```
Order Scorpiones C.L. Koch, 1850 (2 suborders)<sup>1,2,3</sup>
   †Suborder Branchioscorpionina Kjellesvig-Waering, 1986 (4 infraorders)
      †Infraorder Bilobosternina Kiellesvig-Waering, 1986 (1 superfamily)
          †Superfamily Branchioscorpionoidea Kjellesvig-Waering, 1986 (2 families)
             †Family Branchioscorpionidae Kjellesvig-Waering, 1986 (1 genus, 1 species)
             †Family Dolichophonidae Petrunkevitch, 1953 (1 genus, 1 species)
      †Infraorder Holosternina Kjellesvig-Waering, 1986 (10 superfamilies)
          †Superfamily Acanthoscorpionoidea Kjellesvig-Waering, 1986 (2 families)
             †Family Acanthoscorpionidae Kjellesvig-Waering, 1986 (1 genus, 1 species)
             †Family Stenoscorpionidae Kjellesvig-Waering, 1986 (1 genus, 2 species)
          †Superfamily Allopalaeophonoidea Kjellesvig-Waering, 1986 (1 family)
             †Family Allopalaeophonidae Kjellesvig-Waering, 1986 (1 genus, 1 species)
          †Superfamily Archaeoctonoidea Petrunkevitch, 1949 (1 family)
             †Family Archaeoctonidae Petrunkevitch, 1949 (2 genera, 2 species)
          †Superfamily Eoctonoidea Kjellesvig-Waering, 1986 (5 families)
             †Family Allobuthiscorpiidae Kjellesvig-Waering, 1986 (2 genera, 2 species)
             †Family Anthracoscorpionidae Fritsch, 1904 (4 genera, 6 species)
             †Family Buthiscorpiidae Kjellesvig-Waering, 1986 (1 genus, 2 species)
             †Family Eoctonidae Kjellesvig-Waering, 1986 (1 genus, 1 species)
             †Family Garnettiidae Dubinin, 1962 (1 genus, 1 species)
          †Superfamily Gigantoscorpionoidea Kjellesvig-Waering, 1986 (1 family)
             †Family Gigantoscorpionidae Kjellesvig-Waering, 1986 (2 genera, 2 species)
          †Superfamily Mesophonoidea Wills, 1910 (6 families)
             †Family Centromachidae Petrunkevitch, 1953 (5 genera, 5 species)
             †Family Heloscorpionidae Kjellesvig-Waering, 1986 (1 genus, 1 species)
             †Family Liassoscorpionidae Kjellesvig-Waering, 1986 (1 genus, 1 species)
             †Family Mazoniidae Petrunkevitch, 1913 (1 genus, 2 species)
             †Family Mesophonidae Wills, 1910 (1 genus, 2 species)
             †Family Willsiscorpionidae Kjellesvig-Waering, 1986 (1 genus, 1 species)
          †Superfamily Palaeoscorpioidea Lehmann, 1944 (2 families)
             †Family Hydroscorpiidae Kjellesvig-Waering, 1986 (1 genus, 1 species)
             †Family Palaeoscorpiidae Lehmann, 1944 (1 genus, 1 species)
          †Superfamily Proscorpioidea Scudder, 1885 (3 families)
             †Family Proscorpiidae Scudder, 1885 (2 genera, 2 species)
             †Family Labriscorpionidae Kjellesvig-Waering, 1986 (1 genus, 1 species)
             †Family Waeringoscorpionidae Størmer, 1970 (1 genus, 1 species)
          †Superfamily Spongiophonoidea Kjellesvig-Waering, 1986 (2 families)
             †Family Praearcturidae Kjellesvig-Waering, 1986 (1 genus, 1 species)
             †Family Spongiophonidae Kjellesvig-Waering, 1986 (1 genus, 1 species)
          †Superfamily Stoermeroscorpionoidea Kjellesvig-Waering, 1986 (1 family)
             †Family Stoermeroscorpionidae Kjellesvig-Waering, 1986 (1 genus, 1 species)
          †Incertae sedis (1 genus, 1 species)
      †Infraorder Lobosternina Pocock, 1911 (5 superfamilies)
          †Superfamily Isobuthoidea Petrunkevitch, 1913 (5 families)
             †Family Eobuthidae Kjellesvig-Waering, 1986 (1 genus, 3 species)
             †Family Eoscorpiidae Scudder, 1884 (3 genera, 8 species)
             †Family Isobuthidae Petrunkevitch, 1913 (4 genera, 5 species)
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BY Lorenzo Prendini (for full contact details, see Author's address after References). The title of this contribution should be cited as "Order Scorpiones C.L. Koch, 1850. In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness". Recent Scorpiones currently includes 18 families, 151 genera and 1947 species, fossil taxa include 47 families, 87 genera and 121 species.

Higher classification follows Fet et al. (2000) for fossil taxa (1758–1998) and Prendini & Wheeler (2005) for Recent taxa. Generic composition
of families is identical in each case, except where noted (post-1998 for fossil taxa and post-2005 for Recent taxa).

^{3.} The initial list of species was obtained from Fet et al. (2000) and updated using Hallan (2005) and Rein (2011). Only valid species are included in the cited totals; *species inquirenda* and infraspecific taxa are excluded. Counts of fossil genera and species are preceded by †.

†Family **Kronoscorpionidae** Kjellesvig-Waering, 1986 (1 genus, 1 species)

†Family **Pareobuthidae** Kjellesvig-Waering, 1986 (1 genus, 1 species)

†Superfamily Loboarchaeoctonoidea Kjellesvig-Waering, 1986 (1 family)

†Family **Loboarchaeoctonidae** Kjellesvig-Waering, 1986 (1 genus, 1 species)

†Superfamily Palaeophonoidea Thorell & Lindström, 1885 (1 family)

†Family Palaeophonidae Thorell & Lindström, 1885 (1 genus, 2 species)

†Superfamily **Paraisobuthoidea** Kjellesvig-Waering, 1986 (3 families)

†Family **Paraisobuthidae** Kjellesvig-Waering, 1986 (2 genera, 5 species)

†Family **Scoloposcorpionidae** Kjellesvig-Waering, 1986 (2 genera, 2 species)

†Family **Telmatoscorpionidae** Kjellesvig-Waering, 1986 (1 genus, 1 species)

†Superfamily **Pseudobuthiscorpioidea** Kjellesvig-Waering, 1986 (2 families)

†Family **Pseudobuthiscorpiidae** Kjellesvig-Waering, 1986 (1 genus, 1 species)

†Family Waterstoniidae Kjellesvig-Waering, 1986 (1 genus, 1 species)

†Infraorder **Meristosternina** Kjellesvig-Waering, 1986 (3 superfamilies)

†Superfamily Cyclophthalmoidea Thorell & Lindström, 1885 (2 families)

†Family Cyclophthalmidae Thorell & Lindström, 1885 (1 genus, 3 species)

†Family Microlabidae Kjellesvig-Waering, 1986 (1 genus, 1 species)

†Superfamily Palaeobuthoidea Kjellesvig-Waering, 1986 (1 family)

†Family **Palaeobuthidae** Kjellesvig-Waering, 1986 (1 genus, 1 species)

†Superfamily **Tiphoscorpionoidea** Kjellesvig-Waering, 1986 (1 family)⁴

†Family **Tiphoscorpionidae** Kjellesvig-Waering, 1986 (1 genus, 1 species)

†Incertae sedis (6 genera, 6 species)

Suborder **Neoscorpionina** Thorell & Lindström, 1885 (1 infraorder)

Infraorder Orthosternina Pocock, 1911 (23 families)

†Family Akravidae Levy, 2007 (1 genus, 1 species)⁵

†Family Archaeobuthidae Lourenço, 2001 (1 genus, 1 species)⁶

Family **Bothriuridae** Simon, 1880 (15 genera, 138 species)

Family **Buthidae** C.L. Koch, 1837 (56/†6 genera, 938/†17 species)⁷

Family Chactidae Pocock, 1893 (11/†1 genera, 178/†2 species)⁸

Family Chaerilidae Pocock, 1893 (1/†1 genera, 36/†1 species)9

†Family Chaerilobuthidae Lourenço, 2011 (1 genus, 1 species)¹⁰

Family **Diplocentridae** Karsch, 1880 (8 genera, 113 species)

Family Euscorpiidae Laurie, 1896 (4 genera, 25 species)

Family Hemiscorpiidae Pocock, 1893 (1 genus, 13 species)¹¹

Family **Heteroscorpionidae** Kraepelin, 1905 (1 genus, 6 species)

Family Hormuridae Laurie, 1896 (9/†1 genera, 69/†1 species)¹²

Family **Iuridae** Thorell, 1876 (6 genera, 36 species)

†Family Palaeoeuscorpiidae Lourenço, 2003 (1 genus, 1 species)¹³

†Family Palaeopisthacanthidae Kjellesvig-Waering, 1986 (3 genera, 4 species)

- 4. Tiphoscorpionoidea and its component taxa were omitted by Fet et al. (2000).
- 5. This monotypic family was added after 2005.
- 6. This monotypic family was added after 1998.
- 7. Microcharmidae Lourenço, 1996 was synonymized with Buthidae and its component genera transferred to the latter (Volschenk et al., 2008). Ten genera were added to Buthidae after 2005: Afghanobuthus Lourenço, 2005; Ananteroides Borelli, 1911 (reinstated from synonymy); Cicileiurus Teruel, 2007; Femtobuthus Lowe, 2010; Mauritanobuthus Qi & Lourenço, 2007; Pantobuthus Lourenço & Duhem, 2009; Physoctonus Mello-Leitão, 1934 (reinstated from synonymy); Picobuthus Lowe, 2010; Riftobuthus Lourenço et al., 2010; Saharobuthus Lourenço & Duhem, 2009. Four buthid genera were synonymized after 2005: Ankaranocharmus Lourenço, 2004; Microananteris Lourenço, 2003; Paraorthochirus Lourenço & Vachon, 1997; Simonoides Vachon & Farzanpay, 1987.
- 8. A monotypic genus, *Araripescorpius* Bouret Campos, 1986 was transferred to Chactidae (Menon, 2007). The validity and taxonomic composition of several genera in this family continues to be disputed.
- 9. A monotypic genus, *Electochaerilus* Santiago-Blay et al., 2000, was added to Chaerilidae after 1998.
- 10. This monotypic family was added after 2005.
- 11. One hemiscorpiid genus, Habibiella Vachon, 1974, was synonymized after 2005 (Monod & Lourenço, 2005).
- 12. The older name, Hormuridae, is used instead of Liochelidae Fet & Bechly, 2001 (1879). Protoischnuridae Carvalho & Lourenço, 2001 was synonymized with Hormuridae (as Hemiscorpiidae), and *Protoischnurus* Carvalho & Lourenço, 2001 transferred to it (Menon, 2007). Another monotypic genus, *Tibetiomachus* Lourenço & Qi, 2006, was added to Hormuridae after 2005.
- 13. This monotypic family was added after 1998.

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PRENDINI: ORDER SCORPIONES

Family **Pseudochactidae** Gromov, 1998 (3 genera, 3 species)¹⁴

Family **Scorpionidae** Latreille, 1802 (5 genera, 128 species)¹⁵

Family **Scorpiopidae** Kraepelin, 1905 (5 genera, 48 species)

Family Superstitioniidae Stahnke, 1940 (1 genus, 1 species)¹⁶

Family Troglotayosicidae Lourenço, 1998 (2 genera, 3 species)

Family **Typhlochactidae** Mitchell, 1971 (4 genera, 10 species)

Family Urodacidae Pocock, 1893 (2 genera, 21 species)¹⁷

Family Vaejovidae Thorell, 1876 (17 genera, 181 species)¹⁸

†Incertae sedis (4 genera, 5 species)

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^{14.} Two monotypic genera were added to Pseudochactidae after 2005: Troglokhammouanus Lourenço, 2007; Vietbocap Lourenço & Pham, 2010.

^{15.} A monotypic genus, Rugodentus Bastawade et al., 2005, was added to Scorpionidae after 2005.

^{16.} Vignoli & Prendini (2009) elevated Typhlochactinae Mitchell, 1971 to family, removing its component genera from Superstitioniidae.

^{17.} A monotypic genus, Aops Volschenk & Prendini, 2008, was added to Urodacidae after 2005.

Six genera, some of dubious validity, were added to Vaejovidae after 2005: Gertschius Graham & Soleglad, 2007; Hoffmannius Soleglad & Fet, 2008; Kochius Soleglad & Fet, 2008; Kuarapu Francke & Ponce-Saavedra, 2010; Stahnkeus Soleglad & Fet, 2006; Wernerius Soleglad & Fet, 2008.