

Suborder **Oribatida** van der Hammen, 1968 (5 infraorders)^{1,2,3}

Infraorder **Palaeosomata** Grandjean, 1969 (3 superfamilies)

Superfamily **Acaronychoidea** Grandjean, 1932 (2 families)

Family **Acaronychidae** Grandjean, 1932 (1 genus, 3 species)

Family **Archeonothridae** Grandjean, 1954 (5 genera, 20 species)

Superfamily **Palaeacaroidea** Grandjean, 1932 (1 family)

Family **Palaeacaridae** Grandjean, 1932 (2 genera, 6 species)

Superfamily **Ctenacaroidea** Grandjean, 1954 (3 families)

Family **Adelphacaridae** Grandjean, 1954 (1 genus, 1 species)

Family **Aphelacaridae** Grandjean, 1954 (3 genera, 4 species; 1/1/0)

Family **Ctenacaridae** Grandjean, 1954 (5 genera, 6 species; 2/2/0)

Infraorder **Enarthronota** Grandjean, 1969 (5 superfamilies)

Superfamily **Brachychthonioidea** Thor, 1934 (1 family)

Family **Brachychthoniidae** Thor, 1934 (11 genera, 169 species; 0/0/12)

Superfamily **Atopochthonioidea** Grandjean, 1949 (3 families)

Family **Atopochthoniidae** Grandjean, 1949 (1 genus, 2 species)

Family **Phyllochthoniidae** Travé, 1967 (1 genus, 3 species)

Family **Pterochthoniidae** Grandjean, 1950 (1 genus, 1 species)

Superfamily **Hypochthonioidea** Berlese, 1910 (4 families)

Family **Eniochthoniidae** Grandjean, 1947 (1 genus, 7 species; 0/0/1)

Family **Hypochthoniidae** Berlese, 1910 (5 genera, 25 species; 1/1/1)

Family **Lohmanniidae** Berlese, 1916 (25 genera, 205 species; 0/1/8)

Family **Mesoplophoridae** Ewing, 1917 (3 genera, 40 species; 0/0/1)

Superfamily **Protoplophoroidea** Ewing, 1917 (5 families)

Family **Cosmochthoniidae** Grandjean, 1947 (4 genera, 48 species; 1/1/6)

Family **Haplochthoniidae** van der Hammen, 1959 (3 genera, 15 species)

Family **Pediculochelidae** Lavoipierre, 1946 (1 genus, 7 species)

Family **Protoplophoridae** Ewing, 1917 (9 genera, 48 species; 0/1/3)

Family **Sphaerochthoniidae** Grandjean, 1947 (2 genera, 21 species)

Superfamily **Heterochthonioidea** Grandjean, 1954 (3 families)

Family **Arborichthoniidae** Balogh & Balogh, 1992 (1 genus, 1 species)

Family **Heterochthoniidae** Grandjean, 1954 (3 genera, 6 species)

Family **Trichthoniidae** Lee, 1982 (3 genera, 6 species; 0/0/1)

Unplaced families

Family **Protochthoniidae** Norton, 1988 (1 genus, 1 species; 1/1/0)

Family **Devonacaridae** Norton, 1988 (1 genus, 1 species; 1/1/0)⁴

Infraorder **Parhyposomata** Grandjean, 1969 (1 superfamily)

Superfamily **Parhypochthonioidea** Grandjean, 1932 (3 families)

Family **Elliptochthoniidae** Norton, 1975 (1 genus, 9 species)

Family **Gehypochthoniidae** Strenzke, 1963 (1 genus, 9 species; 0/1/1)

Family **Parhypochthoniidae** Grandjean, 1932 (1 genus, 4 species; 0/0/1)

Infraorder **Mixonomata** Grandjean, 1969 (7 superfamilies)

Superfamily **Nehypochthonioidea** Norton & Metz, 1980 (1 family)

Family **Nehypochthoniidae** Norton & Metz, 1980 (1 genus, 2 species)

1. **BY** Heinrich Schatz, Valerie M. Behan-Pelletier, Barry M. O'Connor and Roy A. Norton (for full contact details, see **Contributor names and addresses** after **References**). The title of this contribution should be cited as "Suborder Oribatida van der Hammen, 1968. *In*: Zhang, Z.-Q. (Ed.) *Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness*". Recent Oribatida (including Astigmata) currently include 249 families, 2,399 genera and 16,197 species; exclusively fossil taxa include 2 families, 20 genera and 108 species.
2. This classification is based on Lindquist *et al.* (2009), Norton and Behan-Pelletier (2009), O'Connor (2009) and an unpublished database maintained by H. Schatz. Instances of incongruence with other recent classifications, including those of Balogh and Balogh (1992), Woas (2002), Subías (2004) and Weigmann (2006), are noted by Norton and Behan-Pelletier (2009).
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 inclusion of Devonacaridae Norton, 1988 in Enarthronota remains uncertain (Norton *et al.* 1988).

- Superfamily **Eulohmannioidea** Grandjean, 1931 (1 family)
 Family **Eulohmanniidae** Grandjean, 1931 (1 genus, 1 species)
- Superfamily **Perlohmannioidea** Grandjean, 1954 (1 family)
 Family **Perlohmanniidae** Grandjean, 1954 (2 genera, 10 species)
- Superfamily **Epilohmannioidea** Oudemans, 1923 (1 family)
 Family **Epilohmanniidae** Oudemans, 1923 (3 genera, 59 species; 0/0/2)
- Superfamily **Collohmannioidea** Grandjean, 1958 (1 family)
 Family **Collohmanniidae** Grandjean, 1958 (2 genera, 4 species; 1/2/0)
- Superfamily **Euphthiracaroidae** Jacot, 1930 (3 families)
 Family **Euphthiracaridae** Jacot, 1930 (5 genera, 158 species; 0/0/13)
 Family **Oribotritiidae** Grandjean, 1954 (11 genera, 190 species; 0/1/2)
 Family **Synichotritiidae** Walker, 1965 (4 genera, 15 species)
- Superfamily **Phthiracaroidae** Perty, 1841 (1 family)
 Family **Phthiracaridae** Perty, 1841 (10 genera, 817 species; 0/2/43)
- Infraorder **Desmonomata** Woolley, 1973 (3 hyporders)
 Hyporder **Nothrina** van der Hammen, 1982 (1 superfamily)
 Superfamily **Crotonioidea** Thorell, 1876 (6 families)
 Family **Crotoniidae** Thorell, 1876 (10 genera, 164 species; 1/3/8)⁵
 Family **Hermanniidae** Sellnick, 1928 (4 genera, 111 species; 0/1/9)
 Family **Malaconothridae** Berlese, 1916 (4 genera, 157 species; 0/0/13)
 Family **Nanhermanniidae** Sellnick, 1928 (8 genera, 65 species; 0/0/5)
 Family **Nothridae** Berlese, 1896 (3 genera, 93 species; 0/4/17)
 Family **Trhypochthoniidae** Willmann, 1931 (9 genera, 65 species; 1/3/15)
- Hyporder **Brachypyliina** Hull, 1918 (= Circumdehiscenciae Grandjean, 1954) (25 superfamilies)
 Superfamily **Hermannielloidea** Grandjean, 1934 (2 families)
 Family **Hermanniellidae** Grandjean, 1934 (10 genera, 57 species; 0/2/3)
 Family **Plasmobatidae** Grandjean, 1961 (3 genera, 19 species; 0/0/3)
- Superfamily **Neoliidoidea** Sellnick, 1928 (1 family)
 Family **Neolioidae** Sellnick, 1928 (4 genera, 55 species; 0/4/9)
- Superfamily **Plateremaeoidea** Trägårdh, 1926 (8 families)
 Family **Aleurodamaeidae** Paschoal & Johnston, 1984 (1 genus, 6 species; 0/0/1)
 Family **Gymnodamaeidae** Grandjean, 1954 (7 genera, 64 species; 0/1/3)
 Family **Licnobelbidae** Grandjean, 1965 (2 genera, 3 species)
 Family **Licnodamaeidae** Grandjean, 1954 (3 genera, 12 species)
 Family **Lyrifissellidae** Paschoal, 1989 (1 genus, 1 species)
 Family **Pedrocortesellidae** Paschoal, 1987 (2 genera, 41 species; 0/0/1)
 Family **Pheroliodidae** Paschoal, 1987 (10 genera, 66 species)
 Family **Plateremaeidae** Trägårdh, 1926 (9 genera, 28 species; 1/2/1)
- Superfamily **Damaeidea** Berlese, 1896 (1 family)
 Family **Damaeidae** Berlese, 1896 (27 genera, 291 species; 1/1/34)
- Superfamily **Cepheoidea** Berlese, 1896 (7 families)⁶
 Family **Anderemaeidae** Balogh, 1972 (4 genera, 12 species)
 Family **Cepheidae** Berlese, 1896 (15 genera, 87 species; 0/3/10)
 Family **Cerocephidae** Mahunka, 1986 (3 genera, 4 species)
 Family **Eutegeidae** Balogh, 1965 (10 genera, 32 species)
 Family **Microtegeidae** Balogh, 1972 (2 genera, 31 species)
 Family **Pterobatidae** Balogh & Balogh, 1992 (1 genus, 1 species)

5. Crotoniidae herein includes the classical family Camisiidae Oudemans, 1990. Recent studies, both molecular (Domes *et al.* 2007) and morphological (Colloff & Cameron 2009), show that Crotoniidae (*sensu stricto*) evolved within Camisiidae, which is then clearly paraphyletic. Crotoniidae is the older family-group name and must be used for the merged set of genera, despite the contrary indication by Colloff and Cameron (2010).

6. Due to their type genera having similar names, Cepheidae Berlese, 1896 is a junior homonym of Cepheidae Agassiz, 1862. An application to the International Commission on Zoological Nomenclature, to emend the spelling of the mite family-group name, is being prepared.

Family **Nosybeidae** Mahunka, 1994 (2 genera, 2 species)
 Superfamily **Polypterozetoidea** Grandjean, 1959 (4 families)
 Family **Nodocephidae** Piffel, 1972 (1 genus, 7 species)
 Family **Podopterotegaeidae** Piffel, 1972 (2 genera, 5 species)
 Family **Tumerozetidae** Hammer, 1966 (1 genus, 5 species)
 Family **Polypterozetidae** Grandjean, 1959 (1 genus, 1 species)
 Superfamily **Microzetoidea** Grandjean, 1936 (1 family)
 Family **Microzetidae** Grandjean, 1936 (49 genera, 197 species; 0/0/3)
 Superfamily **Ameroidea** Bulanova-Zachvatkina, 1957 (14 families)⁷
 Family **Ameridae** Bulanova-Zachvatkina, 1957 (7 genera, 37 species; 0/0/3)
 Family **Amerobelbidae** Grandjean, 1961 (7 genera, 14 species)
 Family **Basilobelbidae** Balogh, 1961 (2 genera, 19 species)
 Family **Caleremacidae** Grandjean, 1965 (2 genera, 7 species; 0/1/0)
 Family **Ctenobelbidae** Grandjean, 1965 (1 genus, 23 species)
 Family **Damaeolidae** Grandjean, 1965 (5 genera, 15 species; 0/0/1)
 Family **Eremobelbidae** Balogh, 1961 (4 genera, 51 species; 0/0/3)
 Family **Eremulidae** Grandjean, 1965 (4 genera, 53 species; 0/0/4)
 Family **Heterobelbidae** Balogh, 1961 (2 genera, 16 species)
 Family **Hungarobelbidae** Miko & Travé, 1996 (1 genus, 3 species)
 Family **Oxyameridae** Aoki, 1965 (1 genus, 8 species)
 Family **Rhynchoribatidae** Balogh, 1961 (2 genera, 29 species)
 Family **Spinozetidae** Balogh, 1972 (2 genera, 3 species)
 Family **Staubatidae** Grandjean, 1966 (1 genus, 1 species)
 Superfamily **Zetorchestoidea** Michael, 1898 (6 families)⁸
 Family **Arceremacidae** Balogh, 1972 (2 genera, 11 species)
 Family **Eremaeidae** Oudemans, 1900 (8 genera, 93 species; 1/3/13)
 Family **Megeremacidae** Woolley & Higgins, 1968 (1 genus, 8 species)
 Family **Niphocephidae** Travé, 1959 (1 genus 4 species)
 Family **Zetorchestidae** Michael, 1898 (6 genera, 25 species; 0/0/4)
 Family **Archaeorchestidae** Arillo & Subías, 2000 (1 genus, 1 species; 1/1/0)
 Superfamily **Gustavioidea** Oudemans, 1900 (7 families)
 Family **Astegistidae** Balogh, 1961 (8 genera, 48 species; 0/3/0)
 Family **Gustaviidae** Oudemans, 1900 (1 genus, 17 species; 0/0/4)
 Family **Kodiakellidae** Hammer, 1967 (1 genus, 2 species)
 Family **Liacaridae** Sellnick, 1928 (13 genera, 219 species; 0/1/22)
 Family **Multoribulidae** Balogh, 1972 (2 genera, 3 species)
 Family **Peloppiidae** Balogh, 1943 (19 genera, 81 species; 0/1/3)
 Family **Tenuialidae** Jacot, 1929 (7 genera, 13 species)
 Superfamily **Carabodoidea** C.L.Koch, 1837 (6 families)
 Family **Carabocephidae** Mahunka, 1986 (1 genus, 2 species)
 Family **Carabodidae** C.L.Koch, 1837 (48 genera, 345 species; 1/4/23)
 Family **Dampfiellidae** Balogh, 1961 (2 genera, 58 species)
 Family **Nippobodidae** Aoki, 1959 (2 genera, 17 species)
 Family **Otocephidae** Balogh, 1961 (43 genera 408 species; 1/3/4)
 Family **Tokunocephidae** Aoki, 1966 (1 genus, 1 species)
 Superfamily **Oppioidea** Grandjean, 1951 (17 families)⁹

7. This superfamily is often named Amerobelboidea, with the incorrect assumption that Amerobelbidae was first validly proposed by Grandjean (1954). As no diagnosis or other indication of distinguishing features accompanied the name, it was a nomen nudum at that time (Article 13.1 of the ICZN); Amerobelbidae was first validly proposed by Grandjean (1961). Therefore, Ameridae Bulanova-Zachvatkina, 1957 is the oldest of the family-group names.

8. We follow Grandjean (1967) in the grouping of Zetorchestidae with Eremaeidae and related families. Among them, the oldest available family-group name is Zetorchestidae Michael, 1898.

9. We tentatively follow Subías (2004) in removing from Oppioidea those families with highly modified (“pelopsiform” or “suctorial”) gnathosomas and grouping them as Trizetoidea. Relationships among the families of both groups need more critical study.

- Family **Autognetidae** Grandjean, 1960 (9 genera, 30 species; 0/0/2)
 Family **Chaviniidae** Balogh, 1983 (1 genus, 2 species)
 Family **Enantioppiidae** Balogh, 1983 (1 genus, 1 species)
 Family **Epimerellidae** Ayyildiz & Luxton, 1989 (2 genera, 7 species)
 Family **Granuloppiidae** Balogh, 1983 (4 genera, 20 species; 0/0/2)
 Family **Hexoppiidae** Balogh, 1983 (1 genus, 1 species)
 Family **Luxtoniidae** Mahunka, 2001 (1 genus, 1 species)
 Family **Machadobelbidae** Balogh, 1958 (1 genus, 14 species)
 Family **Machuellidae** Balogh, 1983 (2 genera, 13 species; 0/0/3)
 Family **Oppiidae** Grandjean, 1951 (140 genera, 1045 species; 1/7/72)
 Family **Papillonotidae** Balogh, 1983 (1 genus, 4 species)
 Family **Platyameridae** Balogh & Balogh, 1983 (1 genus, 1 species)
 Family **Quadroppiidae** Balogh, 1983 (5 genera, 43 species; 0/0/8)
 Family **Sternoppiidae** Balogh & Mahunka, 1969 (1 genus, 11 species)
 Family **Teratoppiidae** Balogh, 1983 (5 genera, 19 species)
 Family **Thyrisomidae** Grandjean, 1953 (8 genera, 49 species; 0/1/6)
 Family **Tuparezetidae** Balogh, 1972 (1 genus, 2 species)
 Superfamily **Trizetoidea** Ewing, 1917 (3 families)
 Family **Nosybelbidae** Mahunka, 1994 (1 genus, 1 species)
 Family **Suctobelbidae** Jacot, 1938 (31 genera, 343 species; 0/0/12)
 Family **Trizetidae** Ewing, 1917 (1 genus, 1 species)
 Superfamily **Tectocephoidea** Grandjean, 1954 (1 family)
 Family **Tectocephidae** Grandjean, 1954 (4 genera, 33 species; 0/1/6)
 Superfamily **Limnozetoidea** Thor, 1937 (2 families)¹⁰
 Family **Hydrozetidae** Grandjean, 1954 (1 genus, 33 species; 0/1/7)
 Family **Limnozetididae** Thor, 1937 (2 genera, 16 species; 0/0/2)
 Superfamily **Ameronothroidea** Willmann, 1931 (4 families)
 Family **Ameronothridae** Willmann, 1931 (9 genera, 42 species; 0/0/3)¹¹
 Family **Fortuyniidae** van der Hammen, 1960 (3 genera, 14 species)
 Family **Selenoribatidae** Strenzke, 1962 (6 genera, 14 species)
 Family **Tegeocranellidae** Balogh P., 1987 (1 genus, 17 species)
 Superfamily **Cymbaeremaeoidea** Sellnick, 1928 (1 family)
 Family **Cymbaeremaeidae** Sellnick, 1928 (9 genera, 125 species; 2/5/4)
 Superfamily **Eremaozetoidea** Piffel, 1972 (2 families)
 Family **Eremaozetidae** Piffel, 1972 (2 genera, 37 species)
 Family **Idiozetidae** Aoki, 1976 (1 genus, 3 species)
 Superfamily **Licneremaeoidea** Grandjean, 1931 (9 families)
 Family **Adhaesozetidae** Hammer, 1973 (2 genera, 4 species)
 Family **Charassobatidae** Grandjean, 1958 (1 genus, 7 species)
 Family **Dendroeremaeidae** Behan-Pelletier, Eamer & Clayton, 2005 (1 genus, 2 species)
 Family **Eremellidae** Balogh, 1961 (3 genera, 11 species)
 Family **Lamellareidae** Balogh, 1972 (3 genera, 8 species)
 Family **Licneremaeidae** Grandjean, 1931 (2 genera, 21 species; 0/1/2)
 Family **Micreremidae** Grandjean, 1954 (6 genera, 20 species; 0/2/1)
 Family **Passalozetidae** Grandjean, 1954 (2 genera, 52 species; 0/1/3)
 Family **Scutoverticidae** Grandjean, 1954 (9 genera, 72 species; 0/1/8)
 Superfamily **Phenopelopoidea** Petrunkevich, 1955 (2 families)
 Family **Phenopelopidae** Petrunkevich, 1955 (5 genera, 104 species; 0/1/17)
 Family **Unduloribatidae** Kunst, 1971 (2 genera, 9 species; 0/2/0)
 Superfamily **Achipterioidea** Thor, 1929 (3 families)
 Family **Achipteriidae** Thor, 1929 (15 genera, 117 species; 0/2/19)

10. The superfamily name Hydrozetoidea Grandjean, 1954 is often used, but Limnozetoidea Thor, 1937 has priority.

11. Not included is the genus *Palaeonothrus* Krivolutsky and Sidorchuk, 2003, which was based on Holocene subfossil cuticles shown by Sidorchuk and Rasnitsyn (2009) to derive from hymenopterans.

- Family **Epactozetidae** Grandjean, 1936 (2 genera, 5 species)
 Family **Tegoribatidae** Grandjean, 1954 (13 genera, 42 species; 0/1/2)
 Superfamily **Oribatelloidea** Jacot, 1925 (1 family)
 Family **Oribatellidae** Jacot, 1925 (10 genera, 131 species; 0/2/8)
 Superfamily **Oripodoidea** Jacot, 1925 (17 families)
 Family **Caloppiidae** Balogh, 1960 (9 genera, 33 species)
 Family **Campbellobatidae** Balogh & Balogh, 1984 (1 genera, 5 species)
 Family **Drymobatidae** Balogh & Balogh, 1984 (1 genus, 1 species)
 Family **Haplozetidae** Grandjean, 1936 (57 genera, 368 species; 0/1/25)
 Family **Mochlozetidae** Grandjean, 1960 (10 genera, 63 species; 0/1/3)
 Family **Nasobatidae** Balogh, 1972 (1 genus, 3 species; 0/0/1)
 Family **Neotrichozetidae** Balogh, 1965 (1 genus, 1 species)
 Family **Nesozetidae** Balogh & Balogh, 1984 (2 genera, 2 species)
 Family **Oribatulidae** Thor, 1929 (47 genera, 301 species; 1/4/63)
 Family **Oripodidae** Jacot, 1925 (25 genera, 109 species; 0/3/2)
 Family **Parakalummidae** Grandjean, 1936 (6 genera, 47 species; 0/1/1)
 Family **Schelorbitidae** Grandjean, 1933 (49 genera, 488 species; 0/5/34)
 Family **Sellnickiidae** Balogh & Balogh, 1984 (1 genus, 2 species; 0/0/1)
 Family **Stelechobatidae** Grandjean, 1965 (1 genus, 2 species)
 Family **Symbioribatidae** Aoki, 1966 (2 genera, 3 species)
 Family **Tubulozetidae** Balogh P., 1989 (1 genus, 1 species)
 Family **Zetomotrichidae** Grandjean, 1954 (14 genera, 35 species)
 Superfamily **Ceratozetoidea** Jacot, 1925 (10 families)¹²
 Family **Ceratokalummidae** Balogh, 1970 (9 genera, 16 species)
 Family **Ceratozetidae** Jacot, 1925 (51 genera, 319 species; 0/5/39)
 Family **Chamobatidae** Grandjean, 1954 (3 genera, 49 species; 0/1/15)
 Family **Euzetidae** Grandjean, 1954 (1 genus, 2 species; 0/0/1)
 Family **Humerobatidae** Grandjean, 1971 (1 genus, 11 species; 0/0/2)
 Family **Maudheimiidae** Balogh & Balogh, 1984 (1 genus, 4 species)
 Family **Mycobatidae** Grandjean, 1954 (20 genera, 136 species; 0/0/8)
 Family **Onychobatidae** Luxton, 1985 (1 genus, 1 species)
 Family **Ramsayellidae** Luxton, 1985 (1 genus, 5 species)¹³
 Family **Zetomimidae** Shaldybina, 1966 (3 genera, 20 species; 0/0/2)
 Superfamily **Galumnoidea** Jacot, 1925 (2 families)
 Family **Galumnellidae** Piffel, 1970 (7 genera, 35 species)
 Family **Galumnidae** Jacot, 1925 (50 genera, 461 species; 0/2/36)
 Unplaced family
 Family **Aribatidae** Aoki, Takaku & Ito, 1994 (1 genus, 1 species)¹⁴
 Hyporder **Astigmata** Canestrini, 1891 (=Astigmatina Krantz & Walter, 2009) (11 superfamilies)
 Superfamily **Schizoglyphoidea** Mahunka, 1978 (1 family)
 Family **Schizoglyphidae** Mahunka, 1978 (1 genus, 1 species)
 Superfamily **Histiostomatoidea** Berlese, 1897 (2 families)
 Family **Guanolichidae** Fain, 1968 (3 genera, 4 species)

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12. Not included are *Lamellobates* (9 spp.), *Paralamellobates* (4 spp.) and *Sacculozetes* (1 sp.). We follow Norton & Behan-Pelletier (2009) in considering their familial relationships unresolved, pending the discovery of their immatures. Woas (2002) suggested the family Lamellobatidae for these genera, but the name does not meet the criteria for availability (ICZN, Article 13.1).
13. Ramsayellidae Luxton, 1985 has not been recognized in recent classifications, being considered a junior synonym of Humeroibatidae (by Subías 2004) or a possible junior synonym of Mycobatidae (by Norton & Behan-Pelletier 2009). However, these placements now seem doubtful and need reinvestigation. Adults of the single known genus, *Ramsayellus* Spain & Luxton, 1970, have characters distinct from those of either ceratozetoid family, and immature instars are not yet known.
14. The enigmatic family Aribatidae Aoki, Takaku & Ito, 1994 was grouped with Zetorchestoidea (as Eremaeoidea) by Subías (2004) but we follow Norton & Behan-Pelletier (2009) in considering the family unplaced, pending more complete analysis and discovery of immatures.

- Family **Histiostomatidae** Berlese, 1897 (59 genera, 567 species)
- Superfamily **Canestrinioidea** Berlese, 1884 (1 family)
- Family **Canestriniidae** Berlese, 1884 (93 genera, 338 species)
- Superfamily **Hemisarcoptoidea** Oudemans, 1904 (7 families)
- Family **Hyadesiidae** Halbert, 1915 (2 genera, 47 species)
- Family **Carpoglyphidae** Oudemans, 1923 (2 genera, 6 species)
- Family **Algophagidae** Fain, 1975 (7 genera, 19 species)
- Family **Meliponocoptidae** Fain & Rosa, 1983 (2 genera, 4 species)
- Family **Hemisarcoptidae** Oudemans, 1904 (11 genera, 33 species)
- Family **Winterschmidtidae** Oudemans, 1923 (24 genera, 143 species; 1/1/0)
- Family **Chaetodactylidae** Zachvatkin, 1941 (5 genera, 111 species)
- Superfamily **Glycyphagoidea** Berlese, 1897 (7 families)
- Family **Euglycyphagidae** Fain & Philips, 1977 (2 genera, 4 species)
- Family **Pedetopodidae** Fain, 1969 (1 genus, 1 species)
- Family **Chortoglyphidae** Berlese, 1897 (3 genera, 13 species)
- Family **Echimyopodidae** Fain, 1967 (5 genera, 27 species)
- Family **Aeroglyphidae** Zachvatkin, 1941 (4 genera, 19 species)
- Family **Rosensteiniidae** Cooreman, 1954 (19 genera, 53 species)
- Family **Glycyphagidae** Berlese, 1897 (42 genera, 204 species)
- Superfamily **Acaroidea** Latreille, 1802 (6 families)
- Family **Lardoglyphidae** Oudemans, 1927 (2 genera, 8 species)
- Family **Suidasiidae** Hughes, 1948 (7 genera, 18 species; includes Sapracaridae Fain)
- Family **Gaudiellidae** Atyeo, Baker & Delfinado, 1974 (5 genera, 7 species)
- Family **Glyccaridae** Griffiths, 1977 (1 genus, 1 species)
- Family **Scatoglyphidae** Zachvatkin & Volgin, 1956 (1 genus, 1 species)
- Family **Acaridae** Latreille, 1802 (88 genera, 541 species; 0/0/37)
- Superfamily **Hypoderatoidea** Murray, 1877 (1 family)
- Family **Hypoderatidae** Murray, 1877 (19 genera, 73 species)
- Superfamily **Sarcoptoidea** Murray, 1877 (12 families)
- Family **Psoroptidae** Canestrini, 1892 (34 genera, 63 species)
- Family **Lobalgidae** Fain, 1965 (2 genera, 7 species)
- Family **Sarcoptidae** Murray, 1877 (15 genera, 117 species)
- Family **Rhyncoptidae** Lawrence, 1956 (5 genera, 12 species)
- Family **Chirorhynchobiidae** Fain, 1967 (1 genus, 3 species)
- Family **Atopomelidae** Gunther, 1942 (46 genera, 420 species)
- Family **Chirodiscidae** Trouessart, 1892 (27 genera, 230 species)
- Family **Myocoptidae** Gunther, 1942 (6 genera, 63 species)
- Family **Listrophoridae** Mégnin & Trouessart, 1884 (20 genera, 169 species)
- Family **Gastronyssidae** Fain, 1956 (9 genera, 42 species)
- Family **Pneumocoptidae** Baker, Camin, Cunliffe, Woolley & Yunker, 1958 (1 genus, 5 species)
- Family **Lemurnyssidae** Fain, 1957 (2 genera, 4 species)
- Superfamily **Pterolichoidea** Trouessart & Mégnin, 1884 (18 families)
- Family **Ascouracaridae** Gaud & Atyeo, 1976 (7 genera, 21 species)
- Family **Cheylabididae** Gaud, 1983 (3 genera, 5 species)
- Family **Crypturoptidae** Gaud, Atyeo & Berla, 1973 (9 genera, 18 species)
- Family **Eustathiidae** Oudemans, 1905 (18 genera, 65 species)
- Family **Falculiferidae** Oudemans, 1905 (14 genera, 45 species)
- Family **Gabuciniidae** Gaud & Atyeo, 1975 (16 genera, 72 species; 0/1/0)
- Family **Kiwilichidae** Dabert, 1994 (1 genus, 2 species)
- Family **Kramerellidae** Gaud & Mouchet, 1961 (7 genera, 52 species)
- Family **Ochrolichidae** Gaud & Atyeo, 1978 (3 genera, 4 species)
- Family **Oconoriidae** Gaud, Atyeo & Klompen, 1989 (1 genus, 1 species)
- Family **Pterolichidae** Trouessart & Mégnin, 1884 (122 genera, 389 species)
- Family **Ptiloxenidae** Gaud, 1982 (3 genera, 21 species)

- Family **Rectijanuidae** Gaud, 1961 (1 genus, 7 species)
 Family **Syringobiidae** Trouessart, 1897 (17 genera, 75 species)
 Family **Thoracosathesidae** Gaud & Mouchet, 1959 (1 genus, 2 species)
 Family **Caudiferidae** Gaud & Atyeo, 1978 (3 genera, 4 species)
 Family **Freyanidae** Dubinin, 1953 (17 genera, 75 species)
 Family **Vexillariidae** Gaud & Mouchet, 1959 (12 genera, 36 species)
 Superfamily **Analgoidea** Trouessart & Mégnin, 1884 (19 families)
 Family **Alloptidae** Gaud, 1957 (29 genera, 174 species)
 Family **Analgidae** Trouessart & Mégnin, 1884 (35 genera, 184 species; 0/0/13)
 Family **Apionacaridae** Gaud & Atyeo, 1977 (4 genera, 7 species)
 Family **Avenzoariidae** Oudemans, 1905 (18 genera, 143 species)
 Family **Cytoditidae** Oudemans, 1908 (2 genera, 12 species; 0/0/1)
 Family **Dermationidae** Fain, 1965 (10 genera, 47 species)
 Family **Dermoglyphidae** Mégnin & Trouessart, 1884 (5 genera, 20 species)
 Family **Epidermoptidae** Trouessart, 1892 (18 genera, 61 species) (includes Knemidokoptidae)
 Family **Gaudoglyphidae** Bruce & Johnston, 1976 (1 genus, 1 species)
 Family **Laminosioptidae** Vitzthum, 1931 (8 genera, 26 species)
 Family **Proctophyllodidae** Trouessart & Mégnin, 1884 (46 genera, 463 species)
 Family **Psoroptoididae** Gaud, 1958 (13 genera, 64 species)
 Family **Pteronyssidae** Oudemans, 1941 (24 genera, 242 species)
 Family **Ptyssalgidae** Atyeo & Gaud, 1979 (1 genus, 1 species)
 Family **Pyroglyphidae** Cunliffe, 1958 (19 genera, 56 species)
 Family **Thysanocercidae** Atyeo & Peterson, 1972 (1 genus, 10 species)
 Family **Trouessartiidae** Gaud, 1957 (11 genera, 167 species)
 Family **Turbinoptidae** Fain, 1957 (9 genera, 38 species)
 Family **Xolalgidae** Dubinin, 1953 (27 genera, 111 species)
 Unplaced families
 Family **Heterocoptidae** Fain, 1967 (13 genera, 47 species)
 Family **Lemanniellidae** Wurst, 2001 (1 genus, 2 species)
 Family **Chetochelacaridae** Fain, 1987 (2 genera, 2 species)

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