

Worldwide catalogues and species numbers of the arachnid orders (Arachnida) Weltweite Kataloge und Artenzahlen der Spinnentierordnungen (Arachnida)

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The “World Spider Catalog” – which is online as version 11.5 (PLATNICK 2011) and which is updated every 6 months – is widely known. Less familiar is the availability since 2010 of the older versions of this catalogue, which can be found respectively under http://research.amnh.org/iz/spiders/catalog_11.0. This is helpful as it provides referenced older versions, which are now checkable. These versions also offer the opportunity to investigate changes in total spider species numbers, or for individual families (Figs 1

& 2, comp. BLICK 2011). Especially those families with more intensive recent systematic studies have higher increments (Fig. 2). Worth mentioning is also the list of fossil arachnids (DUNLOP et al. 2011), which is part of the Platnick-catalogue (since version 9.0/2008). The fossil spiders were last indexed by Bonnet until 1940.

Besides spiders, there are other extant arachnid orders catalogued (with the exception of mites and ticks, which are neglected here). The catalogues of the scorpions (FET et al. 2000) and of the “smaller arachnid orders” (HARVEY 2003) are unfortunately not (yet) available online; however there exist updated totals (CHRISTIAN et al. 2010, DUPRÉ 2010, HARVEY 2007, TOURINHO et al. 2010). Among the “smaller arachnid orders”, only the camel spiders contain more than 1000 species (Tab. 1). DUPRÉ (2010) documented the yearly increments for the scorpions since the 2000 catalogue (which covers the literature until 1998) (Fig. 3).

An updated version of the pseudoscorpion catalogue published by HARVEY (1991) was first made available online in 2008. A revised version was released in the following year (HARVEY 2009), and further regular updates are planned from 2011. The number of pseudoscorpion species (without subspecies) increased from HARVEY (1991) to HARVEY (2009) from 3064 to 3385 species; i.e. an increase of 10 %. These non-spider catalogues not only include systematic and taxonomically relevant papers (as in Platnick, Brignoli, Roewer), but – as it was last done by Bonnet for spiders – also the non-systematic literature as completely as possible (including purely faunistic, morphological or ethological papers, etc.).

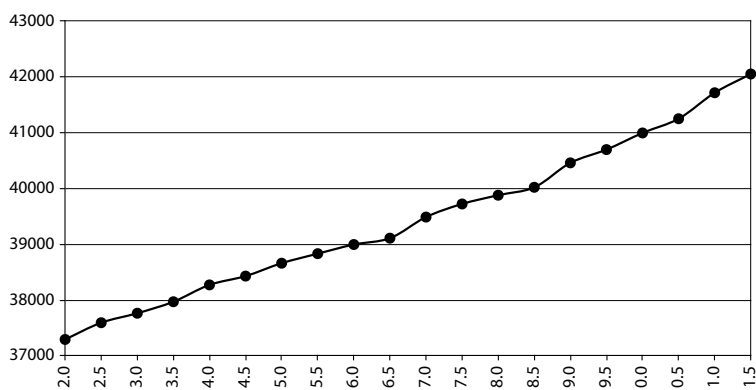


Fig. 1: Increase in the worldwide number of spider species from PLATNICK version 2.0 (2001) to 11.5 (2011) from 37296 to 42055 species (incl. subspecies), total increment nearly 13 %, per year 493 ± 146 species

Abb. 1: Zuwachs der weltweiten Spinnenartenzahl von PLATNICK Version 2.0 (2001) bis 11.5 (2011) von 37296 auf 42055 Arten (inkl. Unterarten), Zunahme insgesamt knapp 13 %, pro Jahr 493 ± 146 Arten

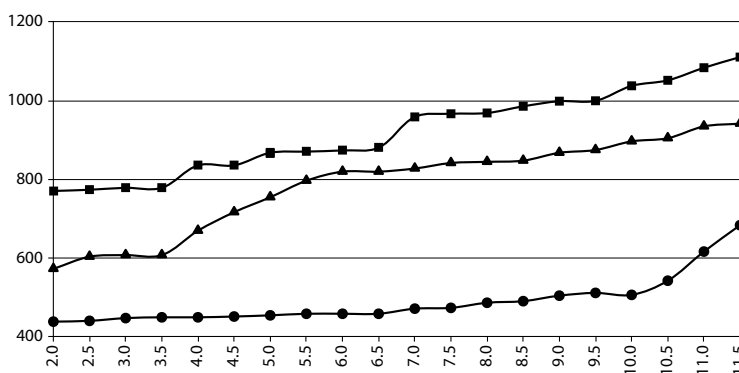


Fig. 2: Increase in the species number of the spider families Pholcidae (■), Zodariidae (▲), and Oonopidae (●) from PLATNICK version 2.0 (2001) to 11.5 (2011): Pholcidae 771 to 1111 (44 % increment, +18 species/version), Zodariidae 573 to 942 (64 % increment, +19 species/version), Oonopidae 439 to 684 (56 % increment, +13 species/version)

Abb. 2: Zuwachs der Artenzahl der Pholcidae (■), Zodariidae (▲) und Oonopidae (●) von PLATNICK Version 2.0 (2001) bis 11.5 (2011): Pholcidae 771 auf 1111 (44 % Zunahme, +18 Arten/Version), Zodariidae 573 auf 942 (64 % Zunahme, +19 Arten/Version), Oonopidae 439 auf 684 (56 % Zunahme, +13 Arten/Version)

The most obvious omission is a full catalogue of the harvestmen (Opiliones). The last worldwide catalogue is nearly 90 years old (ROEWER 1923). In the last two decades catalogues of subgroups or regions have been published (COKENDOLPHER & LEE 1993, GIRIBET 2000, 2011, KURY 2003). However, a complete and up-to-date catalogue of the harvestmen is still missing. Over the past few years at least a list of the valid families and genera (KURY 2011b) as well as an updated species number is available online (KURY 2011a): currently there are 6491 species. Hence the harvestmen are the second most species-rich arachnid order (excluding Acarina), after the spiders. They are even richer than the two most diverse spider families: Salticidae with 5337 species and Linyphiidae with 4378 species (PLATNICK 2011).

Altogether the spiders are updated in an exemplary fashion by the half-yearly Platnick-www-catalogue-versions. One hopes that this can proceed in the long-term, and this is also desirable, probably with yearly or at least regular intervals, for all other mentioned arachnid orders.

Tab. 1: Worldwide species numbers of the arachnid orders (excluding Acarina)

Tab. 1: Weltweite Artenzahlen der Spinnentierordnungen (ohne Milben)

order	Source	species number
Araneae	PLATNICK (2011)	42055
Opiliones	KURY (2011a)	6491
Pseudoscorpiones	Harvey (unpubl. data)	3444
Scorpiones	DUPRÉ (2010)	1922
Solifugae	Harvey (unpubl. data)	1110
Schizomida	Harvey (unpubl. data)	274
Amblypygi	Harvey (unpubl. data)	171
Uropygi	Harvey (unpubl. data)	110
Palpigradi	CHRISTIAN et al. (2010)	84
Ricinulei	TOURINHO et al. (2010)	67

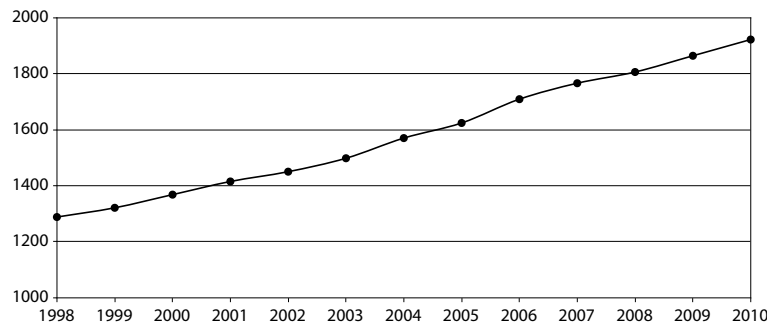


Fig. 3: Increase in the number of scorpion species from 1998 (FET et al. 2000) to 2010 (DUPRÉ 2010) from 1288 to 1922 species (incl. subspecies), total increment 49 %, per year 53 ± 15 species

Abb. 3: Zuwachs der Artenzahl der Skorpione von 1998 (FET et al. 2000) bis 2010 (DUPRÉ 2010) von 1288 auf 1922 Arten (inkl. Unterarten), Zunahme insgesamt 49 %, pro Jahr 53 ± 15 Arten

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