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Global Database of Foraminiferal Organic Linings: ForamL Version 1.

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Summary

This database is a collection of references to illustrations of Foraminiferal Organic Linings (FOLs) published in available scientific literature. FOLs are extracted from recent marine samples and sedimentary rocks worldwide. The analysis of the publications led to the collection of 155 scientific reports that illustrate 614 foraminiferal organic linings. All linings have been assigned to supraordinal groups of Foraminifera (Pawlowski et al. 2013), as well as to basic morphologic types of chamber arrangements. The database consists of three tables that cover the whole Phanerozoic split to the Cenozoic, Mesozoic, Paleozoic, and then to systems/periods, i.e. Quaternary, Neogene, Paleogene, Cretaceous, Jurassic, Triassic and older intervals. For each system, scientific publications are referenced chronologically, according to a publication year. The main principle to collect the data was the preparation method based on palynological procedures. The procedures included treating samples with hydrochloric acid (HCl) to remove carbonates, following with hydrofluoric acid (HF) to remove silicates from the sample. The next step was to sieve the extracted organic matter through a 10 or 15 or 20 µm sieve to separate larger organic particles, including palynomorphs with foraminiferal organic linings, for further preparation of palynological slides. Most researchers identified organic residues in palynological slides under optical microscopes equipped in either analogue or digital cameras. Some authors used a scanning electron microscope (SEM) as a supplementary method of documentation. The purpose of gathering the data is to extend scientific knowledge on the origin, taphonomy, and phylogenetic patterns of these fossilizable organic foraminiferal structures. The most recent review of the knowledge on foraminiferal organic linings is presented by Tyszka et al. (2021). The ForamL database will be further supplemented by available records of foraminiferal organic linings, therefore, any new graphic contribution of published and unpublished specimens of FOLs is welcome.

Pawlowski, J., Holzmann, M., Tyszka, J., 2013. New supraordinal classification of Foraminifera: Molecules meet morphology. *Marine Micropaleontology*, 100: 1-10, <https://doi.org/10.1016/j.marmicro.2013.04.002>

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PERIOD	ALL FORAM. ORGANIC LININGS						Publication number	Publication	publication page/s	Original plate/ figure	Database Figure(s)	Morphology							ALL FORAM. ORGANIC LININGS	
	Monothalamids	Globothalamea	Tubothalamea	Lagenida	indetermined/ unidentified	ALL FORAM. ORGANIC LININGS						spiral	biserial	high trochospiral/ triserial & more	uniserial	spiral-to-uniserial	spiral-to-biserial	Undetermined or single chambers		
PERMIAN	0	0	0	0	0	0	0	TOTAL / PERMIAN				0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0					0	0	0	0	0	0	0	0	
CARBONIFEROUS	1					1	1	di Pasquo (2009)	276	pl. V fig. 9	C1	1							1	
	13					13	2	Gutiérrez et al. (2016)	698	fig. 3 fig. 1-13	C2-14	13							13	
	1					1	3	Gutiérrez & Belarino (2018)	11	fig. V fig. 36	C15	1							1	
	0	15	0	0	0	15	3	TOTAL / CARBONIFEROUS				15	0	0	0	0	0	0	15	
DEVONIAN	28	4				32	1	Winchester-Seeto et al. (1994)			D1-32								32	32
	40		1			41	2	Bell et al. (1999)	30, 35, 36, 40	fig. 1 fig. 1-12; fig. 2 fig. 1-4, 7-11; fig. 3 fig. 1, 2, 4, 5-11; fig. 4 fig. 1, 2, 4-13	D33-73								41	41
	68	4	1	0	0	73	2	TOTAL / DEVONIAN				0	0	0	0	0	0	0	73	73
SILURIAN	0	0	0	0	0	0	0	TOTAL / SILURIAN				0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0					0	0	0	0	0	0	0	0	
ORDOVICIAN	1	1				2	1	Winchester-Seeto et al. (2006)	202	pl. I. fig. 1, 2	O1,2	1			1					2
	1	1	0	0	0	2	1	TOTAL / ORDOVICIAN				1	0	0	1	0	0	0	2	
CAMBRIAN	3					3	1	Winchester-Seeto et al. (2006)	76	pl. II fig. 1, 2, 5	Cm1-3								3	3
	3	0	0	0	0	3	1	TOTAL / CAMBRIAN				0	0	0	0	0	0	0	3	3
	72	514	1	22	5	614	155	TOTAL				444	31	7	24	7	1	100	614	

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