

SUPPLEMENTARY MATERIAL (I) figure 1 source of data

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Supplementary Table S1. Species number of living organisms in China

Animalia 动物界	164182
Bacteria 细菌界	8610 ¹
Chromista 色素界	1970 ²
Fungi 真菌界	27900 ³
Plantae 植物界	38394 ²
Protozoa 原生动物界	2897 ⁴
Viruses 病毒	2800 ⁵
Sum	246753

¹ National Science and Technology Infrastructure Center. 2020. National Report on the Development of Biological Germplasm Resource and Experimental Material 2017–2018. Beijing: Science and Technical Documentation Press. (in Chinese)

² The Biodiversity Committee of Chinese Academy of Sciences. 2020[2021-04-01]. Catalogue of Life China: 2020 Annual Checklist. Beijing: Science Press, <http://www.sp2000.org.cn/CoLChina/>. (in Chinese)

³ Fang R, Wei JC, Li Y, Cai L, Fan L, Wei TZ, et al. 2018. Country focus: China. *In*: Willis KJ. State of the World's Fungi. Report. Kew: Royal Botanic Gardens, 48–55.

⁴ Liu RY. 2008. Checklist of Marine Biota of China Seas. Beijing: Science Press. (in Chinese)

⁵ Ji L. personal communication.

Supplementary Table S2. Number of animal species worldwide and China

	Species in China ¹	Species in the World ^{2,3}	China/World (%)
Trilobozoa 三叶动物门	0	5	0
Ctenophora Eschscholtz, 1829 栉板动物门	100	187	53.4
Porifera Grant, 1826 多孔动物门	190	10876	1.7
Placozoa Grell, 1971 扁盘动物门	0	1	0
Cnidaria Hatschek, 1888 刺胞动物门	1520	16383	9.2
Myxozoa Grassé, 1970 粘体动物门	39	2425	1.6
Xenoturbellida Westblad, 1949 异涡动物门	0	2	0
Acoelomorpha Ehlers, 1985 内肛动物门	0	428	0
Orthonectida Giard, 1877 直泳动物门	0	29	0

Rhombzoa van Beneden, 1876 菱形动物门	0	107	0
Cephalochordata Owen, 1846 头索动物亚门	4	33	12.1
Tunicata Lamarck, 1816 被囊动物门	139	2804	4.9
Craniata Linnaeus, 1758 有头动物门	8214	85432	9.6
Echinodermata 棘皮动物门	588	20550	2.8
Hemichordata Bateson, 1885 半索动物门	7	126	5.5
Chaetognatha Leuckart 1854 毛颚动物门	41	186	22.0
Nematoda Cobb, 1932 线虫动物门	655	25043	2.6
Nematomorpha Vejdovsky, 1886 线形动物门	0	354	0
Tardigrada Doyère, 1840 缓步动物门	42	1335	3.1
Onychophora Grube, 1853 有爪动物门	0	187	0
Arthropoda von Siebold, 1848 节肢动物门	141388	1302809	10.7
Priapulida Théel, 1906 鳃曳动物门	2	20	10
Loricifera Kristensen, 1983 铠甲动物门	0	30	0
Kinorhyncha Reinhard, 1881 动吻动物门	10	196	5.1
Bryozoa Ehrenberg, 1831 苔藓动物门	568	11474	4.9
Entoprocta Nitsche 1869 内肛动物门	9	172	5.2
Cycliophora Funch & Kristensen, 1995 环口动物门	0	2	0
Annelida Lamarck, 1809 环节动物门	1470	17426	8.4
Spincula Rafinesque, 1814 星虫动物门	44	147	29.9
Echiura Newby, 1940 螠虫动物门	12	198	6.0
Mollusca Linnaeus, 1758 软体动物门	6414	118061	5.4
Nemertea Schultze, 1851 纽形动物门	74	1358	5.4
Brachiopoda Duméril, 1806 腕足动物门	8	7390	0.1
Phoronida Hatschek, 1888 帚虫动物门	4	16	25.0
Gastrotricha Metschnikoff, 1864 腹毛动物门	0	794	0
Platyhelminthes Gegenbaur, 1859 扁形动物门	1800	29488	6.1
Gnathostomulida Riedl, 1969 颚口动物门	0	97	0
Micrognathozoa Kristensen & Funch, 2000 微颚动物门	0	1	0
Rotifera Cuvier, 1817 轮形动物门	800	2049	39.0
Acanthocephala Koelreuther, 1771 棘头动物门	40	1199	3.3
Sum	164182	1659420	9.7

¹ Liu RY. 2008. Checklist of Marine Biota of China Seas. Beijing: Science Press, 1267. (in Chinese)

² Edgecombe GD, Giribet G, Dunn CW, Hejnol A, Kristensen RM, Neves RC, et al. 2011. Higher-level metazoan relationships: recent progress and remaining questions. *Organisms Diversity & Evolution*, **11**(2): 151–172.

³ Zhang ZQ. 2013. Animal biodiversity: an outline of higher-level classification and survey of taxonomic richness (Addenda 2013). *Zootaxa*, **3703**: 1–82.

Supplementary Table S3. Number of Arthropoda species worldwide and China

	Species in China	¹ Species in the World	China/World %
Subphylum Chelicerata 有螯动物亚门			
Class Pycnogonida 海蜘蛛纲	10	1335	0.7
Class Arachnida 蛛形纲			
Order Opiliones 盲蛛目	118	6534	1.8
Order Scorpiones 蝎目	61	2654	2.2
Order Solifugae 避日目	18	1188	1.5
Order Pseudoscorpiones 拟蝎目	110	3903	2.8
Order Palpigradi 须肢目	1	115	0.8
Order Ricinulei 僧帽目	0	81	0
Order Opilioacarida 节腹螨目	0	35	0
Order Holothyrida 巨螨目	0	27	0
Order Ixodida 蜱目	125	892	14.0
Order Mesostigmata 中气门目	1178	11419	10.3
Order Trombidiformes 恙螨目	1887	25766	7.3
Order Scarcoptiformes 疥螨目	805	16173	4.9
Order Araneae 蜘蛛目	5249	49853	10.5
Order Amblypygi 无鞭目	0	205	0
Order Thelyphonida 鞭蝎目	0	110	0
Order Schizomida 裂盾目	4	317	12.9
Order Uropygi 有鞭目	7	120	5.8
Subphylum Myriapoda 多足亚门			
Class Chilopoda 唇足纲	97	3112	3.1
Class Symphyla 综合纲	4	204	1.9
Class Pauropoda 少足纲	49	846	5.8
Class Diplopoda 倍足纲	457	7837	5.8
Subphylum Crustacea 甲壳亚门	6645	67735	9.8
Subphylum Hexapoda 六足亚门			
Class Collembola 弹尾目	584	8163	7.2
Class Protura 原尾目	254	816	31.1
Class Diplura 双尾目	52	936	5.5
Class Insecta 昆虫纲			
Order Archaeognatha 石蛎目	27	506	5.3
Order Zygentoma 衣鱼目	5	554	0.9
Order Ephemeroptera 蜉蝣目	385	3124	12.3
Order Odonata 蜻蜓目	834	6042	13.8
Order Orthoptera 直翅目	4026	23830	16.9
Order Phasmida 竹节虫目	477	3046	15.6
Order Embioptera 纺织目	8	457	1.8
Order Grylloblattodea 蛩蠊目	2	32	6.2
Order Mantophasmatodea 竹节虫目	0	17	0

Order Plecoptera 襁翅目	801	3713	21.6
Order Dermaptera 革翅目	308	1933	15.9
Order Zoraptera 缺翅目	5	36	13.9
Order Mantodea 螳螂目	192	2425	7.9
Order Blattodea 蜚蠊目	1077	7570	14.2
Order Psocoptera 啮虫目	1702	5611	30.3
Order Phthiraptera 虱目	1011	5135	19.7
Order Thysanoptera 缨翅目	763	5938	12.8
Order Hemiptera 半翅目	14627	102183	12.2
Order Hymenoptera 膜翅目	15807	153088	10.3
Order Strepsiptera 捻翅目	28	613	4.6
Order Coleoptera 鞘翅目	35489	389487	9.1
Order Neuroptera 脉翅目	865	5468	15.8
Order Megaloptera 广翅目	139	359	38.7
Order Raphidioptera 蛇蛉目	39	184	21.2
Order Trichoptera 毛翅目	1312	14548	9.0
Order Lepidoptera 鳞翅目	24378	158423	15.4
Order Diptera 双翅目	18349	156774	11.7
Order Siphonaptera 蚤目	709	2082	34.0
Order Mecoptera 长翅目	308	400	77.0
Sum	141388	1275963	11.0

¹Zhang ZQ. 2013. Animal biodiversity: an outline of higher-level classification and survey of taxonomic richness (Addenda 2013). *Zootaxa*, **3703**: 1–82.

Supplementary Table S4. Number of Craniata species worldwide and China

	Species in China	Species in the World	China/World %
Superclass Pisces 鱼总纲	5032 ²	34847 ¹	14.4
Class Myxini 盲鳗纲			
Class Cephalaspidomorphi 头甲纲			
Class Chondrichthyes 软骨鱼纲			
Class Sarcopterygii 肉鳍鱼纲			
Class Actinopterygii 辐鳍鱼纲			
Class Amphibia 两栖纲	515 ³	8447 ⁴	6.0
Class Reptilia 爬行纲	511 ³	11600 ⁵	4.4
Class Aves 鸟纲	1470 ⁶	10634 ⁶	13.8
Class Mammalia 哺乳纲	686 ⁷	6450 ⁸	10.6
Sum 小计	8214	71978	11.4

¹Froese R, Pauly D. 2022[2022-02-25]. FishBase. World Wide Web Electronic Publication. <https://www.fishbase.org>.

- ² Zhang CG, Shao GZ, Wu HL, Zhao YH. 2020. Species Catalogue of China. Volume 2 Animals Vertebrates (V) Fishes (I). Beijing: Science Press. (in Chinese)
- ³ Wang K, Ren JL, Chen HM, Lyu ZT, Guo XG, Jiang K, et al. 2020. The updated checklists of amphibians and reptiles of China. *Biodiversity Science*, **28**(2): 189–218. (in Chinese)
- ⁴ Frost DR. 2021[2022-02-25]. Amphibian species of the world 6.1: an online reference. <https://amphibiansoftheworld.amnh.org/index.php>.
- ⁵ Uetz P, Freed P, Aguilar R, Hošek J. 2021[2022-02-25]. The reptile database. <http://www.reptile-database.org>.
- ⁶ Zheng GM. 2021. A Checklist on the Classification and Distribution of the Birds of the World. 2nd ed. Beijing: Science Press. (in Chinese)
- ⁷ Wei FW, Yang QS, Wu Y, Jiang XL, Liu SY, Li BG, et al. 2021. Catalogue of mammals in China (2021). *Acta Theriologica Sinica*, **41**(5): 487–501. (in Chinese)
- ⁸ Burgin CJ, Wilson DE, Mittermeier RA, Rylands AB, Lacher TE, Sechrest W. 2020. Illustrated Checklist of the Mammals of the World. Barcelona: Lynx Edicions.