SUPPLEMENTARY MATERIALS

Table S1: *In situ* conditions and chemical characteristics of investigated peat bogs.

Peat bog	pH	Conductivity	Total N (mg/l)	Total P (mg/l)	NO_3^- (mg/l)	PO_4^{3-} (mg/l)	NH_4^+ (mg/l)
Sphagnum-dominated, ombrotrophic peat bog 1 Darwin Reserve, 58°10'N, 37°33'E (**S. acidiphila BG32**)	3,9	50	1,54	0,04	0,06	0,02	0
Sphagnum-dominated, ombrotrophic peat bog Obukhovskoye, Yaroslavl region, European North Russia (58˚14'N, 38˚12'E) (**T. sphagniphila OB3, S. acidiphila MOB10T)**	3,6-4,0	70	1,7	0,35	0,03	0,08	0
Sphagnum-dominated ombrotrophic peat bog 3 - Staroselsky moss, Tver region, European North Russia (56˚34'N, 32˚46'E) European North Russia (56˚34'N, 32˚46'E) **S. rosea S26T, SP5, T. sphagniphila SP2T**	3,8	50	3,0	0,15	0,04	0,05	2,10