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Phylum Bryozoa Ehrenberg, 1831 in the first twenty years of *Zootaxa*

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This short account is an invited contribution to the *Zootaxa* special volume 'Twenty years of *Zootaxa*.' *Zootaxa* was first published on 28 May 2001. Between this date and December 2020, 116 papers were published in *Zootaxa* that mention Bryozoa, comprising mostly descriptions of new species and higher taxa, but also including molecular sequencing (e.g. Fehlauer-Ale *et al*. 2011; Taylor *et al*. 2011; Franjevic *et al*. 2015), invasive-species research (e.g. Ryland *et al*. 2014; Vieira *et al*. 2014), checklists (e.g. Vieira *et al*. 2008), classification (e.g. Bock & Gordon 2013), bryozoans as associates of other organisms (e.g. Rudman 2007; Chatterjee & Dovgal 2020; Chatterjee *et al*. 2020), metazoan phylogeny (e.g. Giribet *et al*. 2013), biographies of historical figures who worked on bryozoans (e.g. Calder & Brinkmann-Voss 2011; Calder 2015) and a catalogue of the fossil invertebrate taxa described by William Gabb (including 67 bryozoan species) (Groves & Squires 2018). Of the 116 papers, 15 (13%) were open-access.

The first taxonomic paper on Bryozoa did not appear until June 2005; it included only one new species, as well as redescriptions of others. In that year, 43 bryozoan species were described across all literature (Figure 1; Table 1). Subsequently, new-species descriptions in *Zootaxa* remained low until they increased to 12 in 2009 (c. 24% of the total for that year). The most new-species descriptions of Bryozoa in *Zootaxa* in any one year was 69 in 2018, representing 92% of all new-species descriptions in that year. *Zootaxa* captured more than 90% of all new species bryozoan descriptions in 2013 as well. The average number of new living bryozoan species published in all journals per year, 2005–2020, was 58, of which *Zootaxa* captured an average of 23 new species (41%) (Table 1).

Analysis of the 116 papers published in *Zootaxa* in 2005–2020 that mention Bryozoa, gives the following results (Tables 2, 3). There were 28 countries of origin (based on the institutional address of the first or sole author); inclusion of coauthors adds three more countries. In terms of the numbers of authors and coauthors, Brazil was by far the most prolific country, with 25 papers published by 30 authors from that country, more than double the next country, New Zealand, with 12 papers published by five authors from that country.

Based on the provenance of holotypes only, new bryozoan taxa in *Zootaxa* were described from 53 countries, territories or regions of the world, totalling 368 new species, 51 new genera and 12 new families. These include 12 new fossil species and one new fossil genus. The vast majority of new taxa were marine, but six new species, three new genera and two new families of freshwater bryozoans are included in the totals. The largest number of new taxa published in *Zootaxa* were described from Brazil (99 new species, nine new genera and five new families), followed respectively by New Zealand (46 new species and four new genera), Argentina and South Korea (both with 23 new species and three new genera) and Australia (20 new species and one new genus).

Four editors have processed the bryozoan manuscripts that were submitted during 2005–2020, comprising Dennis Gordon (New Zealand, 2005–2016), Karin Fehlauer-Ale (Brazil, 2016–2017) and Emanuela Di Martino (2017–present), with Tim Wood taking over the processing of manuscripts on freshwater bryozoans in 2015. The rejection rate is extremely low (3 during the period). Four submissions were taxonomic monographs exceeding 60 published pages (Vieira *et al.*, 2013; Winston 2016; Cáceres-Chamizo *et al*. 2017; Grischenko *et al*. 2018).

It is evident from the above data that *Zootaxa* has been, and remains, a critically important publishing vehicle for bryozoologists and bryozoology.

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TABLE 1. New species of living bryozoans described per year, 2005–2020: comparison between numbers in all literature vs *Zootaxa*.

Year	Total living bryozoan species described in all literature	Total living bryozoan species published solely in *Zootaxa*	*Zootaxa* species as percent of total
2005	43	1	2.3
2006	116	1	0.9
2007	43	1	2.3
2008	45	0	0
2009	51	12	23.5
2010	55	36	65.5
2011	63	6	9.5
2012	45	22	48.9
2013	45	41	91.1
2014	106	24	22.6
2015	32	17	53.1
2016	53	27	50.9
2017	65	45	69.2
2018	75	69	92.0
2019	33	13	39.4
2020	62	53	85.4
Mean	58	23	41.0

TABLE 2. Provenance of papers published in *Zootaxa* 2005–2020 describing or mentioning Bryozoa: numbers per country based on institutional affiliation of lead authors and coauthors.*

Country	No. of papers from this country based on lead author	Total number of coauthors from this country
Brazil	25	29
New Zealand	12	4
USA	8	12
Australia	8	4
Russia	7	6
Spain	7	9
Austria	6	1
South Korea	6	4
Italy	4	4
United Kingdom	4	8
Canada	3	2
France	3	6
Germany	3	5
India	3	4
Argentina	2	2
Indonesia	2	9
Japan	2	1

*One paper each came from eleven other countries (total number of coauthors from these countries in parentheses), viz Belgium (2), Croatia (2), Norway (2), South Africa (2), China (1), Egypt (1), Iran (1), Chile (0), Czechia (0), Mexico (0), Poland (0). Three other countries were represented by coauthors only, viz Portugal (2), Vietnam (2) and Switzerland (1).

TABLE 3. Numbers of new living bryozoan species (three or more) and fossil species described in *Zootaxa* in 2005–2020 per country, territory or region, based on provenance of the holotype; and new higher taxa based on the provenance of the type species or genus.*

Country/Region	New species	New genera	New families	New solely fossil species	New solely fossil genera
Brazil	99	9	5	3	1
New Zealand	46	4	0	2	1
Argentina	23	3	0	0	0
South Korea	23	3	0	0	0
Australia	20	1	0	0	0
NE Pacific	17	9	2	0	0
Spain	17	5	0	0	0
USA	13	3	2	0	0
China	13	1	0	0	0
Egypt	10	1	0	0	0
South Africa	9	1	0	0	0
Madeira	8	0	0	0	0
Japan	7	2	0	0	0
Vietnam	6	0	0	0	0
Indonesia	6	1	0	5	0
Italy	4	0	0	1	0
Norfolk Ridge	3	0	0	0	0
Maldives	3	0	0	0	0
United Kingdom	3	0	0	0	0

*Additionally (not tabulated), two new bryozoan species were described from each of the following areas—Bahamas, Cape Verde, Congo (DRC), Faeroe Islands, Galápagos, Greenland, Iran, Mauritania, Mexico, North Atlantic, Oman, Panama and Russia—and one new bryozoan species each was described from Algeria, Antarctica, Colombia, France, India, Jamaica, Lebanon, Malta, Mauritius, Mozambique, Philippines, Saudi Arabia, Sri Lanka, Thailand, Tonga, Tuvalu and Yemen. Two new Recent genera were described from Faeroe Islands, and one new Recent genus each from Galápagos, Greenland, Iran, Cuba and Vanuatu. A new fossil genus and species were also described from Czechia and a new fossil species from the Dominican Republic.

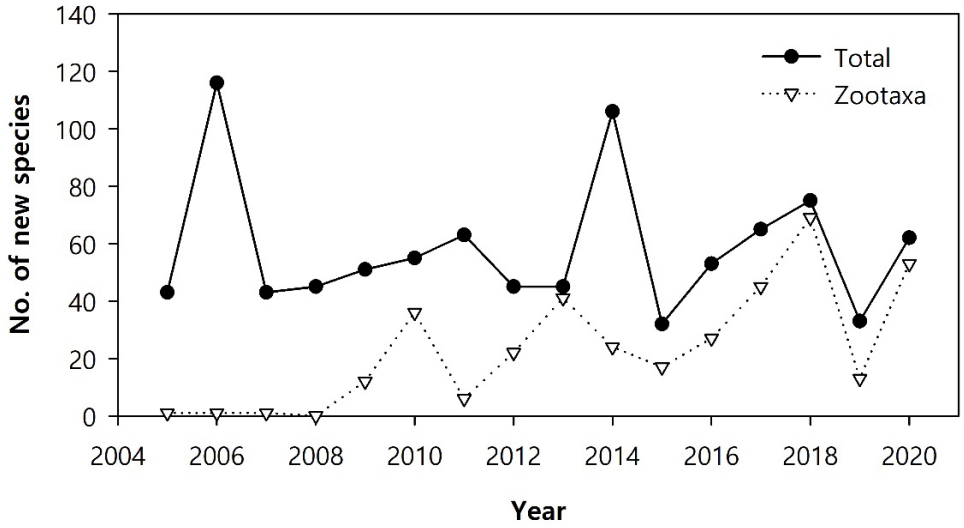

FIGURE 1. Number of new species of living bryozoans described per year, 2005–2020: comparison between the total for all literature and *Zootaxa* alone.

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