905b: page? **Unidentifiable taxon**: Seifert, 2000a: 562.

*exudans* Walker, 1859; see under ***LEPTOGENYS***.

*fabricator* Smith, F. 1858; see under ***CAMPONOTUS***.

*fairchildi. Formica fusca* var. *fairchildi* Wheeler, W.M. 1927a: 40 (w.) INDONESIA (Sumatra) (locality in error). Junior synonym of *glacialis*: Francoeur, 1977a: 11.

*fallax* Nylander, 1856; see under ***CAMPONOTUS***.

*fallax. Formica (Serviformica) rufibarbis* st. *subpilosa* var. *fallax* Santschi, 1928b: 45. Unnecessary and unavailable replacement name for *clara* Kuznetsov-Ugamsky; unavailable name. Material referred to *subpilosa* by Dlussky, 1967a: 70.

*familiaris* Smith, F. 1860: 68; see under ***PSEUDOLASIUS***.

*familiaris* Smith, F. 1860: 96; see under ***TAPINOMA***.

***fatale****. Formica fatale* Christ, 1791: 515 (w.) INDIA. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 194. [Emery, 1892b: 162, suspected that this may be a termite.]

*femorata* Fabricius, 1804; see under ***CAMPONOTUS***.

***fennica****. Formica fennica* Seifert, 2000a: 534, figs. 1F, 2-5, 12 (w.q.m.) FINLAND.

***ferocula****. Formica ferocula* Wheeler, W.M. 1913f: 461 (w.) U.S.A.

*ferruginea. Formica ferruginea* Christ, 1791: 512, pl. 60, fig. 10 (w.) no locality. Junior synonym of *rufa*: Emery, 1892b: 161.

*ferruginea* Fabricius, 1798; see under ***CAMPONOTUS***.

*fervens* Drury, 1782; see under ***ATTA***.

*fervens* Smith, F. 1857; see under ***CAMPONOTUS***.

*festina* Smith, F. 1857; see under ***CAMPONOTUS***.

*festinata* Buckley, 1866; see under ***CAMPONOTUS***.

*ficticia. Formica subpolita* var. *ficticia* Wheeler, W.M. 1913f: 561 (w.q.m.) U.S.A. Subspecies of *subpolita*: Creighton, 1950a: 542. Junior synonym of *subpolita*: Francoeur, 1973: 107.

*filchneri. Formica fusca* subsp. *gagates* var. *filchneri* Forel, 1907b: 208 (w.) CHINA. [Also described as new by Forel, 1908d: 105.] **Unavailable name**; material referred to *picea* Nylander by Emery, 1909b: 159.

*filiformis* Fabricius, 1804; see under ***PSEUDOMYRMEX***.

***finzii****. Formica truncorum* var. *finzii* Stitz, 1939: 347 (w.q.) GERMANY. [First available use of *Formica rufa* subsp. *truncicola* var. *finzii* Krausse, 1926b: 114; unavailable name.]

*flammiventris. Formica flammiventris* Wheeler, W.M. 1912c: 90. Replacement name for *rufiventris* Emery, 1893i: 665. [Junior primary homonym of *rufiventris* Fabricius, 1804: 409.] Junior synonym of *subpolita*: Wheeler, W.M. 1913f: 532.

*flava* Fabricius, 1782; see under ***LASIUS***.

*flavescens* Fabricius, 1793; see under ***CAMPONOTUS***.

*flavicornis* Fabricius, 1789; see under ***ATTA***.

\****flavifemoralis****. \*Formica flavifemoralis* Zhang, Sun & Zhang, 1994: 168, fig. 148 (w.) CHINA (Miocene).

*flavipes. Formica flavipes* Geoffroy, in Fourcroy, 1785: 452 (m.) FRANCE. Junior synonym of *fusca*: Latreille, 1802c: 161.

*flavitarsa* Smith, F. 1858; see under ***LEPTOMYRMEX***.

*flavorubra. Formica sanguinea* var. *flavorubra* Forel, 1909c: 105 (w.) SPAIN. Junior synonym of *sanguinea*: Dlussky, 1967a: 97; Collingwood, 1978: 74.

*flavosetosa* Viehmeyer, 1922; see under ***PROFORMICA***.

\****flori****. \*Formica flori* Mayr, 1868c: 48, pl. 2, figs. 35-37 (w.q.m.) BALTIC AMBER (Eocene). Senior synonym of \**antiqua,* \**baltica,* \**parvula*: Dlussky, 2002a: 292; of \**egecomerta* (replacement name for \**parvula* Dlussky, proposed subsequent to Dlussky’s 2002a synonymy and hence automatic junior synonym) **synonymy unpublished**. See also: Dlussky, 1967b: 81; Baroni Urbani & Graeser, 1987: 1; Dlussky, 2008a: 50.

*floridana* Buckley, 1866; see under ***CAMPONOTUS***.

***foetens****. Formica foetens* Olivier, 1792: 503. Replacement name for *foetida* De Geer, 1773: 611. [Junior primary homonym of *foetida* Linnaeus, 1758: 582.] **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 195. [It is apparent that this taxon is properly referable to subfamily Myrmicinae.]

*foetens* Fabricius, 1793; see under ***PACHYCONDYLA***.

*foetida* Linnaeus, 1758; see under ***PACHYCONDYLA***.

*foetida. Formica foetida* De Geer, 1773: 611, pl. 31, figs. 21, 22 (q.) SURINAM. [Junior primary homonym of *foetida* Linnaeus, 1758: 582, above.] Replacement name: *foetens* Olivier, 1792: 503.

*foetida* Buckley, 1866; see under ***FORELIUS***.

***foreli****. Formica foreli* Bondroit, 1918: 65 (w.q.m.) SWITZERLAND. [First available use of *Formica exsecta* subsp. *pressilabris* var. *foreli* Emery, 1909b: 192; unavailable name.] Combination in *F. (Coptoformica*): Müller, 1923: 146. Subspecies of *pressilabris*: Müller, 1923: 146. Revived status as species: Dlussky, 1964: 1033; Bernard, 1967: 324; Kutter, 1977c: 284. Junior synonym of *pressilabris*: Arakelian, 1994: 97; Seifert, 1994: 41. Revived status as species and senior synonym of *goesswaldi, naefi, tamarae*: Seifert, 2000a: 543.

*foreli. Formica rufa* subsp. *pratensis* var. *foreli* Krausse, 1926a: 108 (w.) GERMANY. **Unavailable name**; material referred to *nigropratensis* by Betrem, 1962: 38.

***foreliana****. Formica foreliana* Wheeler, W.M. 1913f: 451 (w.) U.S.A. Francoeur, 1973: 235 (q.m.). Junior synonym of *gnava*: Creighton, 1950a: 539. Revived from synonymy: Francoeur, 1973: 235.

*forficata* Fabricius, 1787; see under ***MYRMECIA***.

***formosae****. Formica (Serviformica) picea* var. *formosae* Emery, 1925b: 249 (w.) TAIWAN. [First available use of *Formica fusca* r. *picea* var. *formosae* Forel, 1913f: 200.] Currently subspecies of *candida*: Bolton, 1995b: 195.

***forsslundi****. Formica (Coptoformica) forsslundi* Lohmander, 1949: 163 (w.q.m.) SWEDEN. Senior synonym of *strawinskii*: Dlussky & Pisarski, 1971: 199; of *brunneonitida, fossilabris*: Seifert, 2000a: 552. See also: Kutter, 1977c: 285.

***fossaceps****. Formica fossaceps* Buren, 1942: 402 (w.q.m.) U.S.A.

*fossilabris. Formica (Coptoformica) fossilabris* Dlussky, 1965a: 25, fig. 16 (w.) TIBET. Junior synonym of *forsslundi*: Seifert, 2000a: 552.

*foveolata* Mayr, 1853; see under ***CAMPONOTUS***.

*fragilis* Smith, F. 1859; see under ***LEPTOMYRMEX***.

\****fragilis****. \*Formica fragilis* Heer, 1867: 8, pl. 1, figs. 4, 5 (q.m.) CROATIA (Miocene). [**Unresolved junior primary homonym** of *fragilis* Smith, F. 1859a: 136, above (Bolton, 1995b: 195).] Combination in *Lasius* (part) and *Plagiolepis* (part): Mayr, 1867b: 56; in *Lasius*: Scudder, 1891: 713; in *Plagiolepis*: Handlirsch, 1907: 859. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 195.

***francoeuri****. Formica francoeuri* Bolton, 1995b: 195. Replacement name for *pilicornis* Emery, 1893i: 664. [Junior primary homonym of *pilicornis* Roger, 1859: 228.] For previous history see under *pilicornis* Emery.

*fraterna. Formica fraterna* Smith, F. 1878b: 11 (w.) CHINA. Junior synonym of *rufibarbis*: Forel, 1894c: 403; Bingham, 1903: 335.

\**freyeri* Heer, 1867; see under \****LONCHOMYRMEX***.

***frontalis****. Formica truncorum* var. *frontalis* Santschi, 1919e: 246 (w.) SPAIN. Tinaut & Martínez-Ibáñez, 1998: 33 (q.m.). Raised to species: Tinaut & Martínez-Ibáñez, 1998: 40.

*fugax* Latreille, 1798; see under ***SOLENOPSIS***.

***fukaii****. Formica exsecta* var. *fukaii* Wheeler, W.M. 1914a: 26 (w.) JAPAN. Kupyanskaya, 1990: 201 (q.m.). Raised to species: Sonobe & Dlussky, 1977: 23. [Misspelled as *fukali* by Emery, 1925b: 257 and as *fukalii* by Wu, 1990: 5.] See also: Seifert, 2000a: 533.

*fuliginosa* Latreille, 1798; see under ***LASIUS***.

***fuliginothorax****. Formica fuliginothorax* Blacker, 1992: 11 (w.) CANADA.

*fulvacea* Norton, 1868; see under ***CAMPONOTUS***.

*fulvopilosa* De Geer, 1778; see under ***CAMPONOTUS***.

*fungosa* Fabricius, 1798; see under ***DOLICHODERUS***.

***fusca****. Formica fusca* Linnaeus, 1758: 580 (w.) EUROPE. Latreille, 1802c: 159 (q.m.); Wheeler, G.C. & Wheeler, J. 1953c: 164 (l.). Combination in *F. (Serviformica*): Forel, 1913i: 361. Senior synonym of *barbata*: Emery & Forel, 1879: 451; of *flavipes, libera*: Latreille, 1802c: 159; Smith, F. 1851: 3; Roger, 1863b: 13; of *marcida*: Francoeur, 1973: 189; of *pallipes, rufipes*: Dlussky, 1967a: 58; of *tristis*: Emery, 1892b: 162; of *glebaria*: Mayr, 1855: 346; Yarrow, 1954a: 230; Dlussky, 1967a: 58; Radchenko, 2007: 35. Current subspecies: nominal plus *alpicola, fuscolemani, hyrcana, maura, tombeuri*. See also: Emery, 1893i: 657; Wheeler, W.M. 1913f: 494; Donisthorpe, 1915d: 304; Stitz, 1939: 348; Dlussky, 1967a: 58; Dlussky & Pisarski, 1971: 148; Francoeur, 1973: 189; Tarbinsky, 1976: 180; Collingwood, 1979: 120; Kupyanskaya, 1990: 183; Atanassov & Dlussky, 1992: 260; Seppä, *et al*. 2011: 31.

*fusca* Leach, 1825; see under ***TETRAMORIUM***.

*fuscata. Formica pallidefulva* subsp. *fuscata* Emery, 1893i: 656 (w.q.) U.S.A. Combination in *F*. (*Neoformica*): Wheeler, W.M. 1913f: 557. Junior synonym of *nitidiventris*: Creighton, 1950a: 551.

***fuscescens***. *Formica fuscescens* Gmelin, in Linnaeus, 1790: 2804 (w.) EUROPE. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 195.

***fuscicauda****. Formica fuscicauda* Motschoulsky, 1863: 12 (w.) SRI LANKA. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 195.

*fusciceps. Formica sanguinea* var. *fusciceps* Emery, 1895c: 335 (footnote) (w.) JAPAN. Junior synonym of *sanguinea*: Dlussky, 1965a: 16.

*fuscipes* Mayr, 1853; see under ***CAMPONOTUS***.

***fuscocinerea****. Formica fusca* var. *fuscocinerea* Forel, 1874: 55 (w.q.m.) SWITZERLAND. Subspecies of *cinerea*: Wheeler, W.M. 1913f: 522; Dlussky, 1967a: 65; Dlussky & Pisarski, 1971: 161; Baroni Urbani, 1971c: 234; Pisarski, 1975: 43. Raised to species and senior synonym of *lefrancoisi*: Seifert, 2002b: 256.

*fuscogagates. Formica fusca* var. *fuscogagates* Forel, 1874: 54 (w.q.) SWITZERLAND. Combination in *F. (Serviformica*): Forel, 1915d: 63. Raised to species: Bondroit, 1918: 47. Subspecies of *gagates*: Emery, 1909b: 195; Emery, 1925b: 249. Junior synonym of *gagates*: Kutter, 1977c: 254.

*fuscoides. Formica (Serviformica) cunicularia* subsp. *fuscoides* Dlussky, 1967a: 74 (w.q.m.) ARMENIA. Junior synonym of *cunicularia*: Arakelian, 1994: 94; Seifert & Schultz, 2009: 261.

***fuscolemani****. Formica fusca* form. *fuscolemani* Samsinak, 1951: 126 (m.) CZECHOSLOVAKIA.

*fuscoptera* Geoffroy, in Fourcroy, 1785; see under ***CAMPONOTUS***.

*fuscorufibarbis. Formica fusca* var. *fuscorufibarbis* Forel, 1874: 54 (w.q.) SWITZERLAND. Combination in *F. (Serviformica*): Forel, 1915d: 63. Raised to species: Forel, 1906c: 189. Subspecies of *glebaria*: Bondroit, 1918: 50; of *rufibarbis*: Dalla Torre, 1893: 210; Stitz, 1939: 357; Novak & Sadil, 1941: 107. Junior synonym of *rufibarbis*: Bernard, 1967: 297; of *cunicularia*: Dlussky, 1967a: 73; Dlussky & Pisarski, 1971: 166. See also comment in Seifert, 2002b: 266.

***gagates****. Formica gagates* Latreille, 1798: 36 (w.q.) FRANCE. Mayr, 1855: 349 (m.). Combination in *F. (Serviformica*): Forel, 1915d: 63. Subspecies of *fusca*: Forel, 1874: 53; Emery & Forel, 1879: 451; Mayr, 1886d: 426; Forel, 1892i: 307; Forel, 1907b: 208; Bondroit, 1910: 483. Status as species: André, 1882b: 182; Nasonov, 1889: 19; Ruzsky, 1902d: 13; Forel, 1904b: 384; Wheeler, W.M. 1913f: 513; Forel, 1915d: 63; Emery, 1916b: 254; Bondroit, 1918: 46; Karavaiev, 1927c: 285; Karavaiev, 1936: 229; Stitz, 1939: 362; Bernard, 1967: 298; Dlussky, 1967a: 79; Kutter, 1977c: 250; Atanassov & Dlussky, 1992: 269. Senior synonym of *capsincola*: Mayr, 1855: 348; Nylander, 1856b: 65; of *morio*: Emery, 1925b: 248; Karavaiev, 1936: 230; Dlussky & Pisarski, 1971: 169; of *fuscogagates*: Kutter, 1977c: 254. Material of the unavailable name *muralewiczi* referred here by Emery, 1909b: 194; Karavaiev, 1927a: 301. Current subspecies: nominal plus *piceogagates*.

***gagatoides****. Formica fusca* var. *gagatoides* Ruzsky, 1904a: 289 (w.q.) RUSSIA. Ruzsky, 1915a: 423 (m.); Stärcke, 1935: 267 (footnote) (m.). Combination in *F. (Serviformica*): Emery, 1925b: 249. Subspecies of *picea* Nylander: Emery, 1925b: 249; Stitz, 1939: 368. Raised to species: Holgersen, 1942: 15; Holgersen, 1943a: 9. Junior synonym of *picea* Nylander: Bernard, 1967: 299. Revived from synonymy and status as species: Kutter, 1977c: 255; Collingwood, 1979: 121; Kupyanskaya, 1990: 188.

*gaullei. Formica gaullei* Bondroit, 1917a: 176, fig. 1 (w.) FRANCE. Subspecies of *rufa*: Emery, 1925b: 253; Stitz, 1939: 339; Röszler, 1950: 213. Junior synonym of *rufa*: Yarrow, 1955a: 4.

*gelida. Formica fusca* var. *gelida* Wheeler, W.M. 1913f: 399 (in key) (w.q.m.) U.S.A. [*Formica fusca* subsp. *fusca* var. *gelida* Wheeler, W.M. 1913f: 505; unavailable name.] Subspecies of *fusca*: Wheeler, W.M. 1917a: 546; of *neorufibarbis*: Creighton, 1950a: 537. Junior synonym of *neorufibarbis*: Francoeur, 1973: 215.

***georgica****. Formica georgica* Seifert, 2002b: 262, fig. 4 (w.) GEORGIA.

*gerardi* Bondroit, 1917; see under ***IBEROFORMICA***.

*gibba* Smith, F. 1861; see under ***DOLICHODERUS***.

*gibbosa* Latreille, 1798; see under ***APHAENOGASTER***.

\****gibbosa****. \*Formica gibbosa* Presl, 1822: 197 (no caste) BALTIC AMBER (Eocene). [**Unresolved junior primary homonym** of *gibbosa* Latreille, 1798: 50, above (Bolton, 1995b: 196).]

*gibbosa* Smith, F. 1858; see under ***DOLICHODERUS***.

*gigas* Latreille, 1802; see under ***CAMPONOTUS***.

*gigas* Leach, 1825; see under ***CAMPONOTUS***.

*gilvescens. Formica sanguinea* subsp. *subintegra* var. *gilvescens* Wheeler, W.M. 1913f: 412 (w.) U.S.A. **Unavailable name**; material referred to *subintegra* by Creighton, 1950a: 470.

***glabra****. Formica glabra* Gmelin, in Linnaeus, 1790: 2804 (w.) EUROPE. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 196.

*glabra. Formica glabra* White, W.F. 1884: 253 (w.) GREAT BRITAIN. [**Unresolved junior primary homonym** of *glabra* Gmelin, above.] Junior synonym of *gagates*: Dalla Torre, 1893: 188; of *picea* Nylander: Donisthorpe, 1918a: 9; Dlussky, 1967a: 61.

*glabrella* Nylander, 1849; see under ***TAPINOMA***.

***glabridorsis****. Formica (Serviformica) rufibarbis* var. *glabridorsis* Santschi, 1925f: 95 (w.) CHINA. Junior synonym of *glauca*: Dlussky, 1967a: 74; of *cunicularia*: Wu, 1990: 4. Revived from synonymy and raised to species: Seifert & Schultz, 2009: 269.

***glacialis****. Formica fusca* var. *glacialis* Wheeler, W.M. 1908f: 624 (w.q.m.) U.S.A. Combination in *F. (Serviformica*): Emery, 1925b: 247. Junior synonym of *fusca*: Wheeler, W.M. 1913f: 494; Creighton, 1950a: 532. Revived from synonymy and raised to species: Francoeur, 1973: 152. Senior synonym of *fairchildi*: Francoeur, 1977a: 11. Junior synonym of *subsericea*: Wheeler, G.C. & Wheeler, J. 1986g: 92. Revived from synonymy: Bolton, 1995b: 196.

***glauca****. Formica rufibarbis* var. *glauca* Ruzsky, 1896: 70 (w.) RUSSIA. [First available use of *Formica fusca* subsp. *rufibarbis* var. *glauca* Ruzsky, 1895: 20; unavailable name.] Emery, 1909b: 198 (q.m.). Combination in *F. (Serviformica*): Emery, 1925b: 250. Subspecies of *rufibarbis*: Emery, 1925b: 250; of *cunicularia*: Pisarski, 1967: 416; Dlussky, 1967a: 74; Tarbinsky, 1976: 184. Raised to species: Agosti & Collingwood, 1987a: 59. Senior synonym of *katuniensis, montaniformis, montivaga, volgensis* and material of the unavailable name *minor* referred here: Dlussky, 1967a: 74 (note that the name *montaniformis* is misspelled as *montanoides* here). Junior synonym of *cunicularia*: Atanassov & Dlussky, 1992: 267. **Unidentifiable taxon**, *incertae sedis* in *Formica*: Seifert, 2007: 301 [Note that Seifert’s decision renders earlier taxonomy untenable.] See also: Czechowski, Radchenko, *et al*. 2012: 220.

*glebaria. Formica glebaria* Nylander, 1846a: 917, pl. 18, fig. 23 (w.q.) FINLAND. Foerster, 1850a: 31 (m.). Combination in *F. (Serviformica*): Forel, 1915d: 63. Subspecies of *fusca*: Emery & Forel, 1879: 451; Wheeler, W.M. 1908g: 408; Emery, 1909b: 196; Ruzsky, 1914b: 104; Forel, 1915d: 63; Emery, 1916b: 254; Santschi, 1925g: 353; Karavaiev, 1927c: 286; Stitz, 1939: 353; Novak & Sadil, 1941: 108; of *rufibarbis*: Karavaiev, 1936: 237. Status as species: Bondroit, 1918: 49; Müller, 1923: 139; Boven, 1947: 188. Junior synonym of *cunicularia*: Bernard, 1967: 296; Boven, 1977: 164; Agosti & Collingwood, 1987a: 59; of *fusca*: Mayr, 1855: 346; Yarrow, 1954a: 230; Dlussky, 1967a: 58; Radchenko, 2007: 35.

\****globiventris****. \*Formica globiventris* Heer, 1849: 131, pl. 9, fig. 13 (q.) SWITZERLAND (Miocene). [Also described as new by Heer, 1850: 131.]

\**globularis* Heer, 1849; see under ***LASIUS***.

***gnava****. Formica gnava* Buckley, 1866: 156 (w.q.m.) U.S.A. Combination in *F. (Serviformica*): Emery, 1925b: 250. Subspecies of *fusca*: Wheeler, W.M. 1902f: 20; of *rufibarbis*: Wheeler, W.M. 1913f: 518; Creighton, 1950a: 539. Revived status as species: Francoeur, 1973: 238. Material of the *nomen nudum subsericeoneorufibarbis* (misspelled as *subsericeorufibarbis* by Emery, 1925b: 250) referred here by Wheeler, W.M. 1913f: 518.

*goesswaldi. Formica (Coptoformica) goesswaldi* Kutter, 1967a: 234, figs. 15-22 (w.q.m.) GERMANY. Junior synonym of *foreli*: Seifert, 2000a: 544. See also: Kutter, 1977c: 284.

*gracilescens* Nylander, 1856; see under ***PARATRECHINA***.

*gracilipes* Smith, F. 1857; see under ***ANOPLOLEPIS***.

*gracilis* Fabricius, 1804; see under ***PSEUDOMYRMEX***.

*gracilis* Lowne, 1865; see under ***IRIDOMYRMEX***.

*gracilis* Buckley, 1866; see under ***TAPINOMA***.

\****gracilis****. \*Formica gracilis* Heer, 1867: 7, pl. 1, fig. 3 (q.) CROATIA (Miocene). [**Unresolved junior primary homonym** of *gracilis* Fabricius, 1804: 405, above (Bolton, 1995b: 196).]

*graminicola* Latreille, 1802; see under ***MYRMECINA***.

\****grandis****. \*Formica grandis* Carpenter, 1930: 57, pl. 6, fig. 3 (q.) U.S.A. (Oligocene).

*granulata* Latreille, 1802; see under ***CATAULACUS***.

***gravelyi****. Formica gravelyi* Mukerjee, 1930: 162, fig. 6 (w.) INDIA.

\****gravida****. \*Formica gravida* Heer, 1849: 114, pl. 9, fig. 1 (q.) SWITZERLAND (Miocene). [Also described as new by Heer, 1850: 114.]

*grisea* Le Guillou, 1842; see under ***POLYRHACHIS***.

*griseopubescens. Formica sanguinea* var. *griseopubescens* Kuznetsov-Ugamsky, 1926b: 95 (w.) KAZAKHSTAN. Junior synonym of *sanguinea*: Dlussky, 1965a: 16.

*grossa* Fabricius, 1787; see under ***ATTA***.

*grouvellei. Formica rufa* var. *grouvellei* Bondroit, 1918: 60 (q.) FRANCE. Junior synonym of *pratensis*: Seifert, 1996a: 200.

*grundmanni. Formica moki* subsp. *grundmanni* Cole, 1943b: 184 (w.) U.S.A. Junior synonym of *xerophila*: Francoeur, 1973: 259.

*guineense* Fabricius, 1793; see under ***PHEIDOLE***.

*gulosa* Fabricius, 1775; see under ***MYRMECIA***.

\****gustawi****. \*Formica gustawi* Dlussky, 2002a: 295, figs. 10-17 (w.m.) BALTIC AMBER (Eocene).

*gymnomma. Formica dryas* var. *gymnomma* Wheeler, W.M. 1905c: 269 (w.) U.S.A. Subspecies of *rufa*: Creighton, 1940a: 3. Junior synonym of *obscuriventris*: Creighton, 1950a: 493.

***gynocrates****. Formica gynocrates* Snelling, R.R. & Buren, 1985: 72, figs. 7-15 (w.q.m.) U.S.A.

*habrogyna. Formica habrogyna* Cole, 1939: 413, figs. A-D (w.q.) U.S.A. Junior synonym of *difficilis*: Cole, 1943a: 389.

*haematocephala* Leach, 1825; see under ***CREMATOGASTER***.

*haematoda* Linnaeus, 1758; see under ***ODONTOMACHUS***.

*haemorrhoidalis* Latreille, 1802; see under ***CEPHALOTES***.

*haemorrhoidalis. Formica rufa* subsp. *haemorrhoidalis* Creighton, 1940a: 1, fig. 1 (w.) U.S.A. [First available use of *Formica rufa* subsp. *integra* var. *haemorrhoidalis* Emery, 1893i: 652 (w.); Wheeler, W.M. 1913f: 441 (q.m.); unavailable name.] [Junior primary homonym of *Formica haemorrhoidalis* Latreille, 1802c: 276, above.] Replacement name: *ravida* Creighton, 1940a: 1 (designated first available replacement name by Bolton, 1995b: 202, as *haemorrhoidalis* Creighton was raised to species and made senior synonym of *ravida* and *tahoensis* by Brown, 1965d: 181).

*hamata* Fabricius, 1782; see under ***ECITON***.

*harpax* Fabricius, 1804; see under ***PACHYCONDYLA***.

*hastata* Latreille, 1802; see under ***POLYRHACHIS***.

***hayashi****. Formica hayashi* Terayama & Hashimoto, 1996: 4, figs. 8-12 (w.) JAPAN.

*hebescens. Formica ulkei* var. *hebescens* Wheeler, W.M. 1913f: 487 (w.) U.S.A. Junior synonym of *ulkei*: Creighton, 1950a: 515.

*hemipsila* Foerster, 1850; see under ***CAMPONOTUS***.

\**heraclea* Heer, 1849; see under ***CAMPONOTUS***.

*herculeana* Linnaeus, 1758; see under ***CAMPONOTUS***.

*herrichi* Mayr, 1853; see under ***CAMPONOTUS***.

*hesperia. Formica exsectoides* var. *hesperia* Wheeler, W.M. 1913f: 396 (in key) (w.) U.S.A. [*Formica exsectoides* subsp. *exsectoides* var. *hesperia* Wheeler, W.M. 1913f: 484; unavailable name.] Subspecies of *exsectoides*: Wheeler, W.M. 1917a: 544. Junior synonym of *exsectoides*: Creighton, 1950a: 513.

\****heteroptera****. \*Formica heteroptera* Cockerell, 1920: 278, pl. 16, fig. 11 (wing) GREAT BRITAIN (Eocene).

***hewitti****. Formica hewitti* Wheeler, W.M. 1917a: 552 (w.q.m.) CANADA. See also: Francoeur, 1973: 208.

*hexacantha* Erichson, 1842; see under ***POLYRHACHIS***.

***hirta****. Formica hirta* Gravenhorst, 1807: 286 (w.) no locality given. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 196.

\****horrida****. \*Formica horrida* Wheeler, W.M. 1915h: 125, fig. 59 (w.) BALTIC AMBER (Eocene). See also: Dlussky, 1967b: 80.

*huberiana* Leach, 1825; see under ***MESSOR***.

*hybrida. Formica microgyna* subsp. *californica* var. *hybrida* Wheeler, W.M. 1917a: 543 (w.) U.S.A. **Unavailable name**; material referred to *californica* by Creighton, 1950a: 510.

*hybrida* Emery, 1916 [*Formicina*]; see under ***LASIUS***.

***hyrcana****. Formica (Serviformica) fusca* subsp. *hyrcana* Arnol'di, 1968: 1821 (w.q.) RUSSIA. [*Formica fusca* subsp. *hyrcana* Arnol'di, 1948: 212. *Nomen nudum*.]

*hystrix* Latreille, 1802; see under ***ACROMYRMEX***.

*iberica. Formica cinerea* var. *iberica* Finzi, 1928a: 71 (w.) SPAIN. Junior synonym of *cinerea*: Seifert, 2002b: 251.

*ignivora. Formica ignivora* Rafin, 1885: 403. *Nomen nudum*.

\**imhoffii* Heer, 1849; see under ***LIOMETOPUM***.

*imitans. Formica cinerea* var. *imitans* Ruzsky, 1902b: 472 (w.q.) RUSSIA. [Also described as new by Ruzsky, 1902c: 10 (footnote).] Karavaiev, 1936: 226 (m.). Junior synonym of *rufibarbis*: Kuznetsov-Ugamsky, 1926b: 97. Revived from synonymy as subspecies of *cinerea*: Karavaiev, 1927a: 302; Kuznetsov-Ugamsky, 1929b: 39. Raised to species: Agosti & Collingwood, 1987a: 59. Senior synonym of *ochracea, sabulosa*: Dlussky, 1967a: 65. Junior synonym of *cinerea*: Seifert, 2002b: 251.

\****immersa****. \*Formica immersa* Heer, 1849: 122, pl. 9, fig. 5 (q.) SWITZERLAND (Miocene). [Also described as new by Heer, 1850: 122.]

\**impacta* Cockerell, 1927; see under \****MIOMYRMEX***.

*imparis* Say, 1836; see under ***PRENOLEPIS***.

*impetuosa* Smith, F. 1858; see under ***CAMPONOTUS***.

***impexa****. Formica impexa* Wheeler, W.M. 1905c: 273 (w.) U.S.A. Wheeler, W.M. 1906a: 40 (q.). See also: Wheeler, W.M. 1913f: 472.

***incerta****. Formica (Neoformica) pallidefulva* subsp. *incerta* Buren, 1944a: 309 (w.q.m.) U.S.A. [First available use of *Formica pallidefulva* subsp. *schaufussi* var. *incerta* Emery, 1893i: 655; unavailable name.] Junior synonym of *nitidiventris*: Creighton, 1950a: 551. Revived from synonymy and raised to species: Trager, MacGown & Trager, 2007: 621.

*incisa* Schenck, 1852; see under ***LASIUS***.

***incisa****. Formica incisa* Smith, F. 1858b: 52 (q.) MEXICO. [**Unresolved junior primary homonym** of *incisa* Schenck, 1852: 63, above (Bolton, 1995b: 197).] **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 197.

*incisa. Formica rufa* subsp. *pratensis* var. *incisa* Krausse, 1922: 155 (w.) GERMANY. **Unavailable name**; material referred to *nigropratensis* by Betrem, 1962: 38.

*incursor* Smith, F. 1860; see under ***CAMPONOTUS***.

*indefessa* Sykes, 1835; see under ***CAMPONOTUS***.

*indeflexa* Walker, 1859; see under ***CAMPONOTUS***.

***indianensis****. Formica indianensis* Cole, 1940: 224 (w.m.) U.S.A.

*indificans* Jerdon, 1851; see under ***POLYRHACHIS***.

\**indurata* Heer, 1849; see under ***CAMPONOTUS***.

***inequalis****. Formica inequalis* Lowne, 1865b: 331 (q.m.) AUSTRALIA. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 197.

*ingruens* Walker, 1859; see under ***DOLICHODERUS***.

*inplana. Formica (Serviformica) picea* var. *inplana* Emery, 1925b: 249 (w.) TIBET. [First available use of *Formica fusca* subsp. *picea* var. *inplana* Ruzsky, 1915a: 426; unavailable name.] Subspecies of *fusca*: Ruzsky, 1936: 92. Junior synonym of *picea* Nylander: Dlussky, 1965a: 31.

*insana* Buckley, 1866; see under ***DORYMYRMEX***.

***insultans****. Formica insultans* Forskål, 1775: 85 (w.) EGYPT. **Unidentifiable to genus**; *incertae* *sedis* in *Formica*: Bolton, 1995b: 197. See also: Emery, 1892b: 160.

***integra****. Formica integra* Nylander, 1856b: 62 (footnote) (w.) U.S.A. Mayr, 1886d: 425 (q.m.). Subspecies of *rufa*: Emery, 1893i: 652; Wheeler, W.M. 1908g: 406; Creighton, 1940a: 1; of *truncicola*: Wheeler, W.M. 1913c: 116; Wheeler, W.M. 1913f: 444; Wheeler, W.M. 1917a: 464. Revived status as species: Creighton, 1950a: 487. Senior synonym of *similis*: Emery, 1893i: 652; Wheeler, W.M. 1906b: 16.

***integroides****. Formica truncicola* subsp. *integroides* Wheeler, W.M. 1913f: 438 (w.q.) U.S.A. [First available use of *Formica rufa* subsp. *obscuriventris* var. *integroides* Emery, 1893i: 649; unavailable name.] Subspecies of *rufa*: Creighton, 1940a: 3. Raised to species and senior synonym of *subcaviceps*: Creighton, 1950a: 489. Senior synonym of *subfasciata*: Brown, 1965d: 185.

*intermedia* Zetterstedt, 1838; see under ***CAMPONOTUS***.

*intrepida* Kirby, W. 1819; see under ***CAMPONOTUS***.

*irritabilis* Smith, F. 1857; see under ***CAMPONOTUS***.

*irritans* Smith, F. 1857; see under ***CAMPONOTUS***.

*italica. Formica cinerea* var. *italica* Finzi, 1928a: 70 (w.) ITALY. Junior synonym of *cinerea*: Seifert, 2002b: 251.

*itinerans* Lowne, 1865; see under ***ANONYCHOMYRMA***.

*jacoti* Wheeler, W.M. 1923; see under ***PROFORMICA***.

***japonica****. Formica japonica* Motschoulsky, 1866: 183 (w.) JAPAN. Imai, 1966: 119 (k.). Combination in *F. (Serviformica*): Emery, 1925b: 247. Subspecies of *fusca*: Emery, 1909b: 197; Emery, 1923: 62; Wheeler, W.M. 1929f: 10; Kuznetsov-Ugamsky, 1929a: 19; Stitz, 1934: 9. Revived status as species: Dlussky, 1967a: 78; Collingwood, 1976: 305; Wu, 1990: 5; Kupyanskaya, 1990: 185. Senior synonym of *nipponensis*: Emery, 1909b: 197; Karavaiev, 1927b: 111; Kuznetsov-Ugamsky, 1929a: 19.

*juvenilis* Fabricius, 1804; see under ***MESSOR***.

***kashmirica****. Formica (Serviformica) rufibarbis* var. *kashmirica* Stärcke, 1935: 268 (w.q.m.) KASHMIR. Raised to species: Seifert & Schultz, 2008: 81.

*katuniensis. Formica (Serviformica) rufibarbis* var. *katuniensis* Ruzsky, 1915b: 13 (w.) RUSSIA. Junior synonym of *glauca*: Dlussky, 1967a: 74.

*kiesenwetteri* Roger, 1859; see under ***CAMPONOTUS***.

***knighti****. Formica (Formica) knighti* Buren, 1944a: 303 (w.) U.S.A.

\****kollari****. \*Formica kollari* Heer, 1867: 15, pl. 1, fig. 14 (q.) CROATIA (Miocene).

*kontuniemii. Formica kontuniemii* Betrem, 1954: 230 (w.) FINLAND. Junior synonym of *exsecta*: Dlussky, 1967a: 100; Dlussky & Pisarski, 1971: 194.

*korbi* Emery, 1909; see under ***PROFORMICA***.

***kozlovi****. Formica (Serviformica) kozlovi* Dlussky, 1965a: 32 (w.q.) MONGOLIA.

*kraussei* Forel, 1895; see under ***BAJCARIDRIS***.

***kupyanskayae****. Formica kupyanskayae* Bolton, 1995b: 197. Replacement name for *opacus* Kupyanskaya, 1980: 106. [Junior primary homonym of *opaca* Nylander, 1856b: 55.]

*kusnezowi* Santschi, 1928; see under ***PROFORMICA***.

*\*****kutscheri****. \*Formica kutscheri* Dlussky, 2008a: 52, figs. 4a-b (w.) BITTERFELD AMBER.

*laboriosa* Smith, F. 1858; see under ***CAMPONOTUS***.

*lactaria* Smith, F. 1860; see under ***DOLICHODERUS***.

*lacteipennis* Smith, F. 1858; see under ***CAMPONOTUS***.

***laeviceps****. Formica rufa* subsp. *laeviceps* Creighton, 1940a: 9, fig. 1 (w.q.) U.S.A. Raised to species: Creighton, 1950a: 491.

*laevigata* Smith, F. 1858; see under ***CAMPONOTUS***.

*laevissima* Smith, F. 1859; see under ***CALOMYRMEX***.

*lapidum* Fabricius, 1804; see under ***MESSOR***.

***lasioides****. Formica lasioides* Emery, 1893i: 664 (w.) U.S.A. Combination in *Proformica*: Emery, 1912f: 100; in *Formica (Proformica*): Wheeler, W.M. 1913f: 539; in *Formica*: Francoeur, 1973: 114. Subspecies of *fusca*: Wheeler, W.M. 1908g: 409; of *neogagates*: Wheeler, W.M. 1913f: 539. Revived status as species and senior synonym of *vetula*: Creighton, 1950a: 457.

*latebrosa* Walker, 1859; see under ***CAMPONOTUS***.

*lateralis* Olivier, 1792; see under ***CAMPONOTUS***.

\****latinodosa****. \*Formica latinodosa* Théobald, 1937b: 318, pl. 25, fig. 13 (m.) FRANCE (Oligocene).

*latipes* Walsh, 1863; see under ***ACANTHOMYOPS***.

*latreillei* Guérin-Méneville, 1838; see under ***POLYRHACHIS***.

*lauta* Say, 1836; see under ***CAMPONOTUS***.

\****lavateri****. \*Formica lavateri* Heer, 1849: 127, pl. 9, fig. 11 (q.) SWITZERLAND (Miocene). [Also described as new by Heer, 1850: 127.] Current subspecies: nominal plus \**major* (unresolved junior homonym).

*lecontei. Formica lecontei* Kennedy & Dennis, 1937: 542 (w.q.m.) U.S.A. Junior synonym of *fusca*: Creighton, 1950a: 532; of *subsericea*: Francoeur, 1973: 172.

*lefevrei* Wheeler, W.M. 1929; see under ***PROFORMICA***.

*lefrancoisi. Formica lefrancoisi* Bondroit, 1918: 54 (w.m.) FRANCE. Combination in *F. (Serviformica*): Emery, 1925b: 246. Subspecies of *cinerea*: Emery, 1925b: 246. Revived status as species: Kutter, 1977c: 253. Junior synonym of *cinerea*: Seifert, 1994: 38; of *fuscocinerea*: Seifert, 2002b: 256.

***lemani****. Formica lemani* Bondroit, 1917b: 186 (w.q.) FRANCE. Bondroit, 1920a: 145 (m.). Combination in *F. (Serviformica*): Emery, 1925b: 247. Subspecies of *fusca*: Müller, 1923: 139; Santschi, 1925g: 352; Novak & Sadil, 1941: 107. Revived status as species: Yarrow, 1954a: 231. Senior synonym of *borealis*: Dlussky, 1965a: 35. See also: Bernard, 1967: 295; Dlussky, 1967a: 60; Dlussky & Pisarski, 1971: 150; Kutter, 1977c: 251; Kupyanskaya, 1990: 184; Atanassov & Dlussky, 1992: 261; Seppä, *et al*. 2011: 31.

*leninei. Formica (Raptiformica) sanguinea* var. *leninei* Santschi, 1928b: 46. Replacement name for *clara* Karavaiev, 1927d: 345. [Junior primary homonym of *clara* Forel, 1886f: 206.] Junior synonym of *sanguinea*: Dlussky, 1965a: 16.

***lepida****. Formica cinerea* var. *lepida* Wheeler, W.M. 1913f: 399 (diagnosis in key) (w.) U.S.A. [*Formica cinerea* subsp. *cinerea* var. *lepida* Wheeler, W.M. 1913f: 526; unavailable name.] Wheeler, W.M. 1917a: 551 (q.). Subspecies of *cinerea*: Wheeler, W.M. 1917a: 551; Creighton, 1950a: 531. Raised to species: Francoeur, 1973: 122.

*leucophaea* Smith, F. 1861; see under ***CAMPONOTUS***.

*libera. Formica libera* Scopoli, 1763: 313 (w.) AUSTRIA. Junior synonym of *fusca*: Latreille, 1802a: 159.

*ligniperda* Latreille, 1802; see under ***CAMPONOTUS***.

\**lignitum* Germar, 1837; see under ***CAMPONOTUS***.

***limata****. Formica (Proformica) limata* Wheeler, W.M. 1913f: 541 (w.) U.S.A.

***lincecumii****. Formica lincecumii* Buckley, 1866: 163 (w.q.m.) U.S.A. **Unidentifiable taxon**; *incertae sedis* in Formicidae: Smith, D.R. 1979: 1467. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 197. See also: Emery, 1895c: 338; Wheeler, W.M. 1902f: 22.

\****linquensis****. \*Formica linquensis* Zhang, 1989: 287, figs. 287, 288 (m.) CHINA (Miocene).

***liogaster****. Formica liogaster* Chang & He, 2002a: 54, figs. 11, 12, 59 (w.) CHINA.

***liopthalma****. Formica liopthalma* Chang & He, 2002a: 52, figs. 13, 14, 51 (w.) CHINA.

***litoralis****. Formica rufibarbis* subsp. *litoralis* Kuznetsov-Ugamsky, 1926b: 100, figs. 13, 14 (w.) KAZAKHSTAN. Dlussky, 1965a: 29 (q.m.). Subspecies of *subpilosa*: Dlussky, 1965a: 29; Tarbinsky, 1976: 190. Raised to species: Seifert & Schultz, 2008: 80.

*lobata* De Geer, 1773; see under ***PACHYCONDYLA***.

*lochmatteri. Formica (Serviformica) picea* var. *lochmatteri* Stärcke, 1935: 265, fig. 4 (w.q.) CHINA/KASHMIR? Junior synonym of *picea* Nylander: Dlussky, 1965a: 31.

\**longaeva* Heer, 1849; see under ***LASIUS***.

*longiceps* Smith, F. 1863; see under ***CAMPONOTUS***.

*longiceps. Formica (Coptoformica) longiceps* Dlussky, 1964: 1036 (w.q.) MONGOLIA. [Junior primary homonym of *longiceps* Smith, F. 1863: 13, above.] Replacement name: *dlusskyi* Bolton, 1995b: 194. See also: Dlussky, 1965a: 19; Kupyanskaya, 1990: 202.

\****longicollis****. \*Formica longicollis* Heer, 1849: 115, pl. 11, fig. 1 (m.) SWITZERLAND (Miocene). [Also described as new by Heer, 1850: 115.]

*longicornis* Latreille, 1802; see under ***PARATRECHINA***.

*longinoda* Latreille, 1802; see under ***OECOPHYLLA***.

*longipedem* Eichwald, 1841; see under ***CATAGLYPHIS***.

\**longipennis* Heer, 1849; see under ***LASIUS***.

*longipes* Latreille, 1802; see under ***PHEIDOLE***.

*longipes* Jerdon, 1851; see under ***ANOPLOLEPIS***.

*longipes* Gerstäcker, 1859; see under ***CAMPONOTUS***.

***longipilosa****. Formica longipilosa* Francoeur, 1973: 125, figs. 208-214 (w.) U.S.A. Francoeur & Snelling, R.R. 1979: 4 (m.).

\****longiventris****. \*Formica longiventris* Heer, 1849: 123, pl. 9, fig. 6 (q.) CROATIA (Miocene). [Also described as new by Heer, 1850: 123.]

\****lucida****. \*Formica lucida* Giebel, 1856: 163 (q.) BALTIC AMBER (Eocene). [Mayr, 1868c: 19, suggests that this taxon should be transferred to family BRACONIDAE.]

*lucidula. Formica sanguinea* subsp. *rubicunda* var. *lucidula* Wheeler, W.M. 1913f: 390 (in key) (w.) U.S.A. **Unavailable name** (Bolton, 1995; 198).

*luctuosa* Smith, F. 1858; see under ***CAMPONOTUS***.

***lugubris****. Formica lugubris* Zetterstedt, 1838: 449 (m.) NORWAY. Junior synonym of *rufa*: Nylander, 1856b: 60; Emery & Forel, 1879: 450; Wheeler, W.M. 1913f: 425; Emery, 1925b: 253; Stitz, 1939: 328. Revived from synonymy and status as species: Yarrow, 1955a: 5; Betrem, 1960b: 77; Dlussky, 1967a: 91; Dlussky & Pisarski, 1971: 180; Baroni Urbani, 1971c: 218; Kutter, 1977c: 271; Gösswald, 1989: 19; Kupyanskaya, 1990: 198; Atanassov & Dlussky, 1992: 274. Senior synonym of *congerens*: Yarrow, 1955a: 5; Dlussky, 1967a: 91; Radchenko, 2007: 36; of *nylanderi, santschii*: Yarrow, 1955a: 5; of *montana* Sadil: Samsinak, 1964: 157; of *unicolor*: Dlussky, 1967a: 91; Dlussky & Pisarski, 1971: 180. Material of the unavailable name *tir* referred here by Yarrow, 1955a: 5.

*lusatica. Formica lusatica* Seifert, 1997b: 13, figs. 2, 6 (w.) GERMANY. Czechowski & Radchenko, 2006: 260 (m.). Junior synonym of *clara*: Seifert & Schultz, 2009: 263.

*lusitanica. Formica fusca* subsp. *pyrenaea* var. *lusitanica* Schmitz, 1950: 13 (w.) PORTUGAL. **Unavailable name** (Bolton, 1995b: 198).

*lutaria. Formica lutaria* Stephens, 1829: 357. *Nomen nudum*.

*lutea* Smith, F. 1858; see under ***CAMPONOTUS***.

***lutea****. Formica lutea* Duméril, 1860: 930 (w.q.m.) FRANCE. [**Unresolved junior primary homonym** of *lutea* Smith, F. 1858b: 19, above (Bolton, 1995b: 198).] **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 198.

\****luteola****. \*Formica luteola* Presl, 1822: 197 (no sex or caste indicated) BALTIC AMBER (Eocene).

*lutescens. Formica fusca* subsp. *pruinosa* var. *lutescens* Wheeler, W.M. 1917a: 549 (w.) U.S.A. **Unavailable name**; material referred to *neoclara* by Creighton, 1950a: 535.

*lutosa* Smith, F. 1858; see under ***DOLICHODERUS***.

*macra* Guérin-Méneville, 1831; see under ***OECOPHYLLA***.

*macrocephala* Erichson, 1842; see under ***CAMPONOTUS***.

\****macrocephala****. \*Formica macrocephala* Heer, 1849: 125, pl. 9, fig. 10 (q.) SWITZERLAND (Miocene). [Also described as new by Heer, 1850: 125.] [**Unresolved junior primary homonym** of *macrocephala* Erichson, 1842: 259, above (Bolton, 1995b: 198).]

\****macrognatha****. \*Formica macrognatha* Presl, 1822: 198 (no caste or sex given) BALTIC AMBER (Eocene).

\****macrophthalma****. \*Formica macrophthalma* Heer, 1849: 124, pl. 9, fig. 8 (q.) SWITZERLAND (Miocene). [Also described as new by Heer, 1850: 124.]

*maculata* Fabricius, 1782; see under ***CAMPONOTUS***.

***maculata****. Formica maculata* Geoffroy, in Fourcroy, 1785: 452 (w.?) FRANCE. [**Unresolved junior primary homonym** of *maculata* Fabricius, 1782: 491, above (Bolton, 1995b: 198).] **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 198.

\****maculipennis****. \*Formica maculipennis* Théobald, in Théobald & Piton, 1935: 91, pl. 5, fig. 1 (wing) FRANCE (Miocene).

*major. Formica nigra major* Retzius, 1783: 75 (w.) no locality given. **Unavailable name** (published as junior synonym; Bolton, 1995b: 198).

*major. Formica major* Nylander, 1849: 29 (w.) FINLAND. Junior synonym of *rufa*: Emery & Forel, 1879: 450. Revived from synonymy: Betrem, 1926: 213. Senior synonym of *piniphila*: Betrem, 1953: 325. Junior synonym of *rufa*: Yarrow, 1955a: 3; Betrem, 1960b: 76; Kutter, 1977c: 273; of *polyctena*: Radchenko, 2007: 37 (*major* is best regarded as a *nomen oblitum*, therefore *polyctena* takes priority).

\****major****. \*Formica lavateri* var. *major* Heer, 1867: 11, pl. 1, fig. 106 (q.) CROATIA (Miocene). [**Unresolved junior primary homonym** of *major* Nylander, 1849: 29, above (Bolton, 1995b: 198).]

*major. Formica rufa* subsp. *pratensis* var. *major* Gösswald, 1941: 78 (w.q.m.) GERMANY. **Unavailable name**; material referred to *rufa* by Dlussky, 1967a: 93.

***malabarica****. Formica malabarica* Schrank, 1837: 16 (w.) INDIA. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 198.

***maligna****. Formica maligna* Forskål, 1775: 84 (w.) EGYPT? **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 198. See also: Emery, 1892b: 160.

***manchu****. Formica (Coptoformica) exsecta* subsp. *manchu* Wheeler, W.M. 1929f: 10 (w.) CHINA. Raised to species and senior synonym of *dlusskyi*: Seifert, 2000a: 534.

***manni****. Formica manni* Wheeler, W.M. 1913f: 420 (w.q.) U.S.A. Combination in *F*. (*Raptiformica*): Emery, 1925b: 259.

*marcida. Formica fusca* var. *marcida* Wheeler, W.M. 1913f: 398 (in key) (w.q.) CANADA. [*Formica fusca* subsp. *fusca* var. *marcida* Wheeler, W.M. 1913f: 503; unavailable name.] Subspecies of *fusca*: Wheeler, W.M. 1917a: 546. Raised to species: Creighton, 1950a: 534. Junior synonym of *fusca*: Francoeur, 1973: 189.

*marginata* Latreille, 1798; see under ***CAMPONOTUS***.

\****martynovi****. \*Formica martynovi* Popov, 1933: 19, figs. 2, 3 (q.) RUSSIA. See also: Dlussky, 1981b: 75.

*masonia* Buckley, 1866; see under ***LIOMETOPUM***.

***maura****. Formica glebaria* var. *maura* Santschi, 1929e: 164 (w.q.) MOROCCO. Currently subspecies of *fusca*: Santschi, 1931a: 13.

*maxillosa* De Geer, 1773; see under ***ODONTOMACHUS***.

***maxillosa****. Formica maxillosa* Fabricius, 1775: 396 (w.) INDIA. [**Unresolved junior primary homonym** of *maxillosa* De Geer, 1773: 601, above (Bolton, 1995b: 198).] **Unidentifiable to genus**; *incertae* *sedis* in *Formica*: Bolton, 1995b: 198.

*maxima* Moore, 1842; see under ***MYRMECIA***.

*megacephala* Fabricius, 1793; see under ***PHEIDOLE***.

*megacephala* Leach, 1825; see under ***MESSOR***.

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

*megalocola* Foerster, 1850; see under ***CATAGLYPHIS***.

*melanocephala* Fabricius, 1793; see under ***TAPINOMA***.

*melanogastes* Latreille, 1802; see under ***CAMPONOTUS***.

***melanophthalma****. Formica melanophthalma* Reich, 1793: 132 (no sex or caste given) FRENCH GUIANA. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 198.

***melanopis****. Formica melanopis* Gmelin, in Linnaeus, 1790: 2804 (w.) EUROPE. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 198.

*melanotica. Formica rufa* subsp. *melanotica* Creighton, 1940a: 1, fig. 1 (w.q.m.) U.S.A. [First available use of *Formica rufa* subsp. *obscuriventris* var. *melanotica* Emery, 1893i: 650; unavailable name.] Junior synonym of *obscuripes*: Creighton, 1950a: 492.

*mellea* Say, 1836; see under ***CAMPONOTUS***.

*mellea* Provancher, 1881; see under ***LASIUS***.

*melligera* Llave, 1832; see under ***MYRMECOCYSTUS***.

*menozzii. Formica truncorum* var. *menozzii* Stitz, 1939: 347 (w.) GERMANY. [First available use of *Formica rufa* subsp. *truncicola* var. *menozzii* Krausse, 1926c: 336; unavailable name. Note: *truncicola* is misspelled *aruncicola* in this paper.] Junior synonym of *truncorum*: Dlussky, 1967a: 81.

*merdicola* Lund, 1831; see under ***CAMPONOTUS***.

*meridionalis. Formica rufa* var. *meridionalis* Nasonov, 1889: 17 (w.) RUSSIA. Subspecies of *rufa*: Ruzsky, 1905b: 330; Emery, 1909b: 186; Karavaiev, 1936: 244. Junior synonym of *rufa*: Yarrow, 1955a: 4; Dlussky & Pisarski, 1971: 184.

*meridionalis. Formica pallidefulva* subsp. *schaufussi* var. *meridionalis* Wheeler, W.M. 1904f: 370 (diagnosis in key) (w.) U.S.A. **Unavailable name** (Bolton, 1995b: 198).

*meridionalis* Bondroit, 1920 [*Formicina*]; see under ***LASIUS***.

*meritans* Walker, 1859; see under ***LEPTOGENYS***.

*merula* Losana, 1834; see under ***CAMPONOTUS***.

***mesasiatica****. Formica (Coptoformica) mesasiatica* Dlussky, 1964: 1030, figs. (w.q.m.) RUSSIA. Junior synonym of *fukaii*: Sonobe & Dlussky, 1977: 23. Revived status as species: Seifert, 2000a: 532. See also: Tarbinsky, 1976: 179.

*micans* Nylander, 1856; see under ***CAMPONOTUS***.

*microcephala* Panzer, 1798; see under ***LIOMETOPUM***.

***microgyna****. Formica microgyna* Wheeler, W.M. 1903e: 645, fig. 3 (w.q.m.) U.S.A. Senior synonym of *recidiva*: Creighton, 1950a: 504. See also: Wheeler, W.M. 1903f: 656; Wheeler, W.M. 1913f: 465; Letendre & Huot, 1972: 117.

*microgyna* Bondroit, 1918 [*Formicina*]; see under ***LASIUS***.

***microphthalma****. Formica microphthalma* Francoeur, 1973: 201, figs. 344-359 (w.m.) U.S.A.

*migratoria* De Geer, 1773; see under ***ATTA***.

*militaris* Fabricius, 1782; see under ***POLYRHACHIS***.

***miniocca****. Formica miniocca* Chang & He, 2002a: 49, 52, figs. 2, 3, 47 (w.) CHINA. [Spelled *miniocca* p. 49, *minocca* p. 52.]

*minor. Formica nigra minor* Retzius, 1783: 75 (w.) no locality given). **Unavailable name** (published as junior synonym; Bolton, 1995b: 198).

*minor. Formica rufibarbis* subsp. *montana* var. *minor* Kuznetsov-Ugamsky, 1926b: 100, fig. 12 (w.) KAZAKHSTAN. **Unavailable name**; material referred to *glauca* by Dlussky, 1967a: 74.

*minor. Formica minor* Gösswald, 1951: 436 (w.q.) GERMANY. [First available use of *Formica rufa* subsp. *pratensis* var. *minor* Gösswald, 1941: 78; unavailable name.] Junior synonym of *polyctena*: Betrem, 1960b: 64; Dlussky, 1967a: 93.

***minuta****. Formica minuta* Lowne, 1865b: 331 (w.) AUSTRALIA. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 198.

*minuta. Formica sanguinea* subsp. *monticola* var. *minuta* Kuznetsov-Ugamsky, 1926b: 95, figs. 5, 6 (w.) KAZAKHSTAN. **Unavailable name**; material referred to *sanguinea* by Dlussky, 1965a: 16.

\**minutula* Heer, 1849; see under ***LASIUS***.

*mistura* Smith, F. 1857; see under ***CAMPONOTUS***.

*mitis* Smith, F. 1858; see under ***CAMPONOTUS***.

*mixta* Nylander, 1846; see under ***LASIUS***.

***moki****. Formica moki* Wheeler, W.M. 1906d: 343 (w.) U.S.A. Cole, 1966: 25 (m.). Combination in *F. (Neoformica*): Wheeler, W.M. 1913f: 558. Junior synonym of *occidua*: Francoeur, 1973: 254. [Note that *moki* has seniority over *occidua* and hence is the valid name; see Smith, D.R. 1979: 1453.] See also: Smith, M.R. 1939f: 582.

***molestans****. Formica molestans* Latreille, 1802c: 241 (w.) FRENCH GUIANA. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 199.

*mollesonae. Formica sanguinea* var. *mollesonae* Ruzsky, 1903c: 206 (w.) RUSSIA. Junior synonym of *sanguinea*: Dlussky, 1965a: 16.

*mongolica* Emery, 1901; see under ***PROFORMICA***.

***montana****. Formica subpolita* var. *montana* Wheeler, W.M. 1910g: 571 (w.) U.S.A. [First available use of *Formica fusca* subsp. *subpolita* var. *montana* Emery, 1893i: 663; unavailable name.] Francoeur, 1973: 70 (q.m.); Hung, 1969: 455 (k.). Raised to species: Wheeler, W.M. 1913f: 529. Senior synonym of *neocinerea, rutilans*: Creighton, 1950a: 534; Francoeur, 1973: 67.

*montana. Formica rufibarbis* natio *montana* Kuznetsov-Ugamsky, 1923: 245 (w.) KAZAKHSTAN. [Junior primary homonym of *montana* Wheeler, W.M., above.] Replacement name: *montivaga* Santschi, 1928b: 45.

*montana. Formica rufa* var. *montana* Sadil, 1953b: 198, fig. 1 (q.) CZECHOSLOVAKIA. [**Unresolved junior primary homonym** of *montana* Wheeler, W.M., above.] Junior synonym of *lugubris*: Samsinak, 1964: 157.

***montaniformis****. Formica rufibarbis* var. *montaniformis* Kuznetsov-Ugamsky, 1929b: 39 (w.) DAGHESTAN. Junior synonym of *glauca*: Dlussky, 1967a: 74 (misspelled as *montanoides*). **Unidentifiable taxon**: Seifert & Schultz, 2009: 272.

*monticola* Buckley, 1866; see under ***LASIUS***.

*monticola. Formica sanguinea* subsp. *monticola* Kuznetsov-Ugamsky, 1926b: 95, figs. 3, 4 (w.) KAZAKHSTAN. [**Unresolved junior primary homonym** of *monticola* Buckley, 1866: 157, above.] Junior synonym of *sanguinea*: Dlussky, 1965a: 16.

*montigena. Formica montigena* Wheeler, W.M. 1904f: 374 (w.q.m.) U.S.A. Subspecies of *dakotensis*: Wheeler, W.M. 1913f: 463; Wheeler, G.C. & Wheeler, E.W. 1944: 260. Junior synonym of *dakotensis*: Brown, 1957f: 167.

***montivaga****. Formica (Serviformica) rufibarbis* st. *montivaga* Santschi, 1928b: 45. Replacement name for *montana* Kuznetsov-Ugamsky, 1923: 245. [Junior primary homonym of *montana* Wheeler, W.M. 1910g: 571.] Junior synonym of *glauca*: Dlussky, 1967a: 74. **Unidentifiable taxon**: Seifert & Schultz, 2009: 271.

*morbida. Formica (Proformica) neogagates* var. *morbida* Wheeler, W.M. 1913f: 400 (in key) (w.q.) U.S.A. [*Formica (Proformica) neogagates* subsp. *neogagates* var. *morbida* Wheeler, W.M. 1913f: 538; unavailable name.] Subspecies of *neogagates*: Buren, 1944a: 309. Junior synonym of *neogagates*: Creighton, 1950a: 459; of *bradleyi*: Wilson & Brown, 1955: 126.

*morbosa* Bondroit, 1918 [*Formicina*]; see under ***LASIUS***.

*morio. Formica morio* Latreille, 1798: 36 (w.) FRANCE. Junior synonym of *gagates*: Emery, 1925b: 248; Dlussky & Pisarski, 1971: 169.

*morosa* Smith, F. 1858; see under ***CAMPONOTUS***.

***morsei****. Formica morsei* Wheeler, W.M. 1906a: 39, pl. 4, fig. 1 (w.) U.S.A. See also: Wheeler, W.M. 1913f: 480.

***mucescens****. Formica truncicola* subsp. *mucescens* Wheeler, W.M. 1913f: 442 (w.q.m.) U.S.A. Subspecies of *rufa*: Creighton, 1940a: 3. Raised to species: Creighton, 1950a: 491.

*munda. Formica munda* Wheeler, W.M. 1905c: 267 (w.q.) U.S.A. Junior synonym of *obtusopilosa*: Emery, 1925b: 259; Creighton, 1950a: 465. See also: Wheeler, W.M. 1913f: 416.

*muralewiczi. Formica fusca* subsp. *gagates* var. *muralewiczi* Ruzsky, 1905b: 384 (w.) RUSSIA. **Unavailable name**; material referred to *gagates* by Emery, 1909b: 194; Karavaiev, 1927a: 301.

*mutilata* Smith, F. 1859; see under ***CAMPONOTUS***.

*nacerda* Norton, 1868; see under ***CAMPONOTUS***.

*naefi. Formica (Coptoformica) naefi* Kutter, 1957: 4, figs. 1-6 (w.q.m.) SWITZERLAND. Junior synonym of *foreli*: Seifert, 2000a: 543. See also: Kutter, 1977c: 285.

*nahua. Formica microgyna* subsp. *rasilis* var. *nahua* Wheeler, W.M. 1913f: 562 (w.q.m.) MEXICO. **Unavailable name** (Bolton, 1995b: 199).

***nana****. Formica nana* Latreille, 1802c: 263 (w.) FRENCH GUIANA. **Unidentifiable to genus**; *incertae sedis* in *Formica* [see note under *pusilla*]: Bolton, 1995b: 199.

*nana* Jerdon, 1851; see under ***TAPINOMA***.

*nana* Smith, F. 1858; see under ***CAMPONOTUS***.

*nasuta* Nylander, 1856; see under ***PROFORMICA***.

*natalensis* Smith, F. 1858; see under ***CAMPONOTUS***.

*nemoralis. Formica nemoralis* Dlussky, 1964: 1037 (w.m.) UKRAINE. Junior synonym of *forsslundi*: Dlussky, 1967a: 105; of *exsecta*: Seifert, 2000a: 526.

*neocinerea. Formica cinerea* var. *neocinerea* Wheeler, W.M. 1913f: 399 (in key) (w.q.m.) U.S.A. [*Formica cinerea* var. *neocinerea* Wheeler, W.M. 1910g: 571. *Nomen nudum*.] Subspecies of *cinerea*: Buren, 1944a: 301. Junior synonym of *montana*: Creighton, 1950a: 534.

***neoclara****. Formica fusca* var. *neoclara* Emery, 1893i: 661 (w.) U.S.A. Wheeler, W.M. 1913f: 509 (q.m.); Wheeler, G.C. & Wheeler, J. 1953c: 165 (l.). Combination in *F. (Serviformica*): Emery, 1925b: 248. Subspecies of *fusca*: Buren, 1944a: 301. Raised to species and material of the unavailable name *lutescens* referred here: Creighton, 1950a: 535. Senior synonym of *pruinosa*: Francoeur, 1973: 84.

***neogagates****. Formica fusca* var. *neogagates* Viereck, 1903: 74 (w.q.m.) U.S.A. [First available use of *Formica fusca* subsp. *subpolita* var. *neogagates* Emery, 1893i: 661; unavailable name.] Wheeler, G.C. & Wheeler, J. 1953c: 158 (l.). Combination in *F. (Proformica*): Wheeler, W.M. 1913f: 536. Subspecies of *subpolita*: Wheeler, W.M. 1908f: 625. Raised to species: Wheeler, W.M. 1913f: 536.

***neorufibarbis****. Formica fusca* var. *neorufibarbis* Emery, 1893i: 660 (w.) U.S.A. Forel, 1902i: 699 (q.); Wheeler, W.M. 1917a: 547 (m.); Wheeler, G.C. & Wheeler, J. 1953c: 165 (l.). Combination in *F. (Serviformica*): Emery, 1925b: 248. Subspecies of *fusca*: Wheeler, G.C. & Wheeler, E.W. 1944: 261. Raised to species: Creighton, 1950a: 537. Senior synonym of *algida, gelida*: Francoeur, 1973: 215.

***nepticula****. Formica nepticula* Wheeler, W.M. 1905c: 270 (w.q.m.) U.S.A. See also: Wheeler, W.M. 1913f: 475.

\**neutra* Heer, 1849; see under ***LASIUS***.

***nevadensis****. Formica microgyna* var. *nevadensis* Wheeler, W.M. 1904f: 373 (q.) U.S.A. Cole, 1956f: 256 (w.). Raised to species: Wheeler, W.M. 1905c: 272; Cole, 1956f: 257.

*nicaeensis. Formica nicaeensis* Leach, 1825: 291 (w.q.m.) FRANCE. Junior synonym of *rufibarbis*: Roger, 1863b: 13.

*nidulans* Smith, F. 1860; see under ***CAMPONOTUS***.

*nigerrima* Christ, 1791; see under ***LASIUS***.

*nigerrima* Nylander, 1856; see under ***TAPINOMA***.

*nigra* Linnaeus, 1758; see under ***LASIUS***.

\****nigra****. \*Formica nigra* Presl, 1822: 196, no caste or sex given, BALTIC AMBER (Eocene). [**Unresolved junior primary homonym** of *nigra* Linnaeus, 1758: 580, above (Bolton, 1995b: 199).]

*nigrata* Nylander, 1849; see under ***CAMPONOTUS***.

*nigricans. Formica pratensis* var. *nigricans* Bondroit, 1912: 352 (w.) SPAIN. [First available use of *Formica rufa* subsp. *pratensis* var. *nigricans* Emery, 1909b: 187; unavailable name.] Subspecies of *pratensis*: Novak & Sadil, 1941: 105; Boven, 1947: 189. Raised to species: Yarrow, 1955a: 4. Status as species: Betrem, 1960b: 77; Bernard, 1967: 314; Baroni Urbani, 1971c: 220; Paraschivescu, 1972: 534; Collingwood, 1979: 153. Senior synonym of *pratensoides, thyssei*: Yarrow, 1955a: 4; of *cordieri*: Betrem, 1962: 38; Kutter, 1965: 140. Junior synonym of *pratensis*: Dlussky, 1967a: 84; Dlussky & Pisarski, 1971: 177; Kutter, 1977c: 272; Seifert, 1992a: 225.

*nigriceps* Smith, F. 1858; see under ***CAMPONOTUS***.

*nigriventris* Guérin-Méneville, 1831; see under ***LEPTOMYRMEX***.

*nigriventris* Spinola, 1851; see under ***LASIOPHANES***.

*nigroaenea* Smith, F. 1858; see under ***CAMPONOTUS***.

***nigropratensis****. Formica nigropratensis* Betrem, 1962: 38 (w.) EUROPE. Material of the unavailable names *foreli, incisa* referred here by Betrem, 1962: 38.

*nipponensis. Formica fusca* var. *nipponensis* Forel, 1900e: 270 (w.) JAPAN. Forel, 1901h: 66 (q.). Subspecies of *fusca*: Ruzsky, 1925b: 44. Junior synonym of *japonica*: Emery, 1909b: 197; Karavaiev, 1927b: 111; Kuznetsov-Ugamsky, 1929a: 19.

***nitida****. Formica nitida* Razoumowsky, 1789: 427 (no caste or sex given) SWITZERLAND. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 198.

*nitida* Smith, F. 1859; see under ***CAMPONOTUS***.

*nitida* Lowne, 1865; see under ***CAMPONOTUS***.

*nitida* Norton, 1868; see under ***CAMPONOTUS***.

*nitidior* Forel, 1904; see under ***ALLOFORMICA***.

*nitidissima* André, 1896; see under ***PROLASIUS***.

*nitidiventris. Formica pallidefulva* subsp. *nitidiventris* Emery, 1893i: 656, pl. 22, figs. 13, 19 (w.q.m.) U.S.A. Wheeler, G.C. & Wheeler, J. 1953c: 159 (l.). Combination in *F. (Neoformica*): Wheeler, W.M. 1913f: 555. Raised to species: Francoeur, 1977b: 208. Senior synonym of *delicata, fuscata, incerta*: Creighton, 1950a: 551. Junior synonym of *pallidefulva*: Trager, MacGown & Trager, 2007: 625.

*nodosa* Latreille, 1802; see under ***GNAMPTOGENYS***.

*nodus* Brullé, 1833; see under ***CATAGLYPHIS***.

***nortonii****. Formica nortonii* Buckley, 1866: 153 (w.q.) U.S.A. **Unidentifiable to species**; *incertae* *sedis* in *Formica*: Wheeler, W.M. 1902f: 19; Bolton, 1995b: 198; *incertae sedis* in Formicinae: Smith, D.R. 1979: 1467.

***novaanglae****. Formica novaanglae* Buckley, 1866: 153 (w.q.) U.S.A. **Unidentifiable to species**; *incertae sedis* in *Formica*: Wheeler, W.M. 1902f: 19; Bolton, 1995b: 199; *incertae sedis* in Formicinae: Smith, D.R. 1979: 1467.

*novaki. Formica cinerea* var. *novaki* Kratochvil, in Novak & Sadil, 1941: 106 (w.q.) CZECHOSLOVAKIA. Junior synonym of *cinerea*: Seifert, 2002b: 251.

*noveboracensis* Fitch, 1854; see under ***CAMPONOTUS***.

*nuda* Bondroit, 1918 [*Formicina*]; see under ***LASIUS***.

***nuda****. Formica pratensis* subsp. *nuda* Ruzsky, 1926: 110 (w.) RUSSIA.

*nuda. Formica (Formica) rufa* var. *nuda* Karavaiev, 1930b: 148 (w.) SWEDEN. [**Unresolved junior primary homonym** of *nuda* Ruzsky, above.] Junior synonym of *rufa*: Karavaiev, 1936: 240; Yarrow, 1955a: 4; of *polyctena*: Dlussky, 1967a: 93; Dlussky & Pisarski, 1971: 187.

*nylanderi. Formica rufa* var. *nylanderi* Bondroit, 1920a: 145 (q.) FRANCE. [Also described as new by Bondroit, 1920b: 300.] Junior synonym of *lugubris*: Yarrow, 1955a: 5; Seifert, 1996: 200.

*obcordata. Formica obcordata* Schilling, 1830: 55, no caste given, no locality given. *Nomen nudum*.

\**obesa* Heer, 1849; see under ***OECOPHYLLA***.

\****oblita****. \*Formica oblita* Heer, 1867: 13, pl. 1, fig. 12 (q.) CROATIA.

\**obliterata* Heer, 1849; see under ***LASIUS***.

*oblonga* Smith, F. 1858; see under ***CAMPONOTUS***.

\**obscura* Heer, 1849; see under ***LASIUS***.

*obscura* Smith, F. 1858; see under ***DOLICHODERUS***.

*obscurans* Walker, 1859; see under ***PACHYCONDYLA***.

***obscurata****. Formica rufa* var. *obscurata* Santschi, 1925g: 351 (w.m.) FRANCE.

***obscuripes****. Formica rufa* r. *obscuripes* Forel, 1886b: xxxix (w.) U.S.A. Emery, 1893i: 650 (q.m.); Wheeler, G.C. & Wheeler, J. 1953c: 165 (l.); Hung, 1969: 456 (k.). Raised to species: Creighton, 1950a: 492. Senior synonym of *aggerans*: Forel, 1914c: 619; Creighton, 1940a: 1; of *melanotica*: Creighton, 1950a: 492. Material of the unavailable name *rubiginosa* referred here by Creighton, 1940a: 1. See also: Weber, 1935: 165.

***obscuriventris****. Formica truncicola* var. *obscuriventris* Mayr, 1870b: 951 (w.) U.S.A. Wheeler, W.M. 1913f: 446 (q.m.). Subspecies of *rufa*: Mayr, 1886d: 426; Emery, 1893i: 649; Wheeler, W.M. 1908g: 408; Creighton, 1940a: 1; of *truncicola*: Wheeler, W.M. 1913c: 116; Wheeler, W.M. 1913f: 445; Wheeler, W.M. 1917i: 464. Raised to species: Creighton, 1950a: 493. Senior synonym of *dryas*: Wheeler, W.M. 1913f: 446; of *gymnomma*: Creighton, 1950a: 493. Current subspecies: nominal plus *clivia*.

***obsidiana****. Formica (Serviformica) obsidiana* Emery, 1923: 61 (q.) TAIWAN.

***obsoleta****. Formica obsoleta* Linnaeus, 1758: 580 (w.) EUROPE. **Unidentifiable to genus**; *incertae* *sedis* in *Formica*: Bolton, 1995b: 200.

*obsoleta* Christ, 1791; see under ***CAMPONOTUS***.

\****obtecta****. \*Formica obtecta* Heer, 1849: 123, pl. 9, fig. 7 (q.) CROATIA (Miocene). [Also described as new by Heer, 1850: 123.]

*obtusa* Smith, F. 1858; see under ***CAMPONOTUS***.

***obtusopilosa****. Formica sanguinea* subsp. *obtusopilosa* Emery, 1893i: 648 (w.) U.S.A. Combination in *F. (Raptiformica*): Emery, 1925b: 259. Subspecies of *sanguinea*: Wheeler, W.M. 1901c: 713; Wheeler, W.M. 1913f: 414. Raised to species: Emery, 1925b: 259; Cole, 1942: 377. Senior synonym of *munda*: Emery, 1925b: 259; Creighton, 1950a: 465; of *alticola*: Wilson & Brown, 1955: 128.

\****obvoluta****. \*Formica obvoluta* Heer, 1849: 141, pl. 10, fig. 9 (m.) CROATIA (Miocene). [Also described as new by Heer, 1850: 141.]

***occidentalis****. Formica occidentalis* Buckley, 1866: 157 (w.q.m.) U.S.A. **Unidentifiable taxon**; *incertae sedis* in Formicinae: Smith, D.R. 1979: 1467; *incertae sedis* in *Formica*: Bolton, 1995b: 200. See also: Emery, 1895c: 337; Wheeler, W.M. 1902f: 20 (probably a *Lasius* species).

*occidentalis. Formica fusca* var. *occidentalis* Wheeler, W.M. 1908g: 409 (w.) U.S.A. *Nomen nudum. F. rufibarbis* var. *occidentalis* Wheeler, W.M. 1910g: 570. *Nomen nudum*. *F. rufibarbis* var. *occidua* Wheeler, W.M. 1912c: 90, unnecessary replacement name. *Nomen nudum*.

*occidua. Formica rufibarbis* var. *occidua* Wheeler, W.M. 1913f: 517 (w.q.) U.S.A. [*F. rufibarbis* var. *occidua* Wheeler, W.M. 1912c: 90. *Nomen nudum*.] Subspecies of *rufibarbis*: Creighton, 1950a: 539. Raised to species and stated as senior synonym of *moki*: Francoeur, 1973: 254 [the latter has priority and hence is the valid name: Smith, D.R. 1979: 1453].

***occulta****. Formica occulta* Francoeur, 1973: 94, figs. 132-147 (w.q.m.) U.S.A.

\**occultata* Heer, 1849; see under ***LASIUS***.

\****ocella****. \*Formica ocella* Heer, 1849: 133, pl. 10, fig. 5 (q.m.) CROATIA (Miocene). [Also described as new by Heer, 1850: 133.]

*ochracea. Formica (Serviformica) cinerea* var. *ochracea* Karavaiev, 1937: 177 (w.) UKRAINE. Junior synonym of *imitans*: Dlussky, 1967a: 65. See also comment in Seifert, 2002b: 267.

*octospinosa* Reich, 1793; see under ***ACROMYRMEX***.

\****oculata****. \*Formica oculata* Heer, 1849: 143, pl. 10, fig. 9 (m.) CROATIA (Miocene). [Also described as new by Heer, 1850: 143.] See also: Théobald, 1937b: 318.

*oculata* Smith, F. 1859; see under ***OPISTHOPSIS***.

*oculatissima* Forel, 1886; see under ***PROFORMICA***.

\**oeningensis* Heer, 1849; see under ***CAMPONOTUS***.

***omnivora****. Formica omnivora* Linnaeus, 1758: 581 (w.) U.S.A. **Unidentifiable to genus**; *incertae* *sedis* in *Formica*: Bolton, 1995b: 200. [Wheeler, W.M. 1908b: 160, gives a combination in *Monomorium* but there is no evidence that this is correct. See also note under *pusilla*.]

*opaca* Nylander, 1856; see under ***CAMPONOTUS***

*opacus. Formica opacus* Kupyanskaya, 1980: 106, figs. 21-25 (w.q.m.) RUSSIA. [Junior primary homonym of *opaca* Nylander, 1856b: 55, above.] Replacement name: *kupyanskayae* Bolton, 1995b: 197. See also: Kupyanskaya, 1990: 199.

***opaciventris****. Formica exsectoides* var. *opaciventris* Emery, 1893i: 653 (w.m.) U.S.A. Gregg, 1952b: 14 (q.). Subspecies of *exsectoides*: Wheeler, W.M. 1913f: 484. Raised to species: Creighton, 1950a: 514.

\****ophthalmica****. \*Formica ophthalmica* Heer, 1849: 125, pl. 9, fig. 9 (q.) CROATIA (Miocene). [Also described as new by Heer, 1850: 125.] See also: Mayr, 1867b: 52.

***orangea****. Formica orangea* Seifert & Schultz, 2009: 266, fig. 6 (w.) KYRGYZSTAN.

\****orbata****. \*Formica orbata* Heer, 1849: 141, pl. 11, fig. 8 (m.) SWITZERLAND (Miocene). [Also described as new by Heer, 1850: 141.]

***oreas****. Formica oreas* Wheeler, W.M. 1903e: 643, fig. 2 (w.q.m.) U.S.A. Current subspecies: nominal plus *comptula*. See also: Wheeler, W.M. 1913f: 458.

***oregonensis****. Formica oregonensis* Cole, 1938c: 368 (w.) U.S.A. Combination in *F. (Raptiformica*): Creighton, 1950a: 465. Junior synonym of *manni*: Wilson & Brown, 1955: 127. Revived from synonymy: Cole, 1956d: 212.

*orientalis. Formica fusca* subsp. *orientalis* Ruzsky, 1915a: 427, fig. 5 (w.) TIBET. Junior synonym of *picea* Nylander: Dlussky, 1965a: 31.

*orientalis. Formica rufibarbis* var. *orientalis* Wheeler, W.M. 1923b: 4 (w.) CHINA. [Junior primary homonym of *orientalis* Ruzsky, above.] Replacement name: *sinae* Emery, 1925b: 250.

*orites* Santschi, 1928; see under ***PROFORMICA***.

\****ovala****. \*Formica ovala* Zhang, 1989: 289, figs. 290, 291 (m.) CHINA (Miocene).

***ovata****. Formica ovata* Reich, 1793: 132 (w.) FRENCH GUIANA**.** **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 200.

*ovaticeps* Spinola, 1851; see under ***CAMPONOTUS***.

***pachucana****. Formica pachucana* Francoeur, 1973: 128, figs. 216-219 (w.q.) MEXICO.

***pacifica****. Formica pacifica* Francoeur, 1973: 131, figs. 190-197 (w.q.) U.S.A.

*\*****palaeopolonica****. \*Formica palaeopolonica* Dlussky, 2008a: 54, fig. 4c (w.) BALTIC AMBER.

*pallens* Le Guillou, 1842; see under ***CAMPONOTUS***.

*pallens* Nylander, 1849; see under ***CAMPONOTUS***.

*pallescens* Schenck, 1852; see under ***LASIUS***.

*pallida* Latreille, 1798; see under ***LASIUS***.

*pallida* Smith, F. 1857; see under ***CAMPONOTUS***.

***pallidefulva****. Formica pallidefulva* Latreille, 1802c: 174 (w.) U.S.A. Mayr, 1866b: 889 (q.); Emery, 1893i: 657 (m.). Combination in *F. (Neoformica*): Wheeler, W.M. 1913a: 82. Senior synonym of *succinea*: Creighton, 1950a: 550; of *nitidiventris, schaufussi*: Trager, MacGown & Trager, 2007: 624. See also: Wheeler, W.M. 1913f: 548.

***pallidelutea****. Formica pallidelutea* Latreille, 1802c: 241 (w.) SENEGAL. Possible combination in *Pheidole*: Roger, 1863b: 30. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 200.

*pallidinervis* Brullé, 1833; see under ***CAMPONOTUS***.

***pallipes****. Formica pallipes* Latreille, 1787: 309 (m.) FRENCH GUIANA. [Misspelled as *pallidipes* by Dalla Torre, 1893: 40.] **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 200.

*pallipes. Formica fusca* var. *pallipes* Kuznetsov-Ugamsky, 1926b: 97 (w.) KAZAKHSTAN. [**Unresolved junior primary homonym** of *pallipes* Latreille, above.] Junior synonym of *fusca*: Dlussky, 1967a: 58; Tarbinsky, 1976: 180.

*pallitarsis* Provancher, 1881; see under ***LASIUS***.

***pamirica****. Formica subpilosa* subsp. *pamirica* Dlussky, 1965a: 30 (w.q.) TURKMENIA. Raised to species: Seifert & Schultz, 2008: 81. See also: Tarbinsky, 1976: 190.

*pangens* Walker, 1859; see under ***ANOCHETUS***.

***paralugubris****. Formica paralugubris* Seifert, 1996a: 199, figs. 4, 5 (w.q.) SWITZERLAND.

*parcipappa. Formica parcipappa* Cole, 1947: 616 (w.) U.S.A. Combination in *F. (Serviformica)*: Buren, 1968a: 32. Junior synonym of *curiosa*: Snelling, R.R. 1969b: 194.

\**parschlugiana* Heer, 1849; see under ***LASIUS***.

*parva* Buckley, 1866; see under ***TAPINOMA***.

\****parvula****. \*Formica parvula* Presl, 1822: 196 (no caste or sex given) BALTIC AMBER (Eocene).

\**parvula. \*Formica parvula* Dlussky, 1967b: 83, fig. 1 (m.) BALTIC AMBER (Eocene). [Unresolved junior primary homonym of \**parvula* Presl, above (Bolton, 1995b: 200).] Junior synonym of \**flori*: Dlussky, 2002a: 292. Replacement name: \**egecomerta* Özdikmen, 2010c: 988. Name proposed subsequent to Dlussky, 2002a synonymy, hence \**egecomerta* automatically a junior synonym of \**flori*.

*pavida* Smith, F. 1860; see under ***CAMPONOTUS***.

***pediculus****. Formica pediculus* Christ, 1791: 518 (w.) no locality given. [According to Emery, 1892b: 162, this is a termite, Order ISOPTERA].

*pensylvanica* De Geer, 1773; see under ***CAMPONOTUS***.

*perditor* Fabricius, 1804; see under ***DOLICHODERUS***.

***pergandei****. Formica pergandei* Emery, 1893i: 646, pl. 22, fig. 1 (w.) U.S.A. Combination in *F*. (*Raptiformica*): Emery, 1925b: 259. Junior synonym of *subintegra*: Wilson & Brown, 1955: 120. Revived from synonymy and senior synonym of *sublucida*: Buren, 1968a: 28. See also: Snelling, R.R. & Buren, 1985: 72.

*perminuta* Buckley, 1866; see under ***NYLANDERIA***.

*perniciosa. Formica perniciosa* Christ, 1791: 517 (no caste given) GUINEA. *Nomen nudum*.

***perpilosa****. Formica perpilosa* Wheeler, W.M. 1913f: 421 (w.q.m.) U.S.A. [First available use of *Formica fusca* subsp. *subpolita* var. *perpilosa* Wheeler, W.M. 1902b: 141; unavailable name.] Combination in *F. (Raptiformica)*: Emery, 1925b: 259.

***persica****. Formica persica* Seifert & Schultz, 2009: 268, fig. 10 (w.) IRAN.

\****phaethusa****. \*Formica phaethusa* Wheeler, W.M. 1915h: 126, fig. 60 (w.) BALTIC AMBER (Eocene). Senior synonym of \**clymene*: Dlussky, 2008a: 52. See also: Dlussky, 1967b: 80.

*pharaonis* Linnaeus, 1758; see under ***MONOMORIUM***.

***phyllophila****. Formica phyllophila* Jerdon, 1851: 125 (w.) INDIA. **Unidentifiable to genus**; *incertae* *sedis* in *Formica*: Bolton, 1995b: 201.

*picea* Leach, 1825; see under ***CAMPONOTUS***.

***picea****. Formica picea* Nylander, 1846a: 917 (w.q.) FINLAND. [Junior primary homonym of *picea* Leach, 1825: 292, above.] First available replacement name: *candida* Smith, F. 1878b: 11; designated by Bolton, 1995b: 201. Forel, 1914b: 1 (m.). Junior synonym of *gagates*: Nylander, 1856b: 65; Smith, F. 1858b: 6; Dalla Torre, 1893: 198. Revived from synonymy as subspecies of *fusca*: Emery, 1909b: 195. Revived status as species: Bondroit, 1912: 352. Subspecies of *fusca*: Kuznetsov-Ugamsky, 1929a: 19. Status as species: Emery, 1916b: 254; Emery, 1925b: 249; Karavaiev, 1929b: 213; Karavaiev, 1936: 231; Dlussky, 1965a: 31; Dlussky, 1967a: 61; Dlussky & Pisarski, 1971: 153; Pisarski, 1975: 42; Tarbinsky, 1976: 183; Kutter, 1977c: 250; Kupyanskaya, 1990: 186. Senior synonym of *candida*: Emery, 1925b: 249; Karavaiev, 1936: 231; Dlussky, 1967a: 61; of *glabra* White: Donisthorpe, 1918a: 9; Dlussky, 1967a: 61; of *transkaucasica*: Emery, 1909b: 195; Donisthorpe, 1918a: 9; Karavaiev, 1936: 231; Dlussky, 1965a: 31; Dlussky, 1967a: 61; of *inplana, lochmatteri, orientalis*: Dlussky, 1965: 31; of *piceoinplana*: Dlussky, 1967a: 61. Material of the following unavailable names referred here: *filchneri* by Emery, 1909b: 195; *piceoorientalis* by Dlussky, 1965a: 31; *transcaucasicogagates* by Dlussky, 1967a: 61. Returned to valid species with *picea* as retained name: Seifert, 2004: 31. See also: Radchenko, 2007: 35.

*picea* Buckley, 1866; see under ***NYLANDERIA***.

*picea. Formica lasioides* var. *picea* Emery, 1895c: 335 (w.) U.S.A. [Junior primary homonym of *picea* Leach, 1825: 292, above.] Replacement name: *vetula* Wheeler, W.M. 1912c: 90.

*piceogagates. Formica fusca* subsp. *picea* var. *piceogagates* Ruzsky, 1915a: 427 (w.) RUSSIA. **Unavailable name** (Bolton, 1995b: 201).

*piceogagates. Formica (Serviformica) gagates* var. *piceogagates* Karavaiev, 1926e: 197 (w.q.) RUSSIA. Junior synonym of *transkaucasica*: Arakelian, 1994: 102.

*piceoinplana. Formica (Serviformica) picea* var. *piceoinplana* Emery, 1925b: 249 (w.) CHINA. [First available use of *Formica fusca* subsp. *picea* var. *piceoinplana* Ruzsky, 1915a: 426; unavailable name.] Junior synonym of *picea* Nylander: Dlussky, 1967a: 61.

*piceoorientalis. Formica fusca* subsp. *orientalis* var. *piceoorientalis* Ruzsky, 1915a: 427, fig. 6 (w.) TIBET. **Unavailable name**; material referred to *picea* Nylander by Dlussky, 1965a: 31.

*picipes* Olivier, 1792; see under ***CAMPONOTUS***.

***picipes****. Formica picipes* Reich, 1793: 132 (no caste given) FRENCH GUIANA. [**Unresolved junior primary homonym** of *picipes* Olivier, 1792: 501, above (Bolton, 1995b: 201).] **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 201.

*pilicornis* Roger, 1859; see under ***CAMPONOTUS***.

*pilicornis. Formica pilicornis* Emery, 1893i: 664 (w.q.m.) U.S.A. [Junior primary homonym of *pilicornis* Roger, 1859: 228, above.] Replacement name: *francoeuri* Bolton, 1995b: 195. Subspecies of *cinerea*: Wheeler, W.M. 1913f: 527. Revived status as species: Creighton, 1950a: 538. See also: Francoeur, 1973: 74.

*piligera. Formica rufibarbis* var. *piligera* Lomnicki, 1925a: 175 (w.q.) POLAND. Junior synonym of *rufibarbis*: Lomnicki, 1928: 9; Dlussky & Pisarski, 1971: 163.

*piliventris* Smith, F. 1858; see under ***CAMPONOTUS***.

*pilosa* Olivier, 1792; see under ***CAMPONOTUS***.

*pilosa* Smith, F. 1857; see under ***CAMPONOTUS***.

*pinetorum. Formica microgyna* subsp. *rasilis* var. *pinetorum* Wheeler, W.M. 1917a: 542 (w.) U.S.A. **Unavailable name**; material referred to *spicata* by Creighton, 1950a: 507.

\**pinguicula* Heer, 1849; see under ***CAMPONOTUS***.

\**pinguis* Heer, 1849; see under ***CAMPONOTUS***.

*piniphila. Formica piniphila* Schenck, 1852: 28 (w.q.m.) GERMANY. Junior synonym of *rufa*: Mayr, 1855: 328; Emery & Forel, 1879: 450; Dalla Torre, 1893: 208. Revived from synonymy as subspecies of *rufa*: Forel, 1915d: 57. Revived status as species: Bondroit, 1918: 57. Subspecies of *rufa*: Emery, 1925b: 253; Stitz, 1939: 338. Junior synonym of *major*: Betrem, 1953: 325; of *rufa*: Yarrow, 1955a: 4; Betrem, 1960b: 76; Dlussky, 1967a: 93; Bernard, 1967: 308; Kutter, 1977c: 273.

***pisarskii****. Formica (Coptoformica) pisarskii* Dlussky, 1964: 1034, figs. (w.q.) MONGOLIA. See also: Kupyanskaya, 1990: 204; Seifert, 2000a: 551.

\****pitoni****. \*Formica pitoni* Théobald, in Piton & Théobald, 1935: 82, pl. 5, fig. 11 (q.?) FRANCE.

*placida* Smith, F. 1858; see under ***CAMPONOTUS***.

***planipilis****. Formica rufa* subsp. *planipilis* Creighton, 1940a: 9, fig. 1 (w.) U.S.A. Cole, 1956f: 259 (q.). Subspecies of *integroides*: Creighton, 1950a: 490. Raised to species: Cole, 1956f: 259.

*platygnatha* Roger, 1863; see under ***CREMATOGASTER***.

***podzolica****. Formica podzolica* Francoeur, 1973: 162, figs. 272-287 (w.q.m.) CANADA. Junior synonym of *subsericea*: Wheeler, G.C. & Wheeler, J. 1986g: 92. Revived from synonymy: Bolton, 1995b: 201.

***politurata****. Formica politurata* Buckley, 1866: 160 (w.) U.S.A. **Unidentifiable taxon**; *incertae sedis* in Formicinae: Smith, D.R. 1979: 1467. **Unidentifiable to species**; *incertae sedis* in *Formica*: Bolton, 1995b: 200. See also: Emery, 1895c: 338; Wheeler, W.M. 1902f: 21.

***polyctena****. Formica polyctena* Foerster, 1850a: 15 (w.q.m.) GERMANY. Junior synonym of *rufa*: Nylander, 1856b: 60; Emery & Forel, 1879: 450; Dalla Torre, 1893: 208; Yarrow, 1955a: 3. Subspecies of *rufa*: Forel, 1915d: 58; Emery, 1925b: 253; Stitz, 1939: 339; Boven, 1947: 189. Status as species: Bondroit, 1917a: 174; Müller, 1923: 144; Betrem, 1926: 212; Betrem, 1960b: 64; Dlussky, 1967a: 93; Dlussky & Pisarski, 1971: 187; Kutter, 1977c: 272; Collingwood, 1979: 144. Senior synonym of *minor*: Betrem, 1960b: 64; Dlussky, 1967a: 93; of *nuda*: Dlussky, 1967a: 93; Dlussky & Pisarski, 1971: 187; of *major*: Radchenko, 2007: 37 (*major* is best regarded as a *nomen oblitum*, therefore *polyctena* takes priority). See also: Mabelis, 1979: 451; Gösswald, 1989: 18; Atanassov & Dlussky, 1992: 279; Czechowski & Douwes, 1996: 125.

***postoculata****. Formica postoculata* Kennedy & Dennis, 1937: 540, figs. 16-18 (w.) U.S.A.

***pratensis****. Formica pratensis* Retzius, 1783: 75 (w.) no locality given. Forel, 1874: 52 (q.m.). Subspecies of *rufa*: Forel, 1874: 52; Forel, 1892i: 307; Ruzsky, 1905b: 337; Emery, 1909b: 186; Wheeler, W.M. 1913f: 428; Forel, 1915d: 57; Emery, 1916b: 256; Emery, 1925b: 254; Ruzsky, 1925b: 43; Karavaiev, 1929b: 217; Stitz, 1939: 341; Gösswald, 1941: 81; Holgersen, 1942: 13. Status as species: André, 1882b: 184; Nasonov, 1889: 17; Ruzsky, 1902d: 10; Bondroit, 1912: 352; Donisthorpe, 1915d: 267; Bondroit, 1917a: 174; Müller, 1923: 142; Ruzsky, 1926: 110; Novak & Sadil, 1941: 105; Boven, 1947: 188; Yarrow, 1955a: 4; Kutter, 1965: 140; Dlussky, 1967a: 84; Dlussky & Pisarski, 1971: 177; Tarbinsky, 1976: 194; Kutter, 1977c: 272; Collingwood, 1979: 152; Gösswald, 1989: 19; Atanassov & Dlussky, 1992: 272; Seifert, 1992a: 225. Senior synonym of *nigricans* (and its junior synonyms *cordieri, pratensoides, thyssei*): Dlussky, 1967a: 84; Kutter, 1977c: 272; Seifert, 1992a: 225; of *ciliata*: Dlussky & Pisarski, 1971: 177; Seifert, 1992a: 225; of *grouvellei*: Seifert, 1996a: 200. Current subspecies: nominal plus *nuda, staerckei*.

*pratensoides. Formica minor* subsp. *pratensoides* Gösswald, 1951: 436 (w.q.m.) GERMANY. Junior synonym of *nigricans*: Yarrow, 1955a: 4. [Revived from synonymy: Gösswald, 1989: 20; returned to synonymy: Bolton, 1995b: 201.]

***pressilabris****. Formica pressilabris* Nylander, 1846a: 911, pl. 18, fig. 21 (w.q.m.) FINLAND. Combination in *F. (Coptoformica*): Müller, 1923: 146. Subspecies of *exsecta*: Forel, 1874: 51; Emery & Forel, 1879: 450; Ruzsky, 1904b: 5; Emery, 1909b: 191; Wheeler, W.M. 1913f: 491; Forel, 1915d: 59; Emery, 1916b: 257; Ruzsky, 1925b: 43; Emery, 1925b: 257; Karavaiev, 1929b: 217; Karavaiev, 1936: 255; Stitz, 1939: 312. Status as species: André, 1882b: 179; Ruzsky, 1895: 12; Bondroit, 1912: 352; Bondroit, 1918: 64; Kutter, 1957: 11; Bernard, 1967: 324; Dlussky, 1964: 1032; Dlussky, 1967a: 103; Dlussky & Pisarski, 1971: 201; Kutter, 1977c: 285; Collingwood, 1979: 132; Atanassov & Dlussky, 1992: 285; Seifert, 2000a: 541. Senior synonym of *rufomaculata*: Seifert, 2000a: 541. See also: Radchenko, 2007: 36.

\****primitiva****. \*Formica primitiva* Heer, 1849: 139, pl. 11, fig. 6 (m.) SWITZERLAND (Miocene). [Also described as new by Heer, 1850: 139.]

\****primordialis****. \*Formica primordialis* Heer, 1849: 120, pl. 9, fig. 3 (q.) SWITZERLAND (Miocene). [Also described as new by Heer, 1850: 120.]

\****procera****. \*Formica procera* Heer, 1849: 111, pl. 8, fig. 5 (q.) SWITZERLAND (Miocene). [Also described as new by Heer, 1850: 111.]

*procidua* Erichson, 1842; see under ***ANONYCHOMYRMA***.

***prociliata****. Formica prociliata* Kennedy & Dennis, 1937: 531, figs. 1-9 (w.q.m.) U.S.A.

\**proformicoides* Dlussky, 1967; see under \****PROTOFORMICA***.

***propatula****. Formica propatula* Francoeur, 1973: 101, figs. 150-165 (w.q.m.) MEXICO.

***propinqua****. Formica rufa* subsp. *propinqua* Creighton, 1940a: 1, fig. 1 (w.) U.S.A. [First available use of *Formica truncicola* subsp. *integroides* var. *propinqua* Wheeler, W.M. 1917a: 538; unavailable name.] Cole, 1956f: 257 (q.m.). Subspecies of *integroides*: Creighton, 1950a: 490. Raised to species: Wheeler, G.C. & Wheeler, J. 1986g: 85; Mackay, Lowrie, *et al*. 1988: 112 (in key).

*pruinosa. Formica fusca* subsp. *pruinosa* Wheeler, W.M. 1917a: 548 (w.q.m.) U.S.A. Raised to species: Creighton, 1950a: 538. Junior synonym of *neoclara*: Francoeur, 1973: 84.

***puberula****. Formica sanguinea* subsp. *puberula* Emery, 1893i: 648 (w.) U.S.A. Wheeler, W.M. 1913f: 413 (q.m.). Combination in *F. (Raptiformica*): Emery, 1925b: 260. Raised to species: Creighton, 1950a: 468. Junior synonym of *subintegra*: Wilson & Brown, 1955: 120. Revived from synonymy: Buren, 1968a: 30.

*pubescens* Fabricius, 1775; see under ***CAMPONOTUS***.

*pubescens* Brullé, 1840; see under ***CAMPONOTUS***.

\****pulchella****. \*Formica pulchella* Heer, 1849: 142, pl. 11, fig. 9 (m.) SWITZERLAND (Miocene). [Also described as new by Heer, 1850: 142.]

***pulla****. Formica pulla* Francoeur, 1973: 80, figs. 107-113 (w.q.) MEXICO.

*pullula. Formica microgyna* subsp. *rasilis* var. *pullula* Wheeler, W.M. 1913f: 562 (w.q.) U.S.A. **Unavailable name**; material referred to *whymperi* by Creighton, 1950a: 509.

\****pumila****. \*Formica pumila* Heer, 1849: 137, pl. 11, fig. 5 (q.m.) CROATIA (Miocene). [Also described as new by Heer, 1850: 137.]

*purpurea* Smith, F. 1858; see under ***IRIDOMYRMEX***.

*purpurescens* Lowne, 1865; see under ***ANONYCHOMYRMA***.

***pusilla****. Formica pusilla* De Geer, 1773: 612, pl. 31, figs. 23, 24 (w.) SURINAM. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 202. [Latreille, 1802c: 263, gives *pusilla* as a senior synonym of *nana* Latreille, but the latter is also unrecognisable. Similarly Retzius, 1783: 76, gives *pusilla* as a junior synonym of *omnivora*, another unidentifiable name.]

*pygmaea* Latreille, 1798; see under ***PLAGIOLEPIS***.

***pyrenaea****. Formica pyrenaea* Bondroit, 1918: 52 (w.) FRANCE. Subspecies of *fusca*: Schmitz, 1950: 13. Possible junior synonym of *subrufa*: Bernard, 1967: 301. Revived status as species: Collingwood & Yarrow, 1969: 88; Collingwood, 1978: 73.

*pyrrhocephala* Motschoulsky, 1863; see under ***CAMPONOTUS***.

\****quadrata****. \*Formica quadrata* Holl, 1829: 140 (no caste given) BALTIC AMBER (Eocene).

*quadriceps* Smith, F. 1859; see under ***CAMPONOTUS***.

*quadridens* De Geer, 1773; see under ***CEPHALOTES***.

*quadridens* Fabricius, 1793; see under ***ECTATOMMA***.

*quadridenticulata* Roger, 1862; see under ***DOLICHODERUS***.

***quadrinotata****. Formica quadrinotata* Losana, 1834: 320, pl. 36, fig. 4 (w.) ITALY. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 202. [Mayr, 1855: 389 (footnote) suggests a combination in *Ponera*. Emery, 1916b: 105, suspected that this was synonymous with *Cryptopone ochracea*, but the description is not convincing.]

*quadripunctata* Linnaeus, 1771; see under ***DOLICHODERUS***.

*quadrisecta* Smith, F. 1858; see under ***CAMPONOTUS***.

***querquetulana****. Formica querquetulana* Kennedy & Dennis, 1937: 536, figs. 10-15 (w.q.) U.S.A.

*rabaudi* Bondroit, 1917 [*Formicina*]; see under ***LASIUS***.

*\*****radchenkoi****. \*Formica radchenkoi* Dlussky, 2008a: 55, figs. 4d-g (w.) ROVNO AMBER.

*rapax* Fabricius, 1804; see under ***CAMPONOTUS***.

*rasilis. Formica microgyna* var. *rasilis* Wheeler, W.M. 1903e: 648 (w.q.m.) U.S.A. Subspecies of *microgyna*: Wheeler, W.M. 1913f: 468. Raised to species: Creighton, 1950a: 506. Junior synonym of *densiventris*: Mackay, Lowrie, *et al*. 1988: 114.

*rastellata* Latreille, 1802; see under ***POLYRHACHIS***.

***ravida****. Formica rufa* subsp. *ravida* Creighton, 1940a: 1, fig. 1 (w.q.m.) U.S.A. [First available use of *Formica truncicola* subsp. *integroides* var. *ravida* Wheeler, W.M. 1913f: 560; unavailable name.] Subspecies of *obscuripes*: Creighton, 1950a: 493. Junior synonym of *haemorrhoidalis* Creighton: Brown, 1965d: 181. [*F. haemorrhoidalis* Creighton, 1940a: 1, junior primary homonym of *F. haemorrhoidalis* Latreille, 1802c: 276.] *F. ravida* designated as first available replacement name and senior synonym of *tahoensis*: Bolton, 1995b: 202.

*recidiva. Formica microgyna* var. *recidiva* Wheeler, W.M. 1913f: 395 (in key) (w.) U.S.A. [*Formica microgyna* subsp. *microgyna* var. *recidiva* Wheeler, W.M. 1913f: 467 (w.m.); unavailable name.] Subspecies of *microgyna*: Wheeler, W.M. 1917a: 542. Junior synonym of *microgyna*: Creighton, 1950a: 504.

***rediana****. Formica rediana* Leach, 1825: 291 (w.q.m.) FRANCE. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 202.

\**redtenbacheri* Heer, 1849; see under ***LASIUS***.

***reflexa****. Formica reflexa* Buren, 1942: 399 (w.q.m.) U.S.A.

*relucens* Latreille, 1802; see under ***POLYRHACHIS***.

*respiciens* Smith, F. 1865; see under ***OPISTHOPSIS***.

***retecta****. Formica retecta* Francoeur, 1973: 245, figs. 405-408 (w.q.) MEXICO.

*rizadaghi. Formica (Serviformica) rizadaghi* Arnol'di, 1968: 1819, figs. 19, 20 (w.q.) TURKMENIA. Junior synonym of *clara*: Dlussky, Soyunov & Zabelin, 1990: 139.

\****robusta****. \*Formica robusta* Carpenter, 1930: 56, pl. 6, fig. 6; pl. 7, fig. 6 (q.m.) U.S.A. (Oligocene).

***robusta****. Formica robusta* Chang & He, 2002a: 53, figs. 18, 19, 54 (w.) CHINA. **Unresolved junior primary homonym** of \**robusta* Carpenter, above.

***rostrata****. Formica rostrata* Fabricius, 1787: 310 (w.) FRENCH GUIANA. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 202.

*rotundata. Formica sanguinea* var. *rotundata* Kuznetsov-Ugamsky, 1926b: 95, fig. 2 (w.) KAZAKHSTAN. Raised to species: Dlussky, 1962: 182. Junior synonym of *sanguinea*: Dlussky, 1965a: 16.

*rubens. Formica exsecta* var. *rubens* Forel, 1874: 51 (w.) SWITZERLAND. Raised to species: Bondroit, 1918: 62. Subspecies of *exsecta*: Ruzsky, 1925b: 43; Emery, 1925b: 257. Junior synonym of *exsecta*: Dlussky, 1964: 1027.

***rubescens****. Formica rubescens* Leach, 1825: 289 (w.q.m.) FRANCE. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 202.

*rubescens. Formica fusca* var. *rubescens* Forel, 1904f: 423 (w.) SWITZERLAND. [**Unresolved junior primary homonym** of *rubescens* Leach, above.] Emery, 1909b: 196 (q.); Wheeler, W.M. 1913f: 498 (m.). Subspecies of *glebaria*: Bondroit, 1918: 50; Boven, 1947: 188. Junior synonym of *cunicularia*: Yarrow, 1954a: 231; Dlussky, 1967a: 73; Bernard, 1967: 296; Seifert & Schultz, 2009: 261.

***rubicunda****. Formica sanguinea* subsp. *rubicunda* Emery, 1893i: 647, pl. 22, fig. 2 (w.q.) U.S.A. Wheeler, W.M. 1913f: 407 (m.). Combination in *F. (Raptiformica*): Emery, 1925b: 260. Raised to species: Creighton, 1950a: 468. Junior synonym of *subintegra*: Wilson & Brown, 1955: 120. Revived from synonymy: Buren, 1968a: 30.

*rubida* Latreille, 1802; see under ***MANICA***.

*rubiginosa* Latreille, 1802; see under ***LASIUS***.

*rubiginosa* Le Guillou, 1842; see under ***POLYRHACHIS***.

*rubiginosa. Formica rufa* subsp. *obscuriventris* var. *rubiginosa* Emery, 1893i: 650 (w.q.) U.S.A. **Unavailable name**; material referred to *obscuripes* by Creighton, 1940a: 1.

*rubra* Linnaeus, 1758; see under ***MYRMICA***.

*rubripes* Latreille, 1802; see under ***CAMPONOTUS***.

***rufa****. Formica rufa* Linnaeus, 1761: 426 (q.m.) EUROPE. [Not Linnaeus, 1758: 580 (w.); see Yarrow, 1954b: 313; Yarrow, 1955a: 5.] Latreille, 1802c: 143 (w.q.m.); Wheeler, G.C. & Wheeler, J. 1953c: 166 (l.). Senior synonym of *apicalis*: Roger, 1862c: 287; of *dorsata*: Stephens, 1829: 357; Nylander, 1846a: 902; of *ferruginea*: Emery, 1892b: 161; of *gaullei*: Yarrow, 1955a: 4; Bernard, 1967: 308; of *major*: Emery & Forel, 1879: 450; Yarrow, 1955a: 3; Dlussky, 1967a: 93; of *meridionalis*: Yarrow, 1955a: 4; Dlussky & Pisarski, 1971: 184; of *piniphila*: Mayr, 1855: 328; Yarrow, 1955a: 4; Betrem, 1960b: 76; of *rufopratensis*: Karavaiev, 1936: 240; Dlussky, 1967a: 93. Material of the unavailable names *bondroiti, emeryi* referred here by Yarrow, 1955a: 4; of *major* Gösswald by Dlussky, 1967a: 93. Current subspecies: nominal plus *angusticeps, brevisetosa, constricta, obscurata, rufobrevisetosa, rufopratensoides, tshugunovi*. See also: Wheeler, W.M. 1913f: 425; Donisthorpe, 1915d: 245; Yarrow, 1955a: 3; Dlussky, 1967a: 93; Kutter, 1977c: 273; Collingwood, 1979: 141; Douwes, 1979: 187; Douwes, 1981: 213; Pavan, 1981: 1; Gösswald, 1989: 16; Atanassov & Dlussky, 1992: 277; Czechowski & Douwes, 1996: 125.

*rufescens* Latreille, 1798; see under ***POLYERGUS***.

***rufibarbis****. Formica rufibarbis* Fabricius, 1793: 355 (w.) FRANCE. Jurine, 1807: 273 (q.m.); Emery, 1909b: 197 (q.m.). Combination in *F. (Serviformica*): Forel, 1915d: 64. Subspecies of *fusca*: Forel, 1874: 54; Mayr, 1886d: 427; Forel, 1892i: 307; Ruzsky, 1904b: 4; Wheeler, W.M. 1908g: 406; Emery, 1909b: 197; Forel, 1915d: 64; Emery, 1916b: 255; Santschi, 1919e: 247. Status as species: André, 1882b: 182; Nasonov, 1889: 19; Dalla Torre, 1893: 209; Emery, 1898c: 126; Ruzsky, 1902d: 11; Bingham, 1903: 335; Wheeler, W.M. 1913f: 514; Donisthorpe, 1915d: 320; Wheeler, W.M. 1917a: 550; Bondroit, 1918: 51; Emery, 1925b: 249; Karavaiev, 1927c: 286; Stitz, 1930: 238; Karavaiev, 1936: 234; Stitz, 1939: 355; Novak & Sadil, 1941: 107; Yarrow, 1954a: 231; Dlussky, 1967a: 73; Bernard, 1967: 297; Francoeur, 1973: 228; Collingwood, 1979: 128. Senior synonym of *cinereorufibarbis*: Bernard, 1967: 297; Collingwood, 1978: 73; Seifert & Schultz, 2009: 260; of *defensor, fraterna*: Forel, 1894c: 403; Bingham, 1903: 335; of *nicaeensis*: Roger, 1863b: 13; of *piligera*: Lomnicki, 1928: 9; Dlussky & Pisarski, 1971: 163; of *stenoptera*: Dalla Torre, 1893: 210; Yarrow, 1954a: 231; Dlussky, 1967a: 73. See also: Seifert & Schultz, 2009: 260. Current subspecies: nominal plus *clarorufibarbis, subpilosorufibarbis*.

*ruficeps* Fabricius, 1804; see under ***CAMPONOTUS***.

*ruficeps* Smith, F. 1857; see under ***CAMPONOTUS***.

***ruficeps****. Formica ruficeps* Motschoulsky, 1863: 12 (w.) INDONESIA (Java). [**Unresolved junior primary homonym** of *ruficeps* Fabricius, 1804: 404, above (Bolton, 1995b: 203).] **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 203.

***ruficornis****. Formica ruficornis* Gmelin, in Linnaeus, 1790: 2805 (q.) EUROPE. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 203.

*ruficornis* Fabricius, 1804; see under ***LASIUS***.

*rufifrons* Smith, F. 1860; see under ***CAMPONOTUS***.

*rufipes* Fabricius, 1775; see under ***CAMPONOTUS***.

*rufipes. Formica fusca* var. *rufipes* Stitz, 1930: 238 (w.q.) RUSSIA. [**Unresolved junior primary homonym** of *rufipes* Fabricius, 1775: 391, above.] Junior synonym of *fusca*: Dlussky, 1967a: 58.

*rufitarsis* Fabricius, 1804; see under ***MESSOR***.

*rufiventris* Fabricius, 1804; see under ***CAMPONOTUS***.

*rufiventris. Formica rufiventris* Emery, 1893i: 665, pl. 22, fig. 11 (m.) U.S.A. [Junior primary homonym of *rufiventris* Fabricius, 1804: 409, above.] Replacement name: *flammiventris* Wheeler, W.M. 1912c: 90.

*rufobarboides. Formica fusca* var. *rufobarboides* Emery, 1897f: 239, TURKEY. *Nomen nudum*, attributed to Forel.

***rufobrevisetosa****. Formica rufa* var. *rufobrevisetosa* Ruzsky, 1926: 110 (w.) RUSSIA.

*rufoglauca* Jerdon, 1851; see under ***CAMPONOTUS***.

*rufoides. Formica rufa* r. *pratensis* var. *rufoides* Forel, 1874: 368 (w.) SWITZERLAND. **Unavailable name** (Bolton, 1995b: 203).

***rufolucida****. Formica (Neoformica) rufolucida* Collingwood, 1962: 227, figs. 10, 11 (w.) MYANMAR. [Generic combination probably incorrect: Bolton, 1995b: 203]

*rufomaculata. Formica exsecta* var. *rufomaculata* Ruzsky, 1895: 13 (w.) RUSSIA. [Also described as new by Ruzsky, 1896: 68.] Subspecies of *pressilabris*: Ruzsky, 1902e: 16. Raised to species: Dlussky, 1964: 1035. Junior synonym of *pressilabris*: Seifert, 2000a: 541. See also: Dlussky, 1967a: 108; Arnol'di & Dlussky, 1978: 552; Kupyanskaya, 1990: 203.

*rufonigra* Lowne, 1865; see under ***IRIDOMYRMEX***.

*rufopratensis. Formica rufa* var. *rufopratensis* Forel, 1874: 53 (w.q.) SWITZERLAND. Stitz, 1939: 338 (m.). Subspecies of *pratensis*: Dalla Torre, 1893: 205; of *rufa*: Emery, 1925b: 253; Karavaiev, 1927c: 282. Junior synonym of *rufa*: Karavaiev, 1936: 240; Dlussky, 1967a: 93.

***rufopratensoides****. Formica rufa* var. *rufopratensoides* Forel, 1874: 368 (w.) SWITZERLAND.

*rufotruncicola. Formica rufa* var. *rufotruncicola* Ruzsky, 1896: 68 (w.) RUSSIA. [First available use of *Formica rufa* subsp. *pratensis* form. *rufotruncicola* Ruzsky, 1895: 11; unavailable name.] Junior synonym of *truncorum*: Dlussky, 1967a: 81.

***rupestris****. Formica rupestris* Leach, 1825: 291 (w.q.m.) FRANCE. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 203.

*rutilans. Formica cinerea* var. *rutilans* Wheeler, W.M. 1913f: 399 (diagnosis in key) (w.) U.S.A. [*Formica cinerea* subsp. *cinerea* var. *rutilans* Wheeler, W.M. 1913f: 525; unavailable name.] Junior synonym of *montana*: Creighton, 1950a: 534.

*ruzskyi. Formica subpilosa* subsp. *ruzskyi* Dlussky, 1965a: 30. Unnecessary replacement name for *clarior* Ruzsky, 1915a: 421; unavailable name. Junior synonym of *clarissima*: Bolton, 1995b: 203. See also: Kupyanskaya, 1990: 188.

*sabularum* Bondroit, 1918 [*Formicina*]; see under ***LASIUS***.

*sabulosa. Formica (Serviformica) cinerea* var. *sabulosa* Karavaiev, 1931a: 315 (w.) UKRAINE. Junior synonym of *imitans*: Dlussky, 1967a: 65. See also comment in Seifert, 2002b: 267.

***saccharivora****. Formica saccharivora* Linnaeus, 1758: 580 (w.) U.S.A. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 203.

*salomonis* Linnaeus, 1758; see under ***MONOMORIUM***.

***sanguinea****. Formica sanguinea* Latreille, 1798: 37 (w.) FRANCE. Jurine, 1807: 272 (q.m.); Wheeler, G.C. & Wheeler, J. 1953c: 169 (l.); Imai, 1966: 119 (k.). Combination in *F*. (*Raptiformica*): Forel, 1913i: 361. Senior synonym of *dominula*: Smith, F. 1851: 115; Schenck, 1852: 36; Mayr, 1855: 337; Radchenko, 2007: 37; of *arenicola, borea, clarior, fusciceps, griseopubescens, leninei, mollesonae, monticola, rotundata, strennua, tristis*: Dlussky, 1965a: 16; of *flavorubra*: Dlussky, 1967a: 97; Collingwood, 1978: 74. Material of the unavailable name *minuta* referred here by Dlussky, 1965a: 16. See also: Wheeler, W.M. 1913f: 401; Donisthorpe, 1915d: 280; Stitz, 1939: 316; Dlussky, 1967a: 97; Tarbinsky, 1976: 186; Kutter, 1977c: 289; Collingwood, 1979: 137; Kupyanskaya, 1990: 191; Atanassov & Dlussky, 1992: 280.

*sansabeana* Buckley, 1866; see under ***CAMPONOTUS***.

*santschii. Formica rufa* var. *santschii* Wheeler, W.M. 1913f: 390 (in key). Replacement name for *alpina* Santschi, 1911j: 349. [Junior primary homonym of *alpina* Wheeler, W.M. 1909e: 85.] Junior synonym of *lugubris*: Yarrow, 1955a: 5.

*santschii. Formica rufa* subsp. *pratensis* var. *santschii* Krausse, 1926b: 115 (w.q.) GERMANY. **Unavailable name** (Bolton, 1995b: 203).

*saturata. Formica dakotensis* var. *saturata* Wheeler, W.M. 1917a: 542 (w.) U.S.A. Junior synonym of *dakotensis*: Creighton, 1950a: 484.

*savignyi* Dufour, 1862; see under ***CATAGLYPHIS***.

***saxicola****. Formica saxicola* Buckley, 1866: 166 (w.q.) U.S.A. **Unidentifiable taxon**; *incertae sedis* in Formicinae: Smith, D.R. 1979: 1467; *incertae sedis* in *Formica*: Bolton, 1995b: 203. See also: Emery, 1895c: 338 (possible combination in *Lasius*); Wheeler, W.M. 1902f: 23.

***schardj****. Formica schardj* Forskål, 1775: xxiii (w.) ISRAEL? **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 203. See also: Emery, 1892b: 160.

*schaufussi. Formica schaufussi* Mayr, 1866a: 493, fig. 6 (w.) U.S.A. Mayr, 1886d: 427 (q.m.). Combination in *F. (Neoformica*): Wheeler, W.M. 1913f: 552. Subspecies of *pallidefulva*: Emery, 1893i: 654; Wheeler, W.M. 1908g: 408. Revived status as species: Creighton, 1950a: 551. Junior synonym of *pallidefulva*: Trager, MacGown & Trager, 2007: 625.

\**schmidtii* Heer, 1849; see under ***LIOMETOPUM***.

*schmidti. Formica rufa* subsp. *schmidti* Ruzsky, 1926: 109 (w.) RUSSIA. [First available use of *Formica rufa* subsp. *rufa* var. *schmidti* Ruzsky, 1920: 78; unavailable name.] [Junior primary homonym of \**schmidtii* Heer, 1849: 138, above.] Synonymous with *aquilonia*: Dlussky, 1967a: 90, hence *aquilonia* the first available replacement name.

***scitula****. Formica microgyna* subsp. *scitula* Wheeler, W.M. 1913f: 470 (q.) U.S.A. Raised to species: Creighton, 1950a: 507.

*scorpiomajor. Formica scorpiomajor* Christ, 1791: 518 (no caste given) U.S.A.? *Nomen nudum*.

*scorpiominor. Formica scorpiominor* Christ, 1791: 518 (no caste given) U.S.A.? *Nomen nudum*.

*scrutator* Smith, F. 1859; see under ***ANONYCHOMYRMA***.

*scutellaris* Olivier, 1792; see under ***CREMATOGASTER***.

*sedula* Smith, F. 1857; see under ***CAMPONOTUS***.

***selysi****. Formica cinerea* var. *selysi* Bondroit, 1918: 54 (w.) FRANCE. Combination in *F*. (*Serviformica*): Emery, 1925b: 246. Raised to species: Kutter, 1977c: 253. Senior synonym of *torrentium*: Seifert, 2002b: 259.

*semipunctata* Kirby, W. 1837; see under ***CAMPONOTUS***.

*senex* Smith, F. 1858; see under ***CAMPONOTUS***.

***sentschuensis****. Formica (Raptiformica) sentschuensis* Ruzsky, 1915a: 428, figs. 7, 8 (w.q.) TIBET. Senior synonym of *dalailamae*: Dlussky, 1965a: 17.

*septentrionale* Buckley, 1866; see under ***CAMPONOTUS***.

\****sepulta****. \*Formica sepulta* Théobald, 1937b: 319, pl. 15, fig. 14; pl. 25, fig. 16; pl. 26, fig. 16 (q.m.) FRANCE (Oligocene).

*sericata* Guérin-Méneville, 1831; see under ***POLYRHACHIS***.

*sericea* Fabricius, 1798; see under ***CAMPONOTUS***.

*sericeiventris* Guérin-Méneville, 1838; see under ***CAMPONOTUS***.

\****serresi****. \*Formica serresi* Théobald, 1937b: 317, pl. 26, fig. 19 (m.) FRANCE (Oligocene).

*sessilis* Say, 1836; see under ***TAPINOMA***.

\****seuberti****. \*Formica seuberti* Heer, 1849: 127, pl. 9, fig. 12 (q.) SWITZERLAND (Miocene). [Also described as new by Heer, 1850: 127.]

*sexdens* Linnaeus, 1758; see under ***ATTA***.

*sexdentata* Latreille, 1802; see under ***ATTA***.

*sexguttata* Fabricius, 1793; see under ***CAMPONOTUS***.

*sexspinosa* Latreille, 1802; see under ***POLYRHACHIS***.

*siamicaalba. Formica siamicaalba* Christ, 1791: 518 (no caste given) SENEGAL. *Nomen nudum*. See also: Emery, 1892b: 162.

***siamicarubra****. Formica siamicarubra* Christ, 1791: 518 (w.) "Barbary". **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 203. See also: Emery, 1892b: 162.

***sibylla****. Formica sibylla* Wheeler, W.M. 1913f: 530 (w.m.) U.S.A. See also: Wheeler, W.M. 1917a: 551; Francoeur, 1973: 263.

*similis. Formica integra* var. *similis* Mayr, 1886d: 425 (w.q.m.) U.S.A. Junior synonym of *integra*: Emery, 1893i: 652; Wheeler, W.M. 1906b: 16; Creighton, 1950a: 487.

*simillima* Smith, F. 1862; see under ***CAMPONOTUS***.

*simulata. Formica simulata* Smith, F. 1878b: 10 (w.) CHINA. Junior synonym of *truncicola*: Forel, 1894c: 403.

***sinae****. Formica (Serviformica) rufibarbis* var. *sinae* Emery, 1925b: 250. Replacement name for *orientalis* Wheeler, W.M. 1923b: 4. [Junior primary homonym of *orientalis* Ruzsky, 1915a: 427.] Santschi, 1928b: 42 (q.). Junior synonym of *glauca*: Dlussky, 1967a: 74. Revived from synonymy and raised to species: Wu, 1990: 4. Subspecies of *clara*: Seifert & Schultz, 2009: 265.

***sinensis****. Formica truncicola* var. *sinensis* Wheeler, W.M. 1913f: 391 (diagnosis in key) (w.) CHINA. [*Formica truncicola* subsp. *truncicola* var. *sinensis* Wheeler, W.M. 1913f: 437; unavailable name.] Raised to species: Wu, 1990: 6 (in key). See also: Wu & Wang, 1995: 145.

*singularis* Smith, F. 1858; see under ***CAMPONOTUS***.

*smaragdina* Fabricius, 1775; see under ***OECOPHYLLA***.

*smithii* Lowne, 1865; see under ***IRIDOMYRMEX***.

*solitaria* Smith, F. 1858; see under ***GIGANTIOPS***.

***spatulata****. Formica microgyna* subsp. *spatulata* Buren, 1944a: 305 (w.q.m.) U.S.A. Raised to species: Creighton, 1950a: 508.

*specularis. Formica specularis* Wheeler, W.M. 1908g: 408 (q.) U.S.A. [First available use of *Formica fusca* subsp. *subpolita* var. *specularis* Emery, 1893i: 663; unavailable name.] Junior synonym of *wasmanni*: Wheeler, W.M. 1913f: 464 (Wheeler incorrectly gives seniority to *specularis*). Junior synonym of *dakotensis*: Creighton, 1950a: 484.

*spicata. Formica rasilis* subsp. *spicata* Creighton, 1950a: 507 (w.q.m.) U.S.A. [First available use of *Formica microgyna* subsp. *rasilis* var. *spicata* Wheeler, W.M. 1913f: 469; unavailable name.] Material of the unavailable name *pinetorum* referred here by Creighton, 1950a: 507. Junior synonym of *densiventris*: Cole, 1954a: 89; Cole, 1955b: 50.

*spinicollis* Latreille, 1817; see under ***DOLICHODERUS***.

*spininoda* Latreille, 1802; see under ***PARAPONERA***.

*staegeri. Formica truncorum* var. *staegeri* Stitz, 1939: 347 (w.) GERMANY. [First available use of *Formica rufa* subsp. *truncicola* ab. *staegeri* Krausse, 1926d: 264; unavailable name.] Subspecies of *truncorum*: Betrem, 1960b: 76. Junior synonym of *truncorum*: Dlussky, 1967a: 81; Dlussky & Pisarski, 1971: 174.

***staerckei****. Formica nigricans* var. *staerckei* Betrem, 1960a: 132 (q.) NETHERLANDS. [Also described as new by Betrem, 1960b: 70.] Currently subspecies of *pratensis*: Bolton, 1995b: 204.

***stenoptera****. Formica stenoptera* Foerster, 1850a: 26 (w.q.) GERMANY. Junior synonym of *cunicularia*: Smith, F. 1855a: 103; Mayr, 1855: 343; of *rufibarbis*: Dalla Torre, 1893: 210; Stitz, 1939: 355; Dlussky, 1967a: 73. **Unidentifiable taxon**: Seifert & Schultz, 2009: 271.

*stigma* Fabricius, 1804; see under ***PACHYCONDYLA***.

*stitzi. Formica rufa* subsp. *truncicola* ab. *stitzi* Krausse, 1926d: 264 (w.) GERMANY. **Unavailable name**. [*Formica truncorum* ab. *stitzi* Stitz, 1939: 347; unavailable name.]. Material referred to *truncorum* by Dlussky, 1967a: 81.

\****strangulata****. \*Formica strangulata* Wheeler, W.M. 1915h: 130, fig. 62 (w.) BALTIC AMBER (Eocene). [*Formica strangulata* Wheeler, W.M. 1913f: 383 (footnote). *Nomen nudum*.] See also: Dlussky, 1967b: 80; Dlussky, 2008a: 55.

*strawinskii. Formica forsslundi* subsp. *strawinskii* Petal, 1963: 195, figs. 1a, 2a, 3, 4a, 5a, 6a, 7, 8a, 9a, 10a, 11 (w.q.m.) POLAND. Junior synonym of *forsslundi*: Dlussky & Pisarski, 1971: 199.

*strenua* Haliday, 1836; see under ***LASIOPHANES***.

*strennua. Formica (Raptiformica) sanguinea* var. *strennua* Santschi, 1925g: 352 (w.) SPAIN. [**Unresolved junior primary homonym** of *strenua* Haliday, above.] Junior synonym of *sanguinea*: Dlussky, 1965a: 16.

*striata* Smith, F. 1862; see under ***CAMPONOTUS***.

*striaticeps* Forel, 1911; see under ***PROFORMICA***.

*stricta* Jerdon, 1851; see under ***CAMPONOTUS***.

*structor* Latreille, 1798; see under ***MESSOR***.

***subaenescens****. Formica fusca* var. *subaenescens* Emery, 1893i: 659 (w.) U.S.A. Wheeler, W.M. 1913f: 504 (q.m.). Subspecies of *fusca*: Buren, 1944a: 300. Junior synonym of *fusca*: Creighton, 1950a: 532; Francoeur, 1973: 189; Wheeler, G.C. & Wheeler, J. 1986g: 16. Revived from synonymy and raised to species: Francoeur, 1977b: 208; Bolton, 1995b: 204.

*subcaviceps. Formica rufa* subsp. *subcaviceps* Creighton, 1940a: 1, fig. 1 (w.m.) U.S.A. [First available use of *Formica truncicola* subsp. *integra* var. *subcaviceps* Wheeler, W.M. 1917a: 540; unavailable name.] Junior synonym of *integroides*: Creighton, 1950a: 489.

***subcyanea****. Formica subcyanea* Wheeler, W.M. 1913f: 563 (w.q.m.) MEXICO. See also: Francoeur, 1973: 249.

***subelongata****. Formica subelongata* Francoeur, 1973: 268, figs. 482-485 (w.) U.S.A.

*subfasciata. Formica rufa* subsp. *subfasciata* Creighton, 1940a: 1, fig. 1 (w.) U.S.A. [First available use of *Formica truncicola* subsp. *integroides* var. *subfasciata* Wheeler, W.M. 1917a: 539; unavailable name.] Subspecies of *integroides*: Creighton, 1950a: 490. Junior synonym of *integroides*: Brown, 1965d: 185.

***subintegra****. Formica sanguinea* subsp. *subintegra* Wheeler, W.M. 1908f: 627 (w.q.) U.S.A. [First available use of *Formica sanguinea* subsp. *rubicunda* var. *subintegra* Emery, 1893i: 648, pl. 22, fig. 3; unavailable name.] Wheeler, W.M. 1913f: 411 (m.); Hung, 1969: 456 (k.). Combination in *F. (Raptiformica*): Emery, 1925b: 260. Subspecies of *sanguinea*: Wheeler, W.M. 1913f: 410. Raised to species and material of the unavailable name *gilvescens* referred here: Creighton, 1950a: 470. See also: Talbot & Kennedy, 1940: 560.

*sublucida. Formica sublucida* Creighton, 1950a: 472 (w.q.) U.S.A. [First available use of *Formica sanguinea* subsp. *rubicunda* var. *sublucida* Wheeler, W.M. 1913f: 408; unavailable name.] Junior synonym of *subintegra*: Wilson & Brown, 1955: 120; of *pergandei*: Buren, 1968a: 28.

***subnitens****. Formica rufa* subsp. *subnitens* Creighton, 1940a: 10, fig. 1 (w.) U.S.A. Miller, 1957: 255 (q.m.). Subspecies of *integroides*: Creighton, 1950a: 490. Raised to species: Cole, 1955b: 50; Miller, 1957: 253; Mackay, Lowrie, *et al*. 1988: 111 (in key).

*subnuda. Formica sanguinea* subsp. *subnuda* Wheeler, W.M. 1910g: 570 (w.) CANADA. [First available use of *Formica sanguinea* subsp. *rubicunda* var. *subnuda* Emery, 1895c: 335; unavailable name.] Wheeler, W.M. 1913f: 409 (q.m.); Wheeler, G.C. & Wheeler, J. 1953c: 170 (l). Combination in *F. (Raptiformica*): Emery, 1925b: 260. Subspecies of *sanguinea*: Wheeler, W.M. 1913f: 469; Wheeler, W.M. 1917a: 533. Raised to species: Creighton, 1950a: 469. Synonym of *aserva*: Creighton, 1950a: 469; Wilson & Brown, 1955: 118; Buren, 1968a: 33. [Creighton, Wilson & Brown, and Buren incorrectly make *subnuda* the senior name but *aserva* has priority and is therefore the valid name of this taxon: Bolton, 1995b: 204.]

***subpicea****. Formica subpicea* Motschoulsky, 1863: 12 (w.) SRI LANKA. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 204.

***subpilosa****. Formica rufibarbis* subsp. *subpilosa* Ruzsky, 1902b: 472 (w.) RUSSIA. Karavaiev, 1910b: 17 (q.m.). Combination in *F. (Serviformica*): Emery, 1925b: 250. Raised to species: Bondroit, 1918: 51; Collingwood, 1961a: 70. Junior synonym of *rufibarbis*: Bernard, 1967: 297. Revived from synonymy, with status as species: Dlussky, 1965a: 28; Dlussky, 1967a: 70; Tarbinsky, 1976: 189. Senior synonym of *bipilosa* and material of the unavailable names *clara, fallax* referred here: Dlussky, 1965a: 28. Material of the unavailable name *subpilosoclara* referred here by Dlussky, 1967a: 70. See also: Seifert & Schultz, 2008: 79.

*subpilosoclara. Formica rufibarbis* subsp. *clara* var. *subpilosoclara* Ruzsky, 1905b: 400 (w.) RUSSIA. **Unavailable name**; material referred to *subpilosa* by Dlussky, 1967a: 70.

***subpilosorufibarbis****. Formica rufibarbis* var. *subpilosorufibarbis* Ruzsky, 1905b: 398 (w.) RUSSIA.

***subpolita****. Formica fusca* var. *subpolita* Mayr, 1886d: 426 (w.q.) U.S.A. Wheeler, W.M. 1913f: 534 (m.). Combination in *F. (Serviformica*): Emery, 1925b: 251. Subspecies of *gagates*: Dalla Torre, 1893: 199; of *fusca*: Emery, 1893i: 661. Raised to species: Wheeler, W.M. 1908g: 625; Wheeler, W.M. 1913f: 532. Senior synonym of *flammiventris*: Wheeler, W.M. 1913f: 532; Creighton, 1950a: 541; of *camponoticeps, ficticia*: Francoeur, 1973: 107.

*subrufa* Roger, 1859; see under ***IBEROFORMICA***.

*subrufoides. Formica cinerea* var. *subrufoides* Forel, 1913i: 360 (w.) AUSTRIA. Röszler, 1950: 219 (q.). Raised to species: Bondroit, 1918: 55; Kutter, 1977c: 255. Junior synonym of *cinerea*: Agosti & Collingwood, 1987a: 59.

***subsericea****. Formica subsericea* Say, 1836: 289 (w.m.) U.S.A. Junior synonym of *fusca*: Mayr, 1886d: 426; Creighton, 1950a: 532. Revived from synonymy as subspecies of *fusca*: Emery, 1893i: 659; Buren, 1944a: 300. Revived from synonymy, raised to species and senior synonym of *lecontei*: Francoeur, 1973: 172.

*subsericeoneorufibarbis. Formica subsericeoneorufibarbis* Wheeler, W.M. 1901b: 519. *Nomen nudum*, attributed to Emery. Material referred to *gnava*: Wheeler, W.M. 1913f: 518. [Name misspelled *subsericeorufibarbis* by Emery, 1925b: 250.]

***subspinosa****. Formica (Hypochira) subspinosa* Buckley, 1866: 169 (w.) U.S.A. **Unidentifiable taxon**; *incertae sedis* in Dolichoderinae: Smith, D.R. 1979: 1422. **Unidentifiable to genus** [unrecognisable and unplaceable taxon] *incertae sedis* in *Formica*: Bolton, 1995b: 204. [May possibly be a dolichoderine, see: Emery, 1895c: 338; Wheeler, W.M. 1902f: 24; Emery, 1925b: 271.]

*subterranea* Latreille, 1798; see under ***APHAENOGASTER***.

*subtilis* Smith, F. 1860; see under ***CAMPONOTUS***.

*succinea. Formica pallidefulva* var. *succinea* Wheeler, W.M. 1904f: 369 (diagnosis in key) (w.) U.S.A. Wheeler, W.M. 1913f: 551 (q.m.). Junior synonym of *pallidefulva*: Creighton, 1950a: 550.

*sudetica. Formica exsecta* var. *sudetica* Scholz, 1924: 48 (w.) POLAND. Junior synonym of *exsecta*: Dlussky & Pisarski, 1971: 194.

***suecica****. Formica suecica* Adlerz, 1902: 263 (w.q.m.) SWEDEN. Subspecies of *exsecta*: Wheeler, W.M. 1908g: 408; Emery, 1909b: 193. Status as species: Wheeler, W.M. 1913f: 492; Emery, 1925b: 258; Stitz, 1939: 314; Dlussky, 1964: 1035; Bernard, 1967: 326; Dlussky, 1967a: 107; Collingwood, 1979: 133; Seifert, 2000a: 557.

*suffusa* Smith, F. 1858; see under ***CAMPONOTUS***.

*sulci. Formica fusca* r. *lemani* var. *sulci* Samsinak, 1951: 126 (m.) CZECHOSLOVAKIA. **Unavailable name** (Bolton, 1995b: 205).

*superba. Formica pratensis* var. *superba* Wheeler, W.M. 1933c: 65 (w.) CHINA. Raised to species: Santschi, 1941: 278. Junior synonym of *uralensis*: Wu, 1990: 4.

\****surinamensis****. \*Formica surinamensis* Berendt, 1830: 37 (no caste given) BALTIC AMBER (Eocene).

*suzukii. Formica rufa* subsp. *dusmeti* var. *suzukii* Teranishi, 1940: 23 (w.) KOREA. **Unavailable name** (Bolton, 1995b: 205).

*sylvicola* Jerdon, 1851 [original spelling *syloicola*]; see under ***POLYRHACHIS***.

*sylvatica* Olivier, 1792; see under ***CAMPONOTUS***.

*syrdariana* Santschi, 1928; see under ***PROFORMICA***.

*tahoensis. Formica rufa* subsp. *tahoensis* Creighton, 1940a: 1, fig. 1 (w.q.) U.S.A. [First available use of *Formica truncicola* subsp. *integroides* var. *tahoensis* Wheeler, W.M. 1917a: 538; unavailable name.] Cole, 1956g: 260 (q.m.). Subspecies of *integra*: Creighton, 1950a: 488. Junior synonym of *haemorrhoidalis*: Brown, 1965d: 181; of *ravida*: Bolton, 1995b: 205.

***talbotae****. Formica talbotae* Wilson, 1977: 277, fig. 1 (q.m.) U.S.A. See also: Talbot, 1977: 282.

*tamarae. Formica (Coptoformica) tamarae* Dlussky, 1964: 1033, figs. (w.q.m.) CAUCASUS. Junior synonym of *pressilabris*: Arakelian, 1994: 97; of *foreli*: Seifert, 2000a: 543.

*taprobanae* Smith, F. 1858; see under ***DOLICHODERUS***.

***tarimica****. Formica tarimica* Seifert & Schultz, 2009: 266, fig. 7 (w.) CHINA.

*tarsata* Fabricius, 1798; see under ***PACHYCONDYLA***.

*tejonia* Buckley, 1866; see under ***CAMPONOTUS***.

*tenuipes* Smith, F. 1857; see under ***CAMPONOTUS***.

*tenuis* Fabricius, 1804; see under ***PSEUDOMYRMEX***.

***tenuissima****. Formica tenuissima* Buckley, 1866: 162 (w.) U.S.A. **Unidentifiable taxon**; *incertae sedis* in Formicinae: Smith, D.R. 1979: 1467. **Unidentifiable to genus**; *incertae* *sedis* in *Formica*: Bolton, 1995b: 205. See also: Mayr, 1886d: 432 (perhaps *Forelius*); Emery, 1895c: 338; Wheeler, W.M. 1902f: 21 (perhaps *Brachymyrmex*).

*terebrans* Lowne, 1865; see under ***CAMPONOTUS***.

*terricola* Buckley, 1866; see under ***NYLANDERIA***.

***testacea****. Formica testacea* Gmelin, in Linnaeus, 1790: 2804 (w.) EUROPE. **Unidentifiable to genus***; incertae sedis* in *Formica*: Bolton, 1995b: 205.

*testacea* Fabricius, 1804; see under ***POLYERGUS***.

***testaceipes****. Formica testaceipes* Leach, 1825: 290 (w.) FRANCE. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 205.

*testaceipes* Smith, F. 1858; see under ***CAMPONOTUS***.

*theryi* Santschi, 1936; see under ***BAJCARIDRIS***.

***thoracica****. Formica thoracica* Olivier, 1792: 503 (q.m.) FRANCE. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 205.

*thoracica* Fabricius, 1804; see under ***CAMPONOTUS***.

*thyssei. Formica pratensis* ab. *thyssei* Stärcke, 1942b: 43 (footnote) (q.) BASSES ALPES. **Unavailable name**. As species (spelled as *thijssei*): Betrem, 1955: 392. Material referred to *nigricans*: Yarrow, 1955a: 4.

***tianshanica****. Formica tianshanica* Seifert & Schultz, 2009: 267, figs. 9, 16 (w.) KYRGYZSTAN.

*timida* Foerster, 1850; see under ***LASIUS***.

*timida* Jerdon, 1851; see under ***CAMPONOTUS***.

*tincta* Smith, F. 1858; see under ***CAMPONOTUS***.

*tir. Formica rufa* subsp. *rufa* ab. *tir* Stärcke, 1942a: 22 (q.) NORWAY. **Unavailable name**; material referred to *lugubris* by Yarrow, 1955a: 5.

***tombeuri****. Formica tombeuri* Bondroit, 1917b: 187 (w.) PORTUGAL. Currently subspecies of *fusca*: Santschi, 1925g: 352.

***tomentosa****. Formica tomentosa* Reich, 1793: 132 (no caste given) FRENCH GUIANA. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 205.

*torrentium. Formica torrentium* Bernard, 1967: 300 (w.q.m.) FRANCE. [Bernard, 1967: 300, indicates that Bernard, 1960: 108 contains the original description of *torrentium*. The name is not mentioned in the 1960 publication.] Junior synonym of *selysi*: Seifert, 2002b: 259.

***transkaucasica****. Formica transkaucasica* Nasonov, 1889: 21 (w.) RUSSIA. Subspecies of *gagates*: Ruzsky, 1902d: 13; of *fusca*: Ruzsky, 1905b: 384. Junior synonym of *picea* Nylander: Emery, 1909b: 195; Donisthorpe, 1918a: 9; Emery, 1925b: 249; Dlussky, 1965a: 31; Dlussky, 1967a: 61. First available replacement name for *picea* Nylander: Donisthorpe, 1918a: 9; Yarrow, 1954a: 233; Atanassov & Dlussky, 1992: 263. Senior synonym of *piceogagates*: Arakelian, 1994: 102. Junior synonym of *candida*: Bolton, 1995b: 205. **Unidentifiable taxon**, *incertae sedis* in *Formica*: Seifert, 2004: 32.

*transcaucasicogagates. Formica fusca* subsp. *gagates* var. *transcaucasicogagates* Ruzsky, 1905b: 379 (w.) RUSSIA. **Unavailable name**; material referred to *picea* Nylander by Dlussky, 1965a: 31.

***transmontanis****. Formica transmontanis* Francoeur, 1973: 135, figs. 220-232 (w.q.m.) CANADA.

*transversa. Formica (Serviformica) rufibarbis* st. *montivaga* var. *transversa* Santschi, 1928b: 45. **Unavailable name** (Bolton, 1995b: 205); unnecessary replacement name for *clara* Kuznetsov-Ugamsky; unavailable name. Material referred to *clara* Forel by Dlussky, 1967a: 77.

***triangularis****. Formica triangularis* Say, 1836: 288 (q.m.) U.S.A. **Unidentifiable taxon**; *incertae sedis* in Formicidae: Smith, D.R. 1979: 1467. **Unidentifiable to genus**; *incertae* *sedis* in *Formica*: Bolton, 1995b: 205.

*tridentata* Fabricius, 1804; see under ***ECTATOMMA***.

*trifasciata* Smith, F. 1858; see under ***ANOPLOLEPIS***.

\****trigona****. \*Formica trigona* Presl, 1822: 198 (no caste given) BALTIC AMBER (Eocene).

\****tripartita****. \*Formica tripartita* Théobald, 1937b: 214, pl. 15, figs. 4-8 (q.m.) FRANCE (Oligocene).

*tristis. Formica tristis* Christ, 1791: 513, pl. 60, fig. 13 (m.) no locality given. Junior synonym of *fusca*: Emery, 1892b: 162.

*tristis. Formica (Raptiformica) sanguinea* var. *tristis* Karavaiev, 1929b: 217 (w.) RUSSIA. [**Unresolved junior primary homonym** of *tristis* Christ, above.] Junior synonym of *sanguinea*: Dlussky, 1965a: 16.

*tropica* Smith, F. 1861; see under ***CALOMYRMEX***.

*truncata* Spinola, 1808; see under ***CAMPONOTUS***.

*truncicola. Formica truncicola* Nylander, 1846a: 907 (w.q.) FINLAND. Nylander, 1849: 29 (m.). Subspecies of *rufa*: Forel, 1874: 52; André, 1903: 128; Ruzsky, 1905b: 330; Wheeler, W.M. 1908g: 406; Emery, 1909b: 187; Forel, 1915d: 57; Emery, 1916b: 256; Santschi, 1925f: 96. Status as species: Bingham, 1903: 334; Wheeler, W.M. 1913f: 434. Senior synonym of *simulata*: Forel, 1894c: 403. Junior synonym of *truncorum*: Roger, 1863b: 13; Bondroit, 1918: 60; Emery, 1925b: 255; Bernard, 1967: 307; Dlussky, 1967a: 81; Dlussky & Pisarski, 1971: 174; Tarbinsky, 1976: 192; Kutter, 1977c: 274; Radchenko, 2007: 36.

*truncicolopratensis. Formica rufa* var. *truncicolopratensis* Forel, 1874: 53 (w.q.m.) SWITZERLAND. Subspecies of *pratensis*: Dalla Torre, 1893: 205; of *rufa*: Karavaiev, 1912b: 589; of *truncorum*: Stitz, 1939: 346; Holgersen, 1942: 14. Raised to species: Bondroit, 1918: 61. Junior synonym of *truncorum*: Bernard, 1967: 307; Dlussky, 1967a: 81; Dlussky & Pisarski, 1971: 174.

***truncorum****. Formica truncorum* Fabricius, 1804: 403 (q.) CZECHOSLOVAKIA. Subspecies of *rufa*: Emery & Forel, 1879: 450; Santschi, 1925g: 351; Karavaiev, 1936: 247. Status as species: Bondroit, 1917a: 174; Stitz, 1939: 344; Novak & Sadil, 1941: 105; Holgersen, 1942: 13; Dlussky, 1967a: 81; Tarbinsky, 1976: 192; Kutter, 1977c: 274; Gösswald, 1989: 21; Kupyanskaya, 1990: 192; Atanassov & Dlussky, 1992: 270. Senior synonym of *truncicola*: Roger, 1863b: 13; Bondroit, 1918: 60; Dlussky, 1967a: 81; Radchenko, 2007: 36; of *truncicolopratensis*: Dlussky, 1967a: 81; Bernard, 1967: 307; of *menozzii, rufotruncicola, staegeri* and material of the unavailable name *stitzi* referred here: Dlussky, 1967a: 81. Current subspecies: nominal plus *finzii, frontalis*.

***tshugunovi****. Formica rufa* var. *tshugunovi* Ruzsky, 1914b: 102 (w.) RUSSIA. Currently subspecies of *rufa*: Ruzsky, 1926: 110.

*tuberculata* Olivier, 1792; see under ***ECTATOMMA***.

*tuberosa* Latreille, 1802; see under ***TEMNOTHORAX***.

*tuberum* Fabricius, 1775; see under ***TEMNOTHORAX***.

*typhlos. Formica typhlos* Lund, 1831a: 135 (w.) BRAZIL. *Nomen nudum*.

***ulkei****. Formica ulkei* Emery, 1893i: 653, pl. 22, fig. 7 (w.) U.S.A. Wheeler, W.M. 1913f: 486 (q.m.); Wheeler, G.C. & Wheeler, J. 1953c: 168 (l.); Hung, 1969: 456 (k.). Senior synonym of *hebescens*: Creighton, 1950a: 515. See also: Smith, D.R. 1979: 1456.

*umbrata* Nylander, 1846; see under ***LASIUS***.

\****ungeri****. \*Formica ungeri* Heer, 1849: 128, pl. 10, fig. 1 (q.) CROATIA (Miocene). [Also described as new by Heer, 1850: 128.] See also: Mayr, 1867b: 53.

*unicolor. Formica pratensis* subsp. *unicolor* Ruzsky, 1926: 110 (w.) RUSSIA. [First available use of *Formica rufa* subsp. *pratensis* var. *unicolor* Ruzsky, 1914b: 102; unavailable name.] Junior synonym of *lugubris*: Dlussky, 1967a: 91.

*unifasciata* Latreille, 1798; see under ***TEMNOTHORAX***.

*unispinosa* Fabricius, 1793; see under ***ODONTOMACHUS***.

***uralensis****. Formica uralensis* Ruzsky, 1895: 13 (w.q.m.) RUSSIA. [Also described as new by Ruzsky, 1896: 69.] Senior synonym of *superba*: Wu, 1990: 4. See also: Emery, 1909b: 189; Wheeler, W.M. 1913f: 448; Karavaiev, 1936: 249; Stitz, 1939: 325; Dlussky, 1967a: 79; Kutter, 1977c: 274; Collingwood, 1979: 135; Kupyanskaya, 1990: 189.

*vaga* Scopoli, 1763; see under ***CAMPONOTUS***.

*vagans* Olivier, 1792; see under ***ECITON***.

***vagans****. Formica vagans* Fabricius, 1793: 358 (w.) GERMANY. [**Unresolved junior primary homonym** of *vagans* Olivier, 1792: 501 (Bolton, 1995b: 206).] **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 206. See also: Curtis, 1854: 213 [combination in *Myrmica*; misidentification]; Smith, F. 1855b: 117; Mayr, 1855: 407.

*vagans* Jerdon, 1851; see under ***PARATRECHINA***.

*variegata* Smith, F. 1858; see under ***CAMPONOTUS***.

*velox* Jerdon, 1851; see under ***CAMPONOTUS***.

***venosa****. Formica venosa* Gmelin, in Linnaeus, 1790: 2804 (q.) no locality given. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 206.

*ventralis* Smith, F. 1858; see under ***CAMPONOTUS***.

*vestita* Smith, F. 1858; see under ***CAMPONOTUS***.

*vetula. Formica lasioides* var. *vetula* Wheeler, W.M. 1912c: 90. Replacement name for *picea* Emery, 1895c: 335. [Junior primary homonym of *picea* Leach, 1825: 292.] Wheeler, W.M. 1917a: 554 (q.). Combination in *F. (Proformica*): Wheeler, W.M. 1913f: 540. Subspecies of *neogagates*: Buren, 1944a: 308. Junior synonym of *lasioides*: Creighton, 1950a: 458.

*viatica* Fabricius, 1787; see under ***CATAGLYPHIS***.

*vigilans* Smith, F. 1858; see under ***CAMPONOTUS***.

***villiscapa****. Formica villiscapa* Chang & He, 2002a: 55, figs. 27, 28, 65 (w.) CHINA.

*villosa* Fabricius, 1804; see under ***PACHYCONDYLA***.

***vinculans****. Formica (Proformica) neogagates* var. *vinculans* Wheeler, W.M. 1913f: 400 (in key) (w.q.) U.S.A. [*Formica (Proformica) neogagates* subsp. *neogagates* var. *vinculans* Wheeler, W.M. 1913f: 539; unavailable name.] Subspecies of *neogagates*: Buren, 1944a: 309. Junior synonym of *neogagates*: Creighton, 1950a: 459. Revived from synonymy and raised to species: Snelling, R.R. & Buren, 1985: 76.

*vinosa* Smith, F. 1858; see under ***CAMPONOTUS***.

*vinsonnella* Dufour, 1864; see under ***LEPTOGENYS***.

*virescens* Fabricius, 1775; see under ***OECOPHYLLA***.

***virginiana****. Formica virginiana* Buckley, 1866: 159 (w.) U.S.A. **Unidentifiable taxon**; *incertae sedis* in Formicinae: Smith, D.R. 1979: 1467. **Unidentifiable to genus**; *incertae sedis* in *Formica*: Bolton, 1995b: 206. See also: Emery, 1895c: 337; Wheeler, W.M. 1902f: 20.

*viridis* Kirby, W. 1819; see under ***OECOPHYLLA***.

*virulens* Smith, F. 1861; see under ***CAMPONOTUS***.

*visitatrix* Christ, 1791; see under ***ATTA***.

*vitrea* Smith, F. 1860; see under ***CAMPONOTUS***.

*vivida* Smith, F. 1858; see under ***CAMPONOTUS***.

*vividula* Nylander, 1846; see under ***NYLANDERIA***.

***volgensis****. Formica rufibarbis* subsp. *volgensis* Ruzsky, 1914c: 323, fig. (w.) RUSSIA. Junior synonym of *glauca*: Dlussky, 1967a: 74. **Unidentifiable taxon**: Seifert & Schultz, 2009: 271.

*volitans. Formica volitans* Christ, 1791: 518 (no caste given) INDIA. *Nomen nudum*.

*vorax* Fabricius, 1804; see under ***PHEIDOLE***.

*wasmanni. Formica dakotensis* var. *wasmanni* Forel, 1904a: 153 (footnote) (w.q.m.) U.S.A. Synonym of *specularis*: Wheeler, W.M. 1913f: 464 (Wheeler gives *specularis* as senior name but *wasmanni* has priority). Junior synonym of *dakotensis*: Creighton, 1950a: 484.

***wheeleri****. Formica wheeleri* Creighton, 1935: 1, fig. 1 (w.q.) U.S.A. Combination in *F*. (*Raptiformica*): Creighton, 1950a: 472.

***wheeleri****. Formica exsecta* var. *wheeleri* Stitz, 1939: 311 (w.) GERMANY. [First available use of *Formica exsecta* subsp. exsecta var. *wheeleri* Krausse, 1926d: 264; unavailable name.] Junior synonym of *exsecta*: Dlussky, 1967a: 100. **Unidentifiable taxon**: Seifert, 2000a: 562.

***whymperi****. Formica whymperi* Wheeler, W.M. 1917a: 544 (w.) CANADA. [First available use of *Formica rufa* r. *obscuripes* var. *whymperi* Forel, 1904a: 152; unavailable name.] Material of the unavailable name *pullula* referred here: Creighton, 1950a: 509. Senior synonym of *californica*: Wheeler, G.C. & Wheeler, J. 1986g: 15. Currently subspecies of *adamsi* (as the latter name has priority over *whymperi*): Bolton, 1995b: 206).

*wichita* Buckley, 1866; see under ***PRENOLEPIS***.

***wongi****. Formica wongi* Wu, 1990: 2, figs. 10, 18 (w.) CHINA.

***xerophila****. Formica (Neoformica) moki* subsp. *xerophila* Smith, M.R. 1939f: 583 (w.) U.S.A. Raised to species and senior synonym of *grundmanni*: Francoeur, 1973: 259.

*yatsuensis. Formica fusca* subsp. *picea* var. *yatsuensis* Teranishi, 1940: 80 (w.) JAPAN. **Unavailable name** (Bolton, 1995b: 206).

***yessensis****. Formica truncicola* var. *yessensis* Wheeler, W.M. 1913f: 391 (in key) (w.) JAPAN. [First available use of *Formica rufa* r. *truncicola* var. *yessensis* Forel, 1901h: 66; unavailable name.] Kupyanskaya, 1984: 103 (q.m.); Imai, 1966: 119 (k.). Subspecies of *truncicola*: Ruzsky, 1926: 110; of *truncorum*: Wheeler, W.M. 1933c: 66. Junior synonym of *lugubris*: Dlussky, 1967a: 91. Revived from synonymy and raised to species: Collingwood, 1976: 304. See also: Kupyanskaya, 1990: 194.

***yoshiokae****. Formica yoshiokae* Wheeler, W.M. 1933c: 66 (w.) JAPAN.

*zealandica* Smith, F. 1878; see under ***PROLASIUS***.

*\*****zherikhini****. \*Formica zherikhini* Dlussky, 2008a: 56, figs. 4h-i (w.) BALTIC AMBER.

*zonata* Guérin-Méneville, 1838; see under ***OECOPHYLLA***.

*FORMICINA*: see under ***FORMICA***.

\****FORMICIUM***

\****berryi****. \*Eoponera berryi* Carpenter, 1929: 301, fig. 1 (wing) U.S.A. (Eocene). Combination in \**Formicium*: Lutz, 1986: 187; in collective group name \**Formicium*: Archibald, *et al*. 2011: 3681.

\****brodiei****. \*Formicium brodiei* Westwood, 1854: 393, pl. 14, fig. 8 (wing) GREAT BRITAIN (Eocene). In collective group name \**Formicium*: Archibald, *et al*. 2011: 3681. See also: Lutz, 1986: 184.

\**giganteum* Lutz, 1986; see under \****TITANOMYRMA***.

\****mirabile****. \*Megapterites mirabilis* Cockerell, 1920: 278, fig. 3 (wing) GREAT BRITAIN (Eocene). Combination in \**Formicium*: Lutz, 1990: 61; in collective group name \**Formicium*: Archibald, *et al*. 2011: 3681.

\**simillimum* Lutz, 1986; see under \****TITANOMYRMA***.

***FORMICOXENUS***

***chamberlini****. Symmyrmica chamberlini* Wheeler, W.M. 1904a: 5, pl. 1, figs. 1-7 (w.q.m.) U.S.A. Combination in *Formicoxenus*: Francoeur, Loiselle & Buschinger, 1985: 379. See also: Buschinger & Francoeur, 1983: 297.

*corsicus* Emery, 1895; see under ***MYRMOXENUS***.

***diversipilosus****. Leptothorax (Mychothorax) diversipilosus* Smith, M.R. 1939c: 179 (w.q.) U.S.A. Smith, M.R. 1956c: 274 (q.m.); Wheeler, G.C. & Wheeler, J. 1989a: 321 (l.). Combination in *Formicoxenus*: Buschinger, 1979a: 61. See also: Francoeur, Loiselle & Buschinger, 1985: 381.

*emersoni. Leptothorax emersoni* Wheeler, W.M. 1901a: 433, figs. 2, 3 (w.q.m.) U.S.A. Combination in *L. (Mychothorax*): Emery, 1924d: 261. Junior synonym of *provancheri*: Creighton, 1950a: 279. See also: Wheeler, W.M. 1903c: 230.

*formidolosus. Leptothorax (Mychothorax) hirticornis* var. *formidolosus* Wheeler, W.M. 1915b: 415 (w.q.) U.S.A. Junior synonym of *hirticornis*: Smith, M.R. 1939c: 177.

*glacialis. Leptothorax emersoni* subsp. *glacialis* Wheeler, W.M. 1907b: 71 (w.q.m.) U.S.A. Subspecies of *provancheri*: Creighton, 1950a: 280. Junior synonym of *provancheri*: Cole, 1954d: 241.

***hirticornis****. Leptothorax (Leptothorax) hirticornis* Emery, 1895c: 319 (w.) U.S.A. Smith, M.R. 1939c: 176 (q. ergatoid); Snelling, R.R. 1965a: 18 (q.m. ergatoid). Combination in *L*. (*Mychothorax*): Emery, 1924d: 262; in *Mychothorax*: Ruzsky, 1936: 96; in *Formicoxenus*: Buschinger, 1979a: 61. Senior synonym of *formidolosus*: Smith, M.R. 1939c: 177. See also: Wheeler, W.M. 1903c: 224; Francoeur, Loiselle & Buschinger, 1985: 382.

*hirtipilis. Leptothorax emersoni* subsp. *hirtipilis* Wheeler, W.M. 1917a: 515 (w.) CANADA. Junior synonym of *provancheri*: Creighton, 1950a: 279.

*laeviuscula. Myrmica laeviuscula* Foerster, 1850a: 54 (q.) GERMANY. Junior synonym of *nitidulus*: Mayr, 1855: 418.

***nitidulus****. Myrmica nitidula* Nylander, 1846b: 1058 (w.) FINLAND. Nylander, 1849: 34 (q.); Mayr, 1855: 419 (m.). Combination in *Formicoxenus*: Mayr, 1855: 418. Senior synonym of *laeviuscula*: Mayr, 1855: 418; of *picea*: Francoeur, Loiselle & Buschinger, 1985: 380. See also: Kutter, 1977c: 144; Francoeur, Loiselle & Buschinger, 1985: 380; Radchenko, 2007: 32.

*orientalis. Formicoxenus orientalis* Dlussky, 1963: 193, figs. 6, 8 (w.) RUSSIA. Junior synonym of *sibiricus*: Francoeur, Loiselle & Buschinger, 1985: 382. [Kupyanskaya, 1990: 149 uses the name *orientalis*, apparently unaware of the revision by Francoeur, *et al*.; their synonymy is reaffirmed by Radchenko, 1994b: 111.]

*picea. Leptothorax nitidulus* var. *picea* Wasmann, 1906: 120 (w.) LUXEMBOURG. Junior synonym of *nitidulus*: Francoeur, Loiselle & Buschinger, 1985: 380.

***provancheri****. Leptothorax (Leptothorax) provancheri* Emery, 1895c: 320 (w.) CANADA. Francoeur, Loiselle & Buschinger, 1985: 377 (q.m.); Wheeler, G.C. & Wheeler, J. 1973b: 73 (l.); Buschinger, Francoeur & Fischer, 1981: 8 (k.). Combination in *L. (Mychothorax*): Emery, 1924d: 262; in *Formicoxenus*: Francoeur, Loiselle & Buschinger, 1985: 377. Senior synonym of *emersoni, hirtipilis*: Creighton, 1950a: 279; of *glacialis*: Cole, 1954d: 241. See also: Wheeler, W.M. 1903c: 229. [Mackay, Lowrie, *et al*. 1988: 89 (in key) and Wheeler, G.C. & Wheeler, J. 1989a: 323, recombine *provancheri* in *Leptothorax*, apparently unaware of the revision by Francoeur *et al*., whose combination is reaffirmed by Bolton, 1995b: 207.]

***quebecensis****. Formicoxenus quebecensis* Francoeur, in Francoeur, Loiselle & Buschinger, 1985: 378, figs. (q.m.) CANADA. Wheeler, G.C. & Wheeler, J. 1989a: 323 (l.).

*ravouxi* André, 1896; see under ***MYRMOXENUS***.

***sibiricus****. Leptothorax sibiricus* Forel, 1899b: 306 (w.) RUSSIA. Combination in *L*. (*Mychothorax*): Emery, 1924d: 262; in *Formicoxenus*: Francoeur, Loiselle & Buschinger, 1985: 382. Junior synonym of *hirticornis*: Ruzsky, 1905b: 622. Revived from synonymy as subspecies of *hirticornis*: Emery, 1924d: 262. Revived status as species and senior synonym of *orientalis*: Francoeur, Loiselle & Buschinger, 1985: 382.

***FORMILA***

***chevrolatii****. Formila chevrolatii* Romand, 1846: xxxii, pl. 2, fig. 5 (w.) FRANCE. Genus subsequently misspelled as *Formica* and species incorrectly treated as a junior synonym of *Formica fusca*: Dalla Torre, 1893: 193 (and subsequent authors). **Excluded from Formicidae**, transferred to Family Embolemidae: Muesebeck & Walkley, 1951: 1043.

***FORMOSIMYRMA***

***lanuyensis****. Formosimyrma lanuyensis* Terayama, 2009: 159, figs. 225-229 (w.) TAIWAN.

***FROGGATTELLA***

*bispinosa. Froggattella kirbyi* var. *bispinosa* Forel, 1902h: 460 (w.) AUSTRALIA. Junior synonym of *kirbii*: Shattuck, 1996b: 45.

*ianthina. Froggattella kirbyi* subsp. *ianthina* Wheeler, W.M. 1936a: 8 (w.) AUSTRALIA. Junior synonym of *kirbii*: Shattuck, 1996b: 45.

***kirbii****. Acantholepis kirbii* Lowne, 1865b: 333 (w.) AUSTRALIA. Wheeler, W.M. 1936a: 6 (q.m.); Wheeler, G.C. & Wheeler, J. 1951: 182 (l.). Combination in *Hypoclinea*: Mayr, 1870b: 954; in *Dolichoderus*: Dalla Torre, 1893: 159; Emery, 1894c: 228; in *Froggattella*: Forel, 1902h: 459. [Unjustified emendation of spelling to *kirbyi*: Mayr, 1876: 80; Forel, 1902h: 459.] See also: Wheeler, G.C. & Wheeler, J. 1966: 728. Senior synonym of: *bispinosa, ianthina, laticeps, lutescens, nigripes*: Shattuck, 1996b: 45.

*laticeps. Froggattella kirbyi* subsp. *laticeps* Wheeler, W.M. 1936a: 10 (w.) AUSTRALIA. Junior synonym of *kirbii*: Shattuck, 1996b: 45.

***latispina****. Froggattella latispina* Wheeler, W.M. 1936a: 10 (w.) AUSTRALIA. See also: Shattuck, 1996b: 47.

*lutescens. Froggattella kirbyi* subsp. *lutescens* Wheeler, W.M. 1936a: 9 (w.) AUSTRALIA. Junior synonym of *kirbii*: Shattuck, 1996b: 45.

*nigripes. Froggattella kirbyi* subsp. *nigripes* Wheeler, W.M. 1936a: 8 (w.) AUSTRALIA. Junior synonym of *kirbii*: Shattuck, 1996b: 45.

*FULAKORA*: see under ***AMBLYOPONE***.

\****FURCISUTURA***

\****wanghuacunensis****. \* Furcisutura wanghuacunensis* Hong, 2002: 530, figs. 302-315 (m.) CHINA (Eocene).

***FURCOTANILLA***

***furcomandibula****. Protanilla furcomandibula* Xu & Zhang, 2002: 140, figs. 1-3 (w.) CHINA. Combination in *Furcotanilla*: Xu, 2012c: 483.

\****FUSHUNIFORMICA***

\****spinata****. \*Fushuniformica spinata* Hong, 2002: 617, figs. 595-602 (w?) CHINA (Eocene).

\****FUSHUNOMYRMEX***

\****liaoningensis****. \*Fushunomyrmex liaoningensis* Hong, 2002: 550, figs. 365-374 (w.) CHINA (Eocene).