

Table S 1. List of seed zones and regional groups of *A. sachalinensis* in Hokkaido, Japan.

Seed zone	Region group	No. of families used for provenance tests
West	W	9
North	N	18
East	EN	9
	ES	21
Eastern Edge	EE	22
South	S	9
	SS	1 ^a
Total		89

^a Bulkied seeds from local trees were regarded as one family.