

"Polymastiidae (Porifera: Demospongiae) of the Nordic and Siberian Seas" by Plotkin A., Gerasimova E. & Rapp H.T.

Online resource 2. Main synapomorphies and apomorphies of the polymastiids

from the Nordic and Siberian Seas in the 5'-end barcoding region of CO1.

The species are grouped according to their phylogenetic relationships.

Complete alignment with the species from other areas published by Plotkin et al. (2016b) is available

as Matrix M34248 at <http://purl.org/phylo/treebase/phyloids/study/TB2:S18487>

| | | Sites numbered as in the complete alignment (Matrix M34248 in TreeBase) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|
| | | 1 | 4 | 3 | 3 | 4 | 5 | 6 | 8 | 9 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | | | | | |
| Species | Museum Nr. | 1 | 4 | 1 | 4 | 3 | 5 | 4 | 8 | 1 | 0 | 1 | 4 | 6 | 2 | 3 | 8 | 0 | 2 | 5 | 4 | 7 | 8 | 3 | 1 | 9 | 2 | 4 | 7 | 6 | 6 | 7 | 9 | 2 | 1 | 7 | 4 | 0 | 3 | 8 | 5 | 7 | 0 | 0 | 2 | 6 | 9 | 2 | 8 | 3 | 7 | 6 | 4 | 8 | 1 | | | | | | |
| <i>Polymastia andrica</i> | ZMBN 98055 | G | A | G | G | A | T | C | G | A | T | T | A | T | T | T | G | A | G | T | A | C | T | T | T | T | A | G | T | T | G | G | A | G | G | C | A | T | T | G | A | G | T | A | T | T | A | T | T | T | T | G | T | T | | | | | | | |
| <i>Polymastia andrica</i> | ZMBN 98057 | G | A | G | G | A | T | C | G | A | T | T | A | T | T | T | G | A | G | T | A | C | T | T | T | T | A | G | T | T | G | G | A | G | G | C | A | T | T | G | A | G | T | A | T | T | A | T | T | T | T | G | T | T | | | | | | | |
| <i>Polymastia andrica</i> | ZMBN 98074 | G | A | G | G | A | T | C | G | A | T | T | A | T | T | T | G | A | G | T | A | C | T | T | T | T | A | G | T | T | G | G | A | G | G | C | A | T | T | G | A | G | T | A | T | T | A | T | T | T | T | G | T | T | | | | | | | |
| <i>Polymastia andrica</i> | ZMBN 98102 | G | A | G | G | A | T | C | G | A | T | T | A | T | T | T | G | A | G | T | A | C | T | T | T | T | A | G | T | T | G | G | A | G | G | C | A | T | T | G | A | G | T | A | T | T | A | T | T | T | T | G | T | T | | | | | | | |
| <i>Polymastia andrica</i> | ZMBN 98108 | G | A | G | G | A | T | C | G | A | T | T | A | T | T | T | G | A | G | T | A | C | T | T | T | T | A | G | T | T | G | G | A | G | G | C | A | T | T | G | A | G | T | A | T | T | A | T | T | T | T | G | T | T | | | | | | | |
| <i>Polymastia arctica</i> | ZMBN 98060 | G | A | G | T | A | T | C | G | A | T | T | A | T | T | T | G | A | G | T | A | C | T | T | T | T | A | G | T | T | G | T | A | G | G | C | A | G | T | G | A | G | T | A | T | T | A | T | T | T | T | G | T | T | | | | | | | |
| <i>Polymastia arctica</i> | ZMBN 98062 | G | A | G | T | A | T | C | G | A | T | T | A | T | T | T | G | A | G | T | A | C | T | T | T | T | A | G | T | T | G | T | A | G | G | C | A | G | T | G | A | G | T | A | T | T | A | T | T | T | T | G | T | T | | | | | | | |
| <i>Polymastia arctica</i> | ZMBN 98063 | G | A | G | T | A | T | C | G | A | T | T | A | T | T | T | G | A | G | T | A | C | T | T | T | T | A | G | T | T | G | T | A | G | G | C | A | G | T | G | A | G | T | A | T | T | A | T | T | T | T | G | T | T | | | | | | | |
| <i>Polymastia arctica</i> | ZMBN 98065 | G | A | G | T | A | T | C | G | A | T | T | A | T | T | T | G | A | G | T | A | C | T | T | T | T | A | G | T | T | G | T | A | G | G | C | A | G | T | G | A | G | T | A | T | T | A | T | T | T | T | G | T | T | | | | | | | |
| <i>Polymastia arctica</i> | ZMBN 98068 | G | A | G | T | A | T | C | G | A | T | T | A | T | T | T | G | A | G | T | A | C | T | T | T | T | A | G | T | T | G | T | A | G | G | C | A | G | T | G | A | G | T | A | T | T | A | T | T | T | T | G | T | T | | | | | | | |
| <i>Polymastia grimaldii</i> | ZMBN 98064 | G | A | G | A | A | T | C | G | A | T | T | A | T | T | T | G | A | G | T | A | C | T | T | T | T | G | G | T | T | G | T | A | G | G | C | A | T | T | G | A | G | T | G | T | A | T | T | T | T | T | G | T | T | | | | | | | |
| <i>Polymastia grimaldii</i> | ZMBN 98110 | G | A | G | A | A | T | C | G | A | T | T | A | T | T | T | G | A | G | T | A | C | T | T | T | T | G | G | T | T | G | T | A | G | G | C | A | T | T | G | A | G | T | G | T | A | T | T | T | T | T | T | G | T | T | | | | | | |
| <i>Polymastia grimaldii</i> | ZMBN 98112 | G | A | G | A | A | T | C | G | A | T | T | A | T | T | T | G | A | G | T | A | C | T | T | T | T | G | G | T | T | G | T | A | G | G | C | A | T | T | G | A | G | T | G | T | A | T | T | T | T | T | T | T | G | T | T | | | | | |
| <i>Polymastia mamillaris</i> | ZMBN 98078 | C | T | A | G | A | T | C | G | A | T | T | A | T | T | T | G | A | G | T | A | T | T | T | T | T | G | G | T | C | G | T | A | A | G | A | A | T | T | C | A | G | T | A | T | T | G | T | T | T | T | A | T | C | C | | | | | | |
| <i>Polymastia mamillaris</i> | ZMBN 98083 | C | T | A | G | A | T | C | G | A | T | T | A | T | T | T | G | A | G | T | A | T | T | T | T | T | G | G | T | C | G | T | A | A | G | A | A | T | T | C | A | G | T | A | T | T | G | T | T | T | T | A | T | C | C | | | | | | |

"Polymastiidae (Porifera: Demospongiae) of the Nordic and Siberian Seas" by Plotkin A., Gerasimova E. & Rapp H.T.

Online resource 2 (continued)

| | | Sites numbered as in the complete alignment (Matrix M34248 in TreeBase) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|------------|---|---|----|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|---|
| | | 1 | 4 | 14 | 3 | 3 | 4 | 5 | 6 | 8 | 9 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | |
| Species | Museum Nr. | 1 | 4 | 14 | 3 | 3 | 4 | 5 | 6 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | | |
| <i>Polymastia hemisphaerica</i> | ZMBN 98043 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | G | T | A | T | C | T | T | T | G | G | T | C | G | T | A | A | G | A | C | T | T | G | A | G | T | A | T | T | G | T | T | T | A | T | T | |
| <i>Polymastia hemisphaerica</i> | ZMBN 98056 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | G | T | A | T | C | T | T | T | G | G | T | C | G | T | A | A | G | A | C | T | T | G | A | G | T | A | T | T | G | T | T | T | A | T | T | |
| <i>Polymastia hemisphaerica</i> | ZMBN 98058 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | G | T | A | T | C | T | T | T | G | G | T | C | G | T | A | A | G | A | C | T | T | G | A | G | T | A | T | T | G | T | T | T | A | T | T | |
| <i>Polymastia hemisphaerica</i> | ZMBN 98069 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | G | T | A | T | C | T | T | T | G | G | T | C | G | T | A | A | G | A | C | T | T | G | A | G | T | A | T | T | G | T | T | T | A | T | T | |
| <i>Polymastia hemisphaerica</i> | ZMBN 98071 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | G | T | A | T | C | T | T | T | G | G | T | C | G | T | A | A | G | A | C | T | T | G | A | G | T | A | T | T | G | T | T | T | A | T | T | |
| <i>Polymastia hemisphaerica</i> | ZMBN 98077 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | G | T | A | T | C | T | T | T | G | G | T | C | G | T | A | A | G | A | C | T | T | G | A | G | T | A | T | T | G | T | T | T | A | T | T | |
| <i>Polymastia thielei</i> | ZMBN 98052 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | G | T | A | T | C | T | T | T | G | G | T | C | G | T | A | A | G | A | C | T | T | G | A | G | T | A | T | T | G | T | T | T | A | T | T | |
| <i>Polymastia thielei</i> | ZMBN 98053 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | G | T | A | T | C | T | T | T | G | G | T | C | G | T | A | A | G | A | C | T | T | G | A | G | T | A | T | T | G | T | T | T | A | T | T | |
| <i>Polymastia thielei</i> | ZMBN 98070 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | G | T | A | T | C | T | T | T | G | G | T | C | G | T | A | A | G | A | C | T | T | G | A | G | T | A | T | T | G | T | T | T | A | T | T | |
| <i>Polymastia thielei</i> | ZMBN 98107 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | G | T | A | T | C | T | T | T | G | G | T | C | G | T | A | A | G | A | C | T | T | G | A | G | T | A | T | T | G | T | T | T | A | T | T | |
| <i>Polymastia thielei</i> | ZMBN 98109 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | G | T | A | T | C | T | T | T | G | G | T | C | G | T | A | A | G | A | C | T | T | G | A | G | T | A | T | T | G | T | T | T | A | T | T | |
| <i>Polymastia uberrima</i> | ZMBN 98066 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | A | G | T | A | T | T | T | T | T | G | C | C | A | T | A | C | G | A | A | T | T | A | A | G | T | A | C | T | G | T | T | T | A | T | T | |
| <i>Polymastia uberrima</i> | ZMBN 98073 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | A | G | T | A | T | T | T | T | T | T | G | C | C | A | T | A | C | G | A | A | T | T | A | A | G | T | A | C | T | G | T | T | T | A | T | T |

"Polymastiidae (Porifera: Demospongiae) of the Nordic and Siberian Seas" by Plotkin A., Gerasimova E. & Rapp H.T.

Online resource 2 (continued)

| | | Sites numbered as in the complete alignment (Matrix M34248 in TreeBase) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | | 1 | 4 | 3 | 3 | 4 | 5 | 6 | 8 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | |
| Species | Museum Nr. | 1 | 4 | 3 | 3 | 4 | 5 | 6 | 8 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | |
| <i>Polymastia svenseni</i> | ZMBN 98091 | G | T | G | G | A | T | A | G | A | T | T | T | T | T | T | G | C | T | C | G | T | T | G | C | T | G | C | T | G | G | T | T | A | T | C | A | G | A | A | T | T | A | A | G | T | A | T | T | T | T | T | T | T | A | T | A | T | | | |
| <i>Polymastia svenseni</i> | ZMBN 98092 | G | T | G | G | A | T | A | G | A | T | T | T | T | T | T | G | C | T | C | G | T | T | G | C | T | G | C | T | G | G | T | T | A | T | C | A | G | A | A | T | T | A | A | G | T | A | T | T | T | T | T | T | T | A | T | A | T | | | |
| <i>Polymastia</i> sp. | ZMBN 98080 | G | T | G | G | A | T | A | G | A | T | G | T | C | T | T | G | C | T | C | G | T | T | G | C | C | G | G | T | T | A | T | C | A | G | A | A | T | C | A | A | G | T | A | T | T | T | T | T | T | T | T | A | C | A | T | | | | | |
| <i>Polymastia bartletti</i> | ZMBN 98111 | G | T | G | G | A | T | C | A | A | C | T | A | T | C | G | G | G | G | T | A | T | T | T | T | G | G | T | C | G | T | A | A | A | A | C | T | A | A | G | C | A | T | C | T | C | C | G | C | A | T | T | | | | | | | | | |
| <i>Polymastia</i> cf. <i>bartletti</i> | GNM 904:1 | G | T | G | G | A | T | C | A | A | C | T | A | T | C | G | G | G | G | T | A | T | T | T | T | G | G | T | C | G | T | A | A | A | A | C | T | A | A | G | C | A | T | C | T | C | T | C | T | G | C | A | T | T | | | | | | | |
| <i>Sphaerotylus borealis</i> | ZMBN 98036 | Not available | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>Sphaerotylus borealis</i> | ZMBN 98059 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | A | G | T | A | T | T | T | T | T | G | G | T | C | G | T | A | A | G | A | A | T | T | A | A | G | T | A | T | T | T | C | T | T | A | T | G | T | | | | | | | |
| <i>Sphaerotylus borealis</i> | ZMBN 98061 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | A | G | T | A | T | T | T | T | T | G | G | T | C | G | T | A | A | G | A | A | T | T | A | A | G | T | A | T | T | T | C | T | T | A | T | G | T | | | | | | | |
| <i>Weberella bursa</i> | ZMBN 98051 | G | T | G | G | A | T | C | G | G | T | T | A | T | T | T | G | A | G | T | A | T | T | T | T | T | G | G | T | G | A | T | A | A | G | A | A | T | T | A | A | G | T | A | T | T | T | C | T | T | A | T | G | T | | | | | | | |
| <i>Weberella bursa</i> | ZMBN 98072 | G | T | G | G | A | T | C | G | G | T | T | A | T | T | T | G | A | G | T | A | T | T | T | T | T | G | G | T | G | A | T | A | A | G | A | A | T | T | A | A | G | T | A | T | T | T | C | T | T | A | T | G | T | | | | | | | |
| <i>Polymastia nivea</i> | ZMBN 98087 | Not available | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>Polymastia nivea</i> | ZMBN 98044 | G | T | G | G | A | C | C | G | A | T | T | A | T | T | T | G | A | T | T | A | T | T | T | T | T | T | G | G | T | C | A | T | A | A | G | A | A | T | T | A | A | G | T | A | T | T | T | C | T | T | A | T | T | | | | | | | |
| <i>Polymastia nivea</i> | ZMBN 98085 | G | T | G | G | A | C | C | G | A | T | T | A | T | T | T | G | A | T | T | A | T | T | T | T | T | T | G | G | T | C | A | T | A | A | G | A | A | T | T | A | A | G | T | A | T | T | T | C | T | T | A | T | T | | | | | | | |
| <i>Polymastia nivea</i> | ZMBN 98086 | G | T | G | G | A | C | C | G | A | T | T | A | T | T | T | G | A | T | T | A | T | T | T | T | T | T | G | G | T | C | A | T | A | A | G | A | A | T | T | A | A | G | T | A | T | T | T | C | T | T | A | T | T | | | | | | | |
| <i>Polymastia penicillus</i> | BELUM: MC6505 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | A | T | T | A | T | T | T | T | T | T | G | G | T | C | A | T | A | A | G | A | A | T | T | A | A | G | T | A | T | T | T | C | T | T | A | T | G | T | | | | | | |
| <i>Polymastia penicillus</i> | GNM 460:1 | Not available | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>Polymastia penicillus</i> | GNM 460:2 | Not available | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

"Polymastiidae (Porifera: Demospongiae) of the Nordic and Siberian Seas" by Plotkin A., Gerasimova E. & Rapp H.T.

Online resource 2 (continued)

| | | Sites numbered as in the complete alignment (Matrix M34248 in TreeBase) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 4 | 3 | 3 | 4 | 5 | 6 | 8 | 9 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 |
| Species | Museum Nr. | A | T | G | G | T | T | C | G | A | T | T | A | T | T | T | G | A | T | T | A | T | T | T | T | T | T | T | G | G | T | C | A | T | G | T | G | A | A | T | T | A | A | G | T | A | T | T | T | C | T | T | T | A | T | T | | |
| <i>Sphaerotylus capitatus</i> | ZMBN 98042 | A | T | G | G | T | T | C | G | A | T | T | A | T | T | T | G | A | T | T | A | T | T | T | T | T | T | T | G | G | T | C | A | T | G | T | G | A | A | T | T | A | A | G | T | A | T | T | T | C | T | T | T | A | T | T | | |
| <i>Sphaerotylus capitatus</i> | ZMBN 98075 | A | T | G | G | T | T | C | G | A | T | T | A | T | T | T | G | A | T | T | A | T | T | T | T | T | T | T | G | G | T | C | A | T | G | T | G | A | A | T | T | A | A | G | T | A | T | T | T | C | T | T | T | A | T | T | | |
| <i>Sphaerotylus capitatus</i> | GNM 902 | A | T | G | G | T | T | C | G | A | T | T | A | T | T | T | G | A | T | T | A | T | T | T | T | T | T | T | G | G | T | C | A | T | G | T | G | A | A | T | T | A | A | G | T | A | T | T | T | C | T | T | T | A | T | T | | |
| <i>Polymastia boletiformis</i> | GNM 901:1 | Not available | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>Polymastia boletiformis</i> | ZMBN 98048 | Not available | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>Polymastia boletiformis</i> | ZMBN 98081 | Not available | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>Polymastia boletiformis</i> | ZMBN 98088 | Not available | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>Polymastia boletiformis</i> | ZMBN 98047 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | G | G | T | A | T | T | T | T | T | T | G | T | G | T | A | T | G | T | A | A | G | A | A | T | T | T | A | G | T | A | T | T | T | C | T | T | T | A | T | T | |
| <i>Polymastia boletiformis</i> | ZMBN 98089 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | G | G | T | A | T | T | T | T | T | T | T | G | T | G | T | A | T | G | T | A | A | G | A | A | T | T | T | A | G | T | A | T | T | T | T | T | T | T | A | T | T |
| <i>Quasillina brevis</i> | ZMBN 98049 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | G | G | T | A | T | T | T | T | T | T | T | G | T | G | T | A | T | G | T | A | A | G | A | A | T | T | T | A | G | T | A | T | T | T | C | T | T | T | A | T | T |
| <i>Quasillina brevis</i> | ZMBN 98067 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | G | G | T | A | T | T | T | T | T | T | T | G | T | G | T | A | T | G | T | A | A | G | A | A | T | T | T | A | G | T | A | T | T | T | C | T | T | T | A | T | T |
| <i>Quasillina brevis</i> | ZMBN 98082 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | G | G | T | A | T | T | T | T | T | T | T | G | T | G | T | A | T | G | T | A | A | G | A | A | T | T | T | A | G | T | A | T | T | T | C | T | T | T | A | T | T |
| <i>Quasillina brevis</i> | ZMBN 98084 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | G | G | T | A | T | T | T | T | T | T | T | G | T | G | T | A | T | G | T | A | A | G | A | A | T | T | T | A | G | T | A | T | T | T | C | T | T | T | A | T | T |
| <i>Quasillina brevis</i> | ZMBN 98090 | G | T | G | G | A | T | C | G | A | T | T | A | T | T | T | G | G | G | T | A | T | T | T | T | T | T | T | G | T | G | T | A | T | G | T | A | A | G | A | A | T | T | T | A | G | T | A | T | T | T | C | T | T | T | A | T | T |

"Polymastiidae (Porifera: Demospongiae) of the Nordic and Siberian Seas" by Plotkin A., Gerasimova E. & Rapp H.T.

Online resource 2 (continued)

| | | Sites numbered as in the complete alignment (Matrix M34248 in TreeBase) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|
| | | 1 | 4 | 1 | 4 | 3 | 4 | 5 | 6 | 8 | 9 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | | | | | |
| Species | Museum Nr. | 1 | 4 | 1 | 4 | 3 | 4 | 5 | 6 | 8 | 9 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | | | | | | | |
| <i>Spinularia cf. sarsii</i> | ZMBN 98103 | G | T | G | G | A | T | C | C | A | T | T | A | T | T | T | A | G | C | T | A | T | T | T | T | G | G | T | C | T | T | A | G | G | A | A | C | T | A | T | A | T | T | T | C | T | T | A | T | T | | | | | | | | | | | |
| <i>Spinularia sarsii</i> | ZMBN 98039 | T | T | G | G | A | T | C | C | A | T | T | A | T | T | T | G | G | C | T | A | T | T | T | T | T | G | G | T | C | T | T | A | G | G | A | A | C | T | A | A | G | T | A | T | T | T | C | T | T | A | T | T | | | | | | | | |
| <i>Spinularia sarsii</i> | ZMBN 98098 | T | T | G | G | A | T | C | C | A | T | T | A | T | T | T | G | G | C | T | A | T | T | T | T | T | G | G | T | C | T | T | A | G | G | A | A | C | T | A | A | G | T | A | T | T | T | C | T | T | A | T | T | | | | | | | | |
| <i>Spinularia njordi</i> | ZMBN 98038 | T | T | G | G | A | T | C | C | A | T | T | A | T | T | T | G | G | C | T | A | T | T | T | T | T | G | G | T | C | T | T | A | G | G | A | A | C | T | A | A | G | T | A | T | T | T | C | T | T | A | T | T | | | | | | | | |
| <i>Spinularia njordi</i> | ZMBN 98040 | T | T | G | G | A | T | C | C | A | T | T | A | T | T | T | G | G | C | T | A | T | T | T | T | T | G | G | T | C | T | T | A | G | G | A | A | C | T | A | A | G | T | A | T | T | T | C | T | T | A | T | T | | | | | | | | |
| <i>Spinularia njordi</i> | ZMBN 98041 | T | T | G | G | A | T | C | C | A | T | T | A | T | T | T | G | G | C | T | A | T | T | T | T | T | G | G | T | C | T | T | A | G | G | A | A | C | T | A | A | G | T | A | T | T | T | C | T | T | A | T | T | | | | | | | | |
| <i>Spinularia spinularia</i> | ZMBN 98037 | T | T | G | G | A | T | C | C | A | T | T | A | T | T | T | G | G | C | T | A | T | T | T | T | T | G | G | T | C | T | T | A | G | G | A | A | C | T | A | A | G | T | A | T | T | T | C | T | T | A | T | T | | | | | | | | |
| <i>Spinularia spinularia</i> | ZMBN 98050 | T | T | G | G | A | T | C | C | A | T | T | A | T | T | T | G | G | C | T | A | T | T | T | T | T | G | G | T | C | T | T | A | G | G | A | A | C | T | A | A | G | T | A | T | T | T | C | T | T | A | T | T | | | | | | | | |
| <i>Spinularia spinularia</i> | GNM 792:1 | T | T | G | G | A | T | C | C | A | T | T | A | T | T | T | G | G | C | T | A | T | T | T | T | T | G | G | T | C | T | T | A | G | G | A | A | C | T | A | A | G | T | A | T | T | T | C | T | T | A | T | T | | | | | | | | |
| <i>Spinularia spinularia</i> | ZMBN 98076 | T | T | G | G | A | T | C | C | A | T | T | A | T | T | T | G | G | C | T | A | T | T | T | T | T | G | G | T | C | T | T | A | G | G | A | A | C | T | A | A | G | T | A | T | T | T | C | T | T | A | T | T | | | | | | | | |
| <i>Spinularia spinularia</i> | ZMBN 98079 | T | T | G | G | A | T | C | C | A | T | T | A | T | T | T | G | G | C | T | A | T | T | T | T | T | G | G | T | C | T | T | A | G | G | A | A | C | T | A | A | G | T | A | T | T | T | C | T | T | A | T | T | | | | | | | | |
| <i>Tentorium semisuberites</i> | ZMBN 98054 | G | T | G | G | A | T | C | T | A | T | T | A | T | T | T | G | A | G | T | A | T | T | C | T | T | G | A | C | C | A | T | A | G | G | A | A | T | T | A | A | G | T | A | T | T | T | A | A | T | T | A | T | T | | | | | | | |
| <i>Tentorium semisuberites</i> | ZMBN 98099 | G | T | G | G | A | T | C | T | A | T | T | A | T | T | T | G | A | G | T | A | T | T | C | T | T | G | A | C | C | A | T | A | G | G | A | A | T | T | A | A | G | T | A | T | T | T | A | T | T | A | T | T | | | | | | | | |