

The Extreme, Workerless Inquilines of the World.

The inquiline species.

Tetramorium Mayr, 1855 (Only a few species in a big genus.) (= **Teleutomyrmex Kutter, 1950**, by Ward, Brady, Fisher, Schultz, 2015 ("2014"), the old genus, complete.).

- 01) *Tetramorium inquilinum* Ward, Brady, Fisher, Schultz, 2015 ("2014")
(= *Teleutomyrmex schneideri* Kutter, 1950)
(= *Tetramorium schneideri* (Kutter, 1950), by Ward, Brady, Fisher, Schultz, 2015 ("2014"))
(not *Tetramorium schneideri* Emery, 1898)
(= *Tetramorium inquilinum* Ward, Brady, Fisher, Schultz, 2015 ("2014"), replacement name)
- 02) *Tetramorium kutteri* (Tinaut, 1990)
(= *Teleutomyrmex kutteri* Tinaut, 1990)
(= *Tetramorium kutteri* (Tinaut, 1990), by Ward, Brady, Fisher, Schultz, 2015 ("2014"))
(not *Tetramorium semilaeve* André, 1883 var. *kutteri* Santschi, 1927)
- 03) *Tetramorium seiferti* (Kiran & Karaman, in Kiran, Karaman, Lapeva-Gjonova, Aksoy, 2017)
(= *Teleutomyrmex seiferti* Kiran & Karaman, in Kiran, Karaman, Lapeva-Gjonova, Aksoy, 2017)
(= *Tetramorium seiferti* (Kiran & Karaman, in Kiran, Karaman, Lapeva-Gjonova, Aksoy, 2017), by analogy)
- 04) *Tetramorium buschingeri* (Lapeva-Gjonova, in Kiran, Karaman, Lapeva-Gjonova, Aksoy, 2017)
(= *Teleutomyrmex buschingeri* Lapeva-Gjonova, in Kiran, Karaman, Lapeva-Gjonova, Aksoy, 2017)
(= *Tetramorium buschingeri* (Lapeva-Gjonova, in Kiran, Karaman, Lapeva-Gjonova, Aksoy, 2017), by analogy)

Not yet described species of extreme, workerless inquiline, from the genus **Tetramorium Mayr, 1855** (= **Teleutomyrmex Kutter, 1950**).

- 05) The new, undescribed species from *Tetramorium Mayr, 1855* (= *Teleutomyrmex Kutter, 1950*) from Farab, Turkmenistan... See Dlussky, Soyunov, Zabelin, 1990 ["1989"].

Tetramorium Mayr, 1855 (Only a few species in a big genus.) (= **Anergates Forel, 1874**, by Ward, Brady, Fisher, Schultz, 2015 ("2014"), the old genus, complete.).

06) *Tetramorium atratum* (Schenck, 1852)

(= *Myrmica atratula* Schenck, 1852)

[Also described as new by Schenck, 1853b]

(= *Tetramorium atratum* (Schenck, 1852), by Mayr, 1855)

[= *Tomognathus atratus* (Schenck, 1852), by Mayr, 1863 following Mayr, 1861, obsolete combination.]

(= *Anergates atratus* (Schenck, 1852), by Forel, 1874)

(= *Tetramorium atratum* (Schenck, 1852), by Ward, Brady, Fisher, Schultz, 2015 ("2014"))

07) *Tetramorium friedlandi* (Creighton, 1934)

(= *Anergates friedlandi* Creighton, 1934)

[= *Tetramorium friedlandi* (Creighton, 1934), by analogy]

Tetramorium Mayr, 1855 (Only a few species in a big genus.).

08) *Tetramorium microgyna* Santschi, 1918

09) *Tetramorium parasiticum* Bolton, 1980

Pheidole Westwood, 1839 (Only a few species in a big genus.).

10) *Pheidole neokohli* Wilson, 1984

(= *Anergatides kohli* Wasmann, 1915)

(= *Pheidole kohli* (Wasmann, 1915), by Wilson, 1984)

(not *Pheidole kohli* Mayr, 1901)

(= *Pheidole neokohli* Wilson, 1984, replacement name)

11) *Pheidole acutidens* (Santschi, 1922)

(= *Brachomyrma acutidens* Santschi, 1922)

(= *Pheidole acutidens* (Santschi, 1922), by Wilson, 1984)

12) *Pheidole argentina* (Bruch, 1932)

(= *Gallardomyrma argentina* Bruch, 1932)

(= *Pheidole argentina* (Bruch, 1932), by Wilson, 1984)

13) *Pheidole parasitica* Wilson, 1984

Excluded from the extreme, workerless inquilines. Once this species was included in the extreme, workerless inquilines but now it is considered to be a workerless inquiline without extreme reductions, e.g. no pupoid males but normal ones. The decision to exclude it was made by Edward Osborne Wilson in 1984 in a study of the inquilines in the genus ***Pheidole* Westwood, 1839**.

***Pheidole* Westwood, 1839** (Only one species in a big genus.).

- 14) *Pheidole kusnezovi* Wilson, 2003
(= *Eriopheidole symbiotica* Kusnezov, 1952)
(= *Pheidole symbiotica* (Kusnezov, 1952), by Wilson, 1984)
(not *Pheidole symbiotica* Wasmann, 1909)
(= *Pheidole kusnezovi* Wilson, 2003, replacement name)

Distribution.

- 01) Europe (Alps, Pyrenees and Northern Spain)
- 02) Europe (Southern Iberia)
- 03) Turkey (Anatolia)
- 04) Europe (Southern Balkans or, more precisely, Bulgaria)

- 05) Turkmenistan

- 06) Palaearctic region (most important: Europe)
- 07) North America

- 08) Southern Africa
- 09) Southern Africa

- 10) Central Africa
- 11) South America
- 12) South America
- 13) India

- 14) South America

The host species.

01), 02), 03), 04), 05), 06), 07), 08) and 09) Certain species of the genus **Tetramorium Mayr, 1855**.

01) *T. alpestre* Steiner, Schlick-Steiner & Seifert, 2010 and *T. impurum* (Förster, 1850)
and maybe *T. caespitum* (Linnaeus, 1758)?

02) *T. cf. caespitum* (Linnaeus, 1758)

03) *T. cf. chefketi* Forel, 1911

04) *T. cf. chefketi* Forel, 1911

05) A species from the genus *Tetramorium* Mayr, 1855...

06) *T. impurum* (Förster, 1850), *T. caespitum* (Linnaeus, 1758), *T. immigrans* Santschi, 1927, *T. staerckeii* Kratochvíl, in Kratochvíl, Novák, Šnoflák, 1944
and *T. moravicum* [Kratochvíl, in] Novák & Sadil, 1941, *T. diomedaeum* Emery, 1908, *T. chefketi* Forel, 1911

07) *T. immigrans* Santschi, 1927

08) *T. sericeiventre* Emery, 1877 and *T. sepositum* Santschi, 1918

09) *T. avium* Bolton, 1980

10), 11), 12), 13) and 14) Certain species of the genus **Pheidole Westwood, 1839**.

10) *P. megacephala* (Fabricius, 1793) subsp. *melancholica* Santschi, 1912

11) *P. strobelii* Emery, 1906

12) *P. nitidula* Emery, 1888

13) *P. indica* Mayr, 1879

14) *P. obscurior* Forel, 1886

A remark about synonymy.

Tetramorium friedlandi (Creighton, 1934) is now a synonym from *Tetramorium atratum* (Schenck, 1852), more precisely an introduced form in North America (see also Schär, Talavera, Espadaler, Rana, Andersen, Cover, Vila, 2018.). This synonymy was given by Creighton, 1950. So, the name is *Tetramorium atratum* (Schenck, 1852)...

Synonyms of the host species.

- *T. impurum* (Förster, 1850) (= *Myrmica impura* Förster, 1850)
- *T. caespitum* (Linnaeus, 1758) (= *Formica caespitum* Linnaeus, 1758)
- *T. chefketi* Forel, 1911 (= *T. caespitum* (Linnaeus, 1758) var. *chefketi* Forel, 1911)
- *T. immigrans* Santschi, 1927 (= *T. caespitum* (Linnaeus, 1758) var. *immigrans* Santschi, 1927)
- *T. staerckeii* Kratochvíl, in Kratochvíl, Novák, Šnoflák, 1944 (= *T. caespitum* (Linnaeus, 1758) subsp. *hungarica* Röszler, 1935 ("1933-34") var. *staerckeii* Röszler, 1936)
- *T. diomedaeum* Emery, 1908 (= *T. caespitum* (Linnaeus, 1758) var. *diomedea* Emery, 1908)
- *T. sepositum* Santschi, 1918 (= *T. gladstonei* Forel, 1913 var. *seposita* Santschi, 1918)
- *P. megacephala* (Fabricius, 1793) (= *Formica megecephala* Fabricius, 1793) (= *Formica edax* Forskål, 1775, a nomen oblitum under Art. 23.9 of ICBN (1999))
- *P. megacephala* (Fabricius, 1793) subsp. *melancholica* Santschi, 1912 was originally described as *P. punctulata* Mayr, 1866 st. *melancholica* Santschi, 1912
- *P. strobelii* Emery, 1906 (= *P. perversa* Forel, 1908 subsp. *richteri* Forel, 1909, or, in 1922, at the moment the extreme, workerless inquiline species was described, = *P. strobelii* Emery, 1906 subsp. *richteri* Forel, 1909.)
- *P. nitidula* Emery, 1888 (= *P. triconstricta* Forel, 1886 var. *nitidula* Emery, 1888)
- *P. obscurior* Forel, 1886 (= *P. susannae* Forel, 1886 r. *obscurior* Forel, 1886)

And then...

..., if you follow the line further that Ward, Brady, Fisher, Schultz, 2015 ("2014") outlined, the first 9 extreme, workerless inquilines become a few species in the genus ***Strongylognathus* Mayr, 1853.**

01) *Strongylognathus inquilinum* (Ward, Brady, Fisher, Schultz, 2015 ("2014"))

(= *Strongylognathus schneideri* (Kutter, 1950))

02) *Strongylognathus kutteri* (Tinaut, 1990)

03) *Strongylognathus seiferti* (Kiran & Karaman, in Kiran, et al. 2017)

04) *Strongylognathus buschingeri* (Lapeva-Gjonova, in Kiran, et al. 2017)

06) *Strongylognathus atratulus* (Schenck, 1852)

07) (= *Strongylognathus friedlandi* (Creighton, 1934))

08) *Strongylognathus microgyna* (Santschi, 1918)

09) *Strongylognathus parasiticum* (Bolton, 1980)

If you followed the systematics of ants in 2014-2015, you noticed that all the species of *Teleutomyrmex* Kutter, 1950 and *Anergates* Forel, 1874 became *Tetramorium* Mayr, 1855. But normally, they should have the name *Strongylognathus* Mayr, 1853. No, they, Ward, Brady, Fisher, Schultz, 2015 ("2014"), didn't like that! So, until the ICZN would say different, they kept *Tetramorium* Mayr, 1855.

And now you find under a few species, described in the "normal" genus "*Teleutomyrmex* Kutter, 1950", this:

[Note: Kiran, et al. 2017: 146, retain the paraphyletic genus *Teleutomyrmex*.]

But they keep themselves a paraphyletic genus, nl. *Tetramorium* Mayr, 1855!. So it should be *Strongylognathus* Mayr, 1853...