

1883. ERNST HÆCKEL (L. N. 46) revises the 4 orders and 32 families of Radiolaria, and gives more accurate definitions of them, as well as of the 2 subclasses (I. *Holotrypasta* = ACANTHARIA and SPUMELLARIA; II. *Merotrypasta* = NASSELLARIA and PHÆODARIA).  
 1885. D. RÜST (L. N. 51) describes 234 new species of fossil Radiolaria from the Jura, and illustrates them by twenty plates. Among them are 103 SPUMELLARIA, 130 NASSELLARIA, and 1 PHÆODARIA; these are contained in 35 genera, of which 20 belong to the Porulosa, and 15 to the Osculosa.

254. *Statistical Synopsis of the Twenty Orders:—*

Legion.	Sublegion.	Order.	Number of Families.	Number of Genera.	Number of Species.	Previously known Species.	New Species.	Fossil Species.	Pelagic Abundance.	Abyssal Abundance.	Figured on Plates	
I. Legion <b>Spumellaria</b> (Porulosa peripylea)	I. <b>Collodaria</b> (Spumellaria palliata)	1. Colloidea	2	6	36	9	27	0	A	E	1, 3	
		2. Beloidea	2	8	56	9	47	0	A	D	2, 4	
	II. <b>Sphærellaria</b> (Spumellaria loricata)	3. Sphæroidea	6	107	660	105	555	66	A	B	{ 5-8 11-30 16, 17 39, 40 31-38 41-48 9, 10 49, 50	
		4. Prunoidea	7	53	280	35	245	36	B	B		
		5. Discoidea	6	91	503	126	376	102	B	A		
		6. Larcoidea	9	51	260	8	252	0	E	B		
	II. Legion <b>Acantharia</b> (Porulosa actipylea)	III. <b>Acanthometra</b> (Acantharia palliata)	7. Actinelida	3	6	22	6	16	0	E	E	129 (figs. 1-3)
			8. Acanthonida	3	21	138	50	88	0	A	C	
		IV. <b>Acanthophracta</b> (Acantharia loricata)	9. Sphærophracta	3	27	149	9	140	0	B	B	133-138
			10. Prunophracta	3	11	63	5	58	0	D	B	139, 140
III. Legion <b>Nassellaria</b> (Osculosa monopylea)	V. <b>Plectellaria</b> (Nassellaria palliata)	11. Nassoiden	1	2	5	1	4	0	E	E	91 (fig. 1) 91 (figs. 2-12) { 81, 82 92-94	
		12. Plectoidea	2	17	61	5	56	0	D	C		
		13. Stephoidea	4	40	205	14	191	17	C	B		
	VI. <b>Cyrtellaria</b> (Nassellaria loricata)	14. Spyroidea	4	45	239	51	188	53	C	A	83-90 96 51-80	
		15. Botryodea	3	10	55	15	40	10	E	C		
		16. Cyrtoidea	12	160	1122	328	794	250	C	A		
IV. Legion <b>Phæodaria</b> (Osculosa canno- pylea)	VII. <b>Phæocystina</b> (Phæodaria palliata)	17. Phæocystina	3	15	112	30	82	24	C	B	101-105	
		VIII. <b>Phæocoscina</b> (Phæodaria loricata)	18. Phæosphæria	4	22	121	5	116	0	C	A	106-112 { 99, 100 113-120 121-128
	19. Phæogromia		5	27	159	5	154	0	C	A		
	20. Phæoconchia		3	20	73	4	69	0	D	B		
Total,			85	799	4318	810	3508	558	...	...	140	

*Nota.*—In the tenth and eleventh columns the relative abundance of each order at or near the surface and near the bottom is approximately indicated by the letters A-E, which have the following significance:—A, abundant; B, very numerous; C, many (medium quantity); D, few; E, very few.