Table S1. Comparison of *Abyssopathes* Opresko, 2002 with other hitherto known genera of Cladopathidae and Schizopathidae [3,6,7,9,13-18].

Genus	Mature corallum growth form	Striatum	Primary pinnu-lation	Typical number of rows of primary pinnules	Lateral or posterolateral pinnules	Anterior or anterolateral pinnules	Polyp transverse diameter (mm)	Spines
Abyssopathes	monopodial	present	laterals regular; anteriors irregular	3 to 4	simple; basal subopposite others alternating	simple or subpinnulate	5.0–6.0	triangular, compressed
CLADOPATHIDAE								
Chrysopathes	branched	present	regular; in biserial groups	5 to 6	subpinnulate; basal subopposite other alternating	subpinnulate	1.5–3.3	conical to triangular; inclined distally
Cladopathes	densely branched	no data	irregular	4 to 5	simple; alternating	subpinnulate	3.0–6.0	triangular, compressed; inclined distally
Heteropathes	monopodial	present	laterals regular; anteriors irregular	3 to 4	simple; basal subopposite other alternating	subpinnulate	5.0–6.0	conical to triangular; inclined distally
Hexapathes	monopodial	present	laterals regular; anteriors irregular	3 to 4	simple; basal subopposite others alternating	simple or subpinnulate	3.0–6.0	conical to triangular; inclined distally

Trissopathes	laxly or densely branched	at least in some species	regular; in biserial groups	3 to 4	usually simple; basal subopposite other alternating	subpinnulate	2..0–4.0	conical to triangular; inclined distally
Sibopathes	monopodial or laxly branched	present	regular; in biserial groups	4 to 6	simple; basal subopposite other alternating	simple	1.8–2.5	triangular, compressed laterally
SCHIZOPATHIDAE								
Alternatipathes	monopodial or rarely branched	absent	regular	2	simple, alternating	absent	2.0–7.0	conical to triangular
Bathypathes	monopodial, rarely branched	present or absent	regular	2	simple; all subopposite or all alternating	absent	2.0–17	usually conical to triangular
Dendrobathypathes	sparsely to densely branched	no data	regular	2	subpinnulate; all alternating	absent	2.5–5.0	triangular to subconical
Dendropathes	densely branched	no data	regular; in biserial groups	4	simple; all alternating	simple	up to 3	subconical
Diplopathes	laxly branched	no data	regular	2	simple; all alternating	absent	up to 4	triangular and compressed to conical
Lillipathes	usually laxly branched	present	regular; in biserial groups	4	simple; all alternating	simple	1.8–3.3	triangular, compressed

Parantipathes	monopodial or laxly branched	present or absent	regular; in biserial groups	6 to 12	simple; all alternating	simple	1.6–3.3	triangular to conical
Saropathes	monopodial?	no data	regular; in biserial groups	4	subpinnulate; all alternating	subpinnulate	1.5–3.0	triangular, compressed
Schizopathes	monopodial	absent	regular	2	simple; all alternating	absent	3.0–6.0	triangular, compressed
Stauropathes	sparsely or densely branched	at least in some species	regular	2	simple; all subopposite	absent	3.0–6.0	triangular, compressed
Taxipathes	sparsely branched	no data	regular; in biserial groups	6	simple; all alternating	simple	2.5	conical, hooked
Telopathes	sparsely branched	no data	irregular	2	simple alternating or subopposite	absent	4.0–7.1	conical, compressed
Umbellapathes	monopodial-like; stalked with branched crown	absent	regular	2 /	simple or subpinnulate; all alternating	absent	3.0–4.0	conical to acute, subequal or unequal