

Supplementary Table 5 | Intra- and interspecific variation of closely related taxa of *Stuckenia* and maternal origins of hybrids (*trnT-trnL*)

A) *Stuckenia pectinata*, *S. striata*

Species (isolate)	Position in alignment																
	15	61	72-73	138	222-223	245-266	310-314	363-364	395	417-422	625	756	760	810			
<i>S. pectinata</i> (133, 981, 1023, 1650, 1652, 1837, 1841, 1869, 1935, 2026, 2051, 2071, 2116, 2210, 2283, 2448, 2465, 2484, 2538, 2561, 2689 , 2690, 2705, 2707, 2796, 2797, 2920, 3201, 3210, 3225)	G	A	TT	T	TC	+ 22 bp	-	CT	C	AATTTT	T	A	T	G			
<i>S. striata</i> (1034, 2185)	G	A	TT	T	TC	+ 22 bp	-	CT	C	AATTTT	T	A	T	G			
<i>S. pectinata</i> (2040)	G	A	TT	T	TC	+ 22 bp	+ 5 bp	CT	C	AATTTT	T	A	T	G			
<i>S. pectinata</i> (2726)	G	A	TT	T	TC	+ 22 bp	-	CT	C	AATTTT	T	A	G	G			
<i>S. striata</i> × <i>S. sp.</i> (855*)	T	G	AC	G	-A	-	-	TG	T	- 6 bp	C	T	T	T			

* maternal parent *S. sp.*, probably a highly divergent genotype of *S. striata*, see Discussion

B) *Stuckenia pamirica*, *S. amblyphylla*, *S. filiformis*, *S. vaginata*, and their hybrids

Species (isolate)	Position in alignment																
	99	121	132	145	212	285-305	338-344	345-346	367	393	422	431	458	543	686	780	809
<i>S. pamirica</i> (1753)	C	A	T	C	C	-	-	TC	C	C	G	-	C	A	G	G	T
<i>S. amblyphylla</i> (2602, 2603)	C	A	T	C	C	-	-	TC	C	T	T	-	A	A	A	G	T
<i>S. amblyphylla</i> × <i>S. filiformis</i> (2183*, 2666*, 2789*)	C	A	T	C	C	-	-	TC	C	T	T	-	A	A	A	G	T
<i>S. filiformis</i> (1187, 1941, 2543)	C	A	T	C	C	-	-	TC	C	T	T	-	A	A	A	G	T
<i>S. filiformis</i> (2095, 2453, 2462)	C	A	T	C	C	-	-	TC	A	T	T	-	A	A	A	G	T
<i>S. filiformis</i> × <i>S. vaginata</i> (2460)	C	A	T	C	C	-	-	TC	A	T	T	-	A	A	A	G	T
<i>S. filiformis</i> (1985, 1987, 1992, 2290 , 2291, 2322)	C	C	T	C	C	-	-	TC	C	T	T	-	A	A	A	G	T
<i>S. filiformis</i> × <i>S. vaginata</i> (2652)	C	C	T	C	C	-	-	TC	C	T	T	-	A	A	A	G	T
<i>S. filiformis</i> (1060, 1703, 3192)	C	C	T	C	C	-	-	AA	C	T	T	-	A	A	A	G	T
<i>S. filiformis</i> (2134, 2794)	C	A	T	C	C	-	-	TC	C	T	T	-	A	A	A	G	T
<i>S. filiformis</i> (2440, 2793)	C	A	T	C	C	-	-	TC	C	C	G	-	C	A	A	G	T
<i>S. filiformis</i> × <i>S. amblyphylla</i> (3258)	C	A	T	C	C	-	-	TC	C	C	G	-	C	A	A	G	T
<i>S. vaginata</i> (1999)	C	A	T	T	T	+ 21 bp	+ 7 bp	TC	C	C	T	-	C	A	A	G	G
<i>S. vaginata</i> (2016)	C	A	G	T	T	+ 21 bp	+ 7 bp	TC	C	C	T	-	C	A	A	G	G
<i>S. vaginata</i> (1063, 1976)	A	A	T	T	T	+ 21 bp	+ 7 bp	TC	C	C	T	-	C	A	A	G	G
<i>S. vaginata</i> × <i>S. filiformis</i> (2446, 2452, 2454, 2455)	A	A	T	T	T	-	+ 7 bp	TC	C	C	T	-	A	A	A	G	G
<i>S. vaginata</i> (2052, 2097, 2132)	A	A	T	T	T	-	+ 7 bp	TC	C	C	T	-	C	A	A	G	G
<i>S. vaginata</i> × <i>S. filiformis</i> (2141, 2456, 2457, 2459)	A	A	T	T	T	-	+ 7 bp	TC	C	C	T	-	C	A	A	G	G
<i>S. vaginata</i> × <i>S. filiformis</i> (2467)	A	A	T	T	T	-	+ 7 bp	TC	C	C	T	-	C	N	N	N	N
<i>S. vaginata</i> × <i>S. filiformis</i> (2458)	A	A	T	T	T	-	+ 7 bp	TC	C	C	T	-	C	C	A	G	G

* maternal parent equivocal

Groenlandia densa: three identical sequences, no close relatives

Legend: Intra- and interspecific variation is summarized; variable positions are shown. For deletions or insertions, sometimes only the length is given to save space. Positions in the alignment start with the first base after the forward primer and are specific for each table. Colors are for better distinction of the variation. Samples in bold cover the variation and were used for tree construction. Hybrids are included to show their sequences compared to the respective parents.