1 Taxonomic coverage of the trait databases

Regarding the taxonomical coverage, the New Zealand database has, as expected, the smallest taxon pool (478 taxa, Table 1). By contrast, the largest taxon pool is spanned by the European trait database with 4110 taxa followed by the North American trait database that contained trait information on 3753 taxa. The Australian database contains 1402 taxa. The European, New Zealand, and North American databases have most taxa on the highest taxonomical resolution while the Australian database has a similar number of taxa on species and genus-level.

Table 1: Number of taxa per harmonized database and per taxonomic level. Numbers in parenthesis show relative frequencies in percentage.

Database	Nr. of taxa	Species	Genus	Family	Nr. aquatic taxa
Europe	4110	3848 (93.63)	237 (5.77)	25 (0.61)	3579 (87.08)
North America	3753	2414 (64.32)	1163 (30.99)	176 (4.69)	3305 (88.06)
Australia	1402	564 (40.23)	578 (41.23)	260 (18.54)	1016 (72.47)
New Zealand	478	404 (84.52)	47 (9.83)	27(5.65)	443 (92.68)

2 Completeness of trait information

The amount of entries with available information for the individual grouping features varied strongly for the European, North American, and Australian databases (Table 2). By contrast, the New Zealand database contained complete trait information for most of the investigated grouping features (between 94 % and 100 %).

Table 2: Displayed is the percentage of entries that have information for the individual grouping features per database.

Database	Body form	Oviposition	Voltinism	Locomotion	Size	Respiration	Feeding mode
EU	7	16	24	33	11	56	65
NOA	28	13	47	52	73	44	63
AUS	5	48	51	42	78	70	99
NZ	100	94	100	99	100	100	99