

Order **Araneae** Clerck, 1757 (2 suborders)^{1,2,3}

Suborder **Mesothelae** Pocock, 1892 (4 families)

Family †**Arthrolycosidae** Frič, 1904 (2 genera, 3 species; 2/3/0)⁴

Family †**Arthromygalidae** Petrunkevitch, 1923 (8 genera, 9 species; 8/9/0)⁴

Family †**Pyritaraneidae** Petrunkevitch, 1953 (2 genera, 3 species; 2/3/0)⁴

plesion fossil genus (1 genus, 1 species; 1/1/0)

Family **Liphistiidae** Pocock, 1892 (5 genera, 89 species)

Suborder **Opisthothelae** Pocock, 1892 (2 infraorders)

Opisthothelae *incerate sedis* (1 genus, 1 species; 1/1/0)

Infraorder **Mygalomorphae** Pocock, 1892 (2 superfamilies)

Superfamily **Atypoidea** Thorell, 1870 (2 families)

Family **Atypidae** Thorell, 1870 (5 genera, 52 species; 2/4/0)

Family **Antrodiaetidae** Gertsch *in* Comstock, 1940 (3 genera, 33 species; 1/1/0)

Unplaced family

Family **Mecicobothriidae** Holmberg, 1882 (6 genera, 11 species; 2/2/0)

Superfamily **Avicularoidea** Simon, 1874 (12 families)

Family **Hexathelidae** Simon, 1892 (13 genera, 106 species; 1/1/0)

Family **Dipluridae** Simon, 1889 (28 genera, 183 species; 3/4/0)

Family **Cyrtoucheniidae** Simon, 1892 (18 genera, 135 species; 0/1/0)

Family **Ctenizidae** Thorell, 1887 (11 genera, 129 species; 2/4/0)

Family **Idiopidae** Simon, 1892 (22 genera, 302 species)

Family **Actinopodidae** Simon, 1892 (3 genera, 40 species)

Family **Migidae** Simon, 1892 (10 genera, 91 species)

Family **Nemesiidae** Simon, 1892 (44 genera, 357 species; 2/2/0)

Family **Microstigmatidae** Roewer, 1942 (8 genera, 16 species; 1/1/0)

Family **Barychelidae** Simon, 1889 (44 genera, 304 species; 0/1/0)

Family **Theraphosidae** Thorell, 1870 (121 genera, 938 species; 1/1/0)

Family **Paratropididae** Simon, 1889 (4 genera, 8 species)

Infraorder **Araneomorphae** Smith, 1902 (number of superfamilies unclear)

Araneomorphae *incertae sedis* (2 genera, 2 species; 2/2/0)

Clade **Paleocribellatae** (1 family)

Family **Hypochilidae** Marx, 1888 (2 genera, 12 species)

Unnamed Clade

Superfamily **Austrochiloidea** Zapfe, 1955 (2 families)

Family **Austrochilidae** Zapfe, 1955 (3 genera, 9 species)

Family **Gradungulidae** Forster, 1955 (7 genera, 16 species)

Clade **Araneoclada** Platnick, 1977 (107 families)

Clade **Haplogynae** Simon, 1893 (20 families)

Superfamily **Dysderoidea** C. L. Koch, 1837 (5 families)

Family **Segestriidae** Simon, 1893 (7 genera, 140 species; 4/20/0)

Family **Dysderidae** C. L. Koch, 1837 (26 genera, 528 species; 2/9/0)

Family **Oonopidae** Simon, 1890 (88 genera, 793 species; 5/38/0)

Family **Orsolobidae** Cooke, 1965 (28 genera, 181 species)

Family †**Plumorsolidae** Wunderlich, 2008 (1 genus, 1 species; 1/1/0)⁵

1. **BY** Jason A. Dunlop and David Penney (for full contact details, see **Contributor names and addresses** after **References**). The title of this contribution should be cited as “Order Araneae Clerck, 1757. In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness”.
2. The phylogenetic scheme adopted here is primarily based on Coddington (2005), with updates. In this sense the sequence of families is similar to—but not identical with—that of Platnick’s (2011) World Spider Catalog. Superfamily names and groupings have not reached a generally accepted consensus for some groups; especially within Haplogynae. Genus and species counts are based on Platnick (2011) for extant species, supplemented by the data of Dunlop *et al.* (2011) for fossil taxa. Araneae currently includes a total of 129 families, 4,191 genera and 43,579 species; of which 110, 3,849 and 42,473 respectively are extant.
3. Where needed, information about fossil and questionable taxa is given by the following shorthand. In parentheses, the contributors to the cited totals that are fossil genera (fg), fossil species (fs), or *species inquirendae* (si) are listed as (fg/fs/si).
4. The putative fossil mesothelae families merit revision (see comments in Penney & Selden 2006).

- Superfamily **Pholcoidea** C. L. Koch, 1851 (3 families)
 Family **Pholcidae** C. L. Koch, 1851 (86 genera, 1136 species; 2/14/0)
 Family **Plectreuridae** Simon, 1893 (4 genera, 33 species; 2/3/0)
 Family **Diguetidae** F. O. P.-Cambridge, 1899 (2 genera, 15 species)
- Superfamily **Caponioidea** Simon, 1890 (2 families)
 Family **Caponiidae** Simon, 1890 (15 genera, 85 species; 0/1/0)
 Family **Tetrablemmidae** O. P.-Cambridge, 1873 (31 genera, 143 species; 1/2/0)
- Superfamily **Scytodoidea** Blackwall, 1864 (4 families)
 Family **Sicariidae** Keyserling, 1880 (2 genera, 127 species; 0/3/0)
 Family **Scytodidae** Blackwall, 1864 (5 genera, 233 species; 0/5/0)
 Family **Periegopidae** Simon, 1893 (1 genus, 2 species)
 Family **Drymusidae** Simon, 1893 (1 genus, 15 species)
- Superfamily **Leptonetoidea** Simon, 1890 (3 families)
 Family **Ochyroceratidae** Fage, 1912 (15 genera, 163 species; 1/2/0)
 Family **Leptonetidae** Simon, 1890 (20 genera, 269 species; 2/8/0)
 Family **Telemidae** Fage, 1913 (7 genera, 61 species; 0/1/0)
- Unplaced families
 Family **Filistatidae** Ausserer, 1867 (17 genera, 114 species; 0/1/0)
 Family †**Praeterleptonetidae** Wunderlich, 2008 (3 genera, 4 species; 3/4/0)⁵
 Family †**Eopsilodercidae** Wunderlich, 2008 (2 genera, 2 species; 2/2/0)⁵
- Clade **Entelegynae** Simon, 1893 (87 families)
- Superfamily **Palpimanoidea** Thorell, 1870 (13 families)⁶
 Family *incertae sedis* (1 genus, 1 species; 1/1/0)
 Family **Archaeidae** C. L. Koch & Berendt, 1854 (13 genera, 54 species; 10/17/0)
 Family **Mecysmaucheniidae** Simon, 1895 (8 genera, 26 species; 1/1/0)
 Family **Pararchaeidae** Forster & Platnick, 1984 (7 genera, 35 species)
 Family **Holarchaeidae** Forster & Platnick, 1984 (1 genus, 2 species)
 Family **Huttoniidae** Simon, 1893 (1 genus, 1 species)
 Family **Stenochilidae** Thorell, 1873 (2 genera, 13 species)
 Family **Palpimanidae** Thorell, 1870 (15 genera, 131 species)
 Family †**Micropalpimanidae** Wunderlich, 2008 (1 genus, 1 species; 1/1/0)⁷
 Family †**Lagonomegopidae** Eskov & Wunderlich, 1995 (3 genera, 5 species; 3/5/0)
 Family †**Grandoculidae** Penney, 2011 (1 genus, 1 species; 1/1/0)
 Family †**Spatiatoridae** Petrunkevitch, 1942 (1 genus, 3 species; 1/3/0)⁷
 Family **Malkaridae** Davies, 1980 (4 genera, 11 species)
 Family **Mimetidae** Simon, 1881 (14 genera, 164 species; 1/8/0)⁸
- Superfamily **Eresoidea** C. L. Koch, 1851 (3 families)
 Family **Eresidae** C. L. Koch, 1851 (8 genera, 96 species)
 Family **Oecobiidae** Blackwall, 1862 (9 genera, 118 species; 3/8/0)
 Family **Hersiliidae** Thorell, 1870 (22 genera, 188 species; 7/14/1)
- Unplaced families
 Family †**Burmascutidae** Wunderlich, 2008 (1 genus, 1 species; 1/1/0)⁵
 Family †**Salticoididae** Wunderlich, 2008 (1 genus, 1 species; 1/1/0)⁵
- 'Canoe tapetum' clade (68 families)
Orbiculariae Walckenaer, 1802 (21 families)

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5. One of a number of rather poorly-defined fossil families in need of revision; often based on a small sample of (sometimes juvenile) specimens and in some cases published in non-peer reviewed journals.
 6. The correct delimitation of Palpimanoidea has been controversial for many years (see e.g. Griswold *et al.* 2005, and references therein) and the issue is still not fully resolved. The inclusion here of the fossil families Lagonomegopidae and Grandoculidae also merits confirmation.
 7. Probably huttoniids according to research in progress by Spanish and US researchers.
 8. Although traditionally placed in Palpimanoidea the—probably paraphyletic—mimetids almost certainly belong in Orbiculariae (see again Griswold *et al.* 2005; Dimitrov *et al.* 2011) and maybe even within different superfamilies.

- Superfamily **Deinopoidea** C. L. Koch, 1851 (2 families)
 Family **Deinopidae** C. L. Koch, 1851 (5 genera, 59 species; 1/2/0)
 Family **Uloboridae** Thorell, 1869 (27 genera, 286 species; 9/21/0)
- Superfamily **Araneoidea** Latreille, 1806 (20 families)
 Family *incertae sedis* (1 genus, 1 species; 1/1/0)
 Family **Cyatholipidae** Simon, 1894 (28 genera, 71 species; 5/13/0)
 Family **Synotaxidae** Simon, 1894 (25 genera, 112 species; 11/36/0)
 Family **Nesticidae** Simon, 1894 (13 genera, 219 species; 4/11/0)
 Family **Theridiidae** Sundevall, 1833 (153 genera, 2513 species; 34/189/0)
 Family **Theridiosomatidae** Simon, 1881 (22 genera, 101 species; 6/12/0)
 Family **Symphytognathidae** Hickman, 1931 (7 genera, 66 species)
 Family **Anapidae** Simon, 1895 (47 genera, 177 species; 9/27/0)⁹
 Family **Micropholcommatidae** Hickman, 1944 (20 genera, 67 species; 1/1/0)¹⁰
 Family **Mysmenidae** Petrunkevitch, 1928 (26 genera, 133 species; 3/10/0)
 Family †**Baltsuccinidae** Wunderlich, 2004 (1 genus, 2 species; 1/2/0)⁵
 Family †**Protheridiidae** Wunderlich, 2004 (3 genera, 7 species; 3/7/0)⁵
 Family **Synaphridae** Wunderlich, 1986 (4 genera, 14 species; 1/1/0)
 Family **Pimoidae** Wunderlich, 1986 (4 genera, 45 species; 0/8/0)
 Family †**Pumiliopimoidae** Wunderlich, 2008 (1 genus, 1 species; 1/1/0)⁵
 Family **Sinopimoidae** Li & Wunderlich, 2008 (1 genus, 1 species)¹¹
 Family **Linyphiidae** Blackwall, 1859 (596 genera, 4461 species; 10/60/0)
 Family **Tetragnathidae** Menge, 1866 (57 genera, 982 species; 10/27/0)
 Family **Nephilidae** Simon, 1894 (9 genera, 81 species; 5/20/0)
 Family **Araneidae** Simon, 1895 (185 genera, 3088 species; 17/68/0)
 Family †**Juraraneidae** Eskov, 1984 (1 genus, 1 species; 1/1/0)¹²
- Unplaced non-Orbiculariae families
 Family **Nicodamidae** Simon, 1898 (9 genera, 29 species)
 Family **Phyxelididae** Lehtinen, 1967 (12 genera, 54 species)
 Family **Titanoecidae** Lehtinen, 1967 (5 genera, 49 species)
- ‘Retrolateral tibial apophysis’ (RTA) clade** (44 families)
 Superfamily **Dictynoidea** (4 families)
 Family **Hahniidae** Bertkau, 1878 (30 genera, 252 species; 3/4/1)
 Family **Dictynidae** O. P.-Cambridge, 1871 (71 genera, 617 species; 21/51/0)
 Family **Cybaeidae** Simon, 1898 (11 genera, 179 species; 1/2/0)
 Family **Desidae** Pocock, 1895 (38 genera, 183 species; 0/2/0)
- Clade **‘Amaurobioids’** (20 families)
 Superfamily **Lycosoidea** Sundevall, 1833 (11 families)
 Family *incertae sedis* (1 genus, 1 species; 1/1/0)
 Family **Lycosidae** Sundevall, 1833 (119 genera, 2388 species; 1/6/0)
 Family †**Parattidae** Petrunkevitch, 1922 (1 genus, 4 species; 1/4/0)¹³
 Family **Trechaleidae** Simon, 1890 (19 genera, 121 species; 3/3/1)
 Family **Pisauridae** Simon, 1890 (54 genera, 335 species; 2/1/1)
 Family **Oxyopidae** Thorell, 1870 (10 genera, 433 species; 1/3/0)
 Family **Senoculidae** Simon, 1890 (1 genus, 31 species)
 Family **Stiphidiidae** Dalmas, 1917 (22 genera, 135 species)

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9. Wunderlich (2011) treated some anapid genera as a distinct family, Comaromidae, but this was not accepted in the latest version of the Platnick Catalog.
 10. Traditionally placed in Palpimanoidea; some workers (e.g. Lopardo *et al.* 2011) consider micropholcommatids a subfamily of Anapidae; but see Platnick (2011).
 11. Status of this monotypic family dubious according to Platnick (2011); possibly an erigonine linyphiid (Hormiga 2008).
 12. Possibly an araneid (see comments in Penney & Selden 2006).
 13. Parattids are in need of revision and probably represent an assemblage of species assignable to one or more extant lycosoid families (see comments in Penney & Selden 2006).

Family **Psechridae** Simon, 1890 (2 genera, 30 species)
Family **Zoropsidae** Bertkau, 1882 (16 genera, 92 species; 3/14/0)
Family †**Insecutoridae** Petrunkevitch, 1942 (1 genus, 5 species; 1/5/0)⁵
Family **Ctenidae** Keyserling, 1877 (41 genera, 477 species; 1/1/0)

Unplaced families

Family **Agelenidae** C. L. Koch, 1837 (69 genera, 1156 species; 1/8/0)
Family **Amphinectidae** Forster & Wilton, 1973 (32 genera, 159 species)
Family **Cycloctenidae** Simon, 1898 (5 genera, 36 species)
Family **Amaurobiidae** Thorell, 1870 (51 genera, 278 species)
Family **Tengellidae** Dahl, 1908 (8 genera, 51 species)
Family **Zorocratidae** Dahl, 1913 (5 genera, 42 species)
Family **Miturgidae** Simon, 1885 (28 genera, 357 species; 0/2/0)
Family **Zodariidae** Thorell, 1881 (86 genera, 967 species; 9/11/0)
Family **Penestomidae** Simon, 1903 (1 genus, 9 species)
Family *incertae sedis* (1 genus, 1 species; 1/1/0)

Clade **Dionycha** (20 families)

Superfamily **Gnaphosoidea** Simon, 1893 (7 families)

Family **Ammoxenidae** Simon, 1893 (4 genera, 18 species)
Family **Cithaeronidae** Simon, 1893 (2 genera, 6 species)
Family **Gallieniellidae** Millot, 1947 (11 genera, 57 species)
Family **Trochanteriidae** Karsch, 1879 (25 genera, 182 species; 6/30/0)
Family **Lamponidae** Simon, 1893 (23 genera, 192 species)
Family **Prodidomidae** Simon, 1884 (30 genera, 304 species; 0/1/0)
Family **Gnaphosidae** Pocock, 1898 (123 genera, 2147 species; 6/24/0)

Unplaced families

Family *incertae sedis* (2 genera, 2 species; 2/2/0)
Family **Clubionidae** Simon, 1895 (26 genera, 601 species; 9/22/1)
Family **Anyphaenidae** Bertkau, 1878 (56 genera, 518 species; 0/4/0)
Family **Liocranidae** Simon, 1897 (31 genera, 182 species; 1/4/0)
Family **Corinnidae** Karsch, 1880 (96 genera, 1051 species; 9/37/0)
Family †**Ephalmatoridae** Petrunkevitch, 1950 (1 genus, 12 species; 1/12/0)⁵
Family **Chummidae** Jocqué, 2001 (1 genus, 2 species)
Family **Homalonychidae** Simon, 1893 (1 genus, 3 species)
Family **Zoridae** F. O. P.-Cambridge, 1893 (16 genera, 81 species; 2/2/0)
Family **Selenopidae** Simon, 1897 (10 genera, 241 species; 0/4/0)
Family **Sparassidae** Bertkau, 1872 (89 genera, 1124 species; 4/11/0)
Family **Philodromidae** Thorell, 1870 (31 genera, 537 species; 2/2/0)
Family **Thomisidae** Sundevall, 1833 (190 genera, 2183 species; 13/31/0)¹⁴
Family **Salticidae** Blackwall, 1841 (591 genera, 5430 species; 17/62/0)

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14. Wunderlich's (2004) proposal of a separate family, Borboropactidae, for some fossil and living crab spiders has not been widely accepted.

- ments on its phylogenetic relationships. *Zootaxa*, 1814, 1–20.
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