Online Resource 1

Morphological characters of Polymastiidae (based on Plotkin et al. 2012 with emendations)

Paper: Molecular phylogenies challenge the classification of Polymastiidae (Porifera, Demospongiae) based on morphology

Journal: Organisms Diversity and Evolution

Authors:

Alexander Plotkin, corresponding author (Department of Biology, University of Bergen, Postbox 7803, 5020 Bergen, Norway, e-mail: alexander.s.plotkin@gmail.com)

Oliver Voigt (Department of Earth and Environmental Sciences, Paleontology and Geobiology, Ludwig-Maximilians-Universität München, Richard-Wagner-Str. 10, 80333 München, Germany)

Endre Willassen (Natural History Collections, University Museum of Bergen, University of Bergen, Postbox 7800, 5020 Bergen, Norway)

Hans Tore Rapp (Department of Biology and Centre for Geobiology, University of Bergen, Postbox 7803, 5020 Bergen, Norway)

Supplementary Table 1 Morphological characters of Polymastiidae (based on Plotkin et al. 2012 with emendations)

Character	States
1. Growth pattern	0. Globular / 1. Thickly encrusting / 2. Radial /
	3. Columnar
2. Upper surface	0. Smooth / 1. Hispid
3. Lateral surface	0. Not developed / 1. Developed
4. Basal surface	0. Not developed / 1. Developed
5. Exhalant papillae	0. Absent / 1. Present
6. Number of exhalant papillae	0. Always a single / 1. May be several
7. Development of exhalant papillae	0. Weak / 1. Normal
8. Inhalant papillae	0. Absent / 1. Present
9. Oscula on the body surface	0. Absent / 1. Present
10. Ostia on the body surface	0. Absent / 1. Present
11. Upper cortex: middle layer of collagen	0. Absent / 1. Present
fibres	
12. Upper cortex: middle layer of aquiferous	0. Absent / 1. Present
cavities	
13. Upper cortex: inner layer of criss-cross	0. Absent / 1. Present
monactines	
14. Exotyles	0. Absent / 1. Present
15. Specialised basal cortex	0. Absent / 1. Present
16. Marginal spicule fringe	0. Absent / 1. Present
17. Well developed and regular choanosomal	0. Absent / 1. Present
skeleton	
18. Arrangement pattern of the regular	0. Radial / 1. Reticulate
choanosomal skeleton	
19. Auxiliary choanosomal monactines	0. Absent / 1. Present
20. Non-monactines in choanosome	0. Absent / 1. Present
21. Total number of the size categories of	0. Two / 1. More than two
monactines	
(excluding exotyles and spicules of the	
fringe)	