

**Supplement Table S1.** List of sites with litter decomposition studies, their geographic location, altitude, mean annual precipitation (MAP), and mean annual temperature (MAT). The tree species are Scots pine and Norway spruce in monocultures. Paired stands are indicated. The site numbers are those used in previous publications.

Site Name	Site number	Lat/long	Altitude (m asl)	MAP (mm)	MAT (°C)	Species
Skällarimsheden	106	66°32'N 20°11'E	280	490	-0.5	Scots pine
Ätnakobbo	109	66°22'N 20°02'E	405	469	-1.7	Norway spruce
Harads	002	66°08'N; 20°53'E	58	650	1.3	Scots pine
Manjärv	003:1	65°47'N; 20°37'E	135	516	0.2	Scots pine
Manjärv	003:2	65°47'N; 20°37'E	135	516	0.2	Scots pine
Manjärv	003:3	65°47'N; 20°37'E	135	516	0.2	Scots pine
Norrliden	004:23	64°21'N; 19°46'E	260	595	1.2	Scots pine
Västbyn	108	63°13'N 14°28'E	325	460	2.1	Scots pine Norway spruce
Stråsan	005	60°55'N 16°01'E	350	775	3.4	Norway spruce
Jädraås	006:51	60°49'N; 16°01'E	185	609	3.8	Scots pine
Anundberget	018	60°38'N; 13°37'E	400	450	2.0	Scots pine
Kappsjön	017	60°33'N; 13°44'E	375	450	2.8	Scots pine
Hässlen	111	60°16'N 16°15'E	185	425	4.2	Norway spruce
Månkarbo	112	60°14'N 17°28'E	40	580	4.4	Norway spruce
Tomta	103	59°49'N 16°33'E	63	550	5.1	Scots pine Norway spruce
Kungs-Husby	102	59°31'N 17°16'E	30	470	5.2	Scots pine Norway spruce
Dimbo	100	59°07'N 15°44'E	70	560	5.5	Scots pine
Grensholm	101	58°33'N 15°51'E	58	520	6.1	Scots pine Norway spruce
Remningstorp	105	58°28'N	128	530	5.6	Scots pine

		13°39'E				Norway spruce
Tveten	104	58°06'N 13°17'E	170	675	5.5	Scots pine Norway spruce
Sänksjön	107	58°04'N; 14°08'E	245	595	5.1	Scots pine
Tönnersjöheden	113	56°42'N 13°05'E	80	870	7.2	Norway spruce
Mästocka	010	56°36'N 13°15'E	135	1070	6.8	Scots pine Norway spruce
Farabol		56°26'N 14°35'E	140	660	5.7	Norway spruce