

Supplementary Material Table S2: The functional traits used for the analyses.

Table S2A: Descriptive statistics of the categorical functional traits, showing the number of occurrences (N), the threatened and non-threatened species counts per attribute considered and a short explanation as to why these traits were grouped as such.

Trait	Attributes	Non-threatened	Threatened	Explanation of grouping
Plant sex (N=707)	Dioicous	364	73	This sex clustering is widely used (Patiño and Vanderpoorten, 2018).
	Monoicous	199	71	
Capsule shape (N=580)	Cylindric	215	43	Main attributes were considered to be cylindric (shapes elongated horizontally) and globose (shapes as wide as long) after taxonomic descriptions to test their effect on spore release.
	Globose	252	70	
Capsule on seta (N=585)	Exserted	453	93	The position of the capsule held on seta is suspected to influence the spore release threshold. Grouping was applied to test this hypothesis.
	Immersed	21	18	
Seta shape (N=463)	Straight	263	78	In addition to role of seta length in spore release, this trait was grouped as such to test the effect of its shape.
	Curved	108	14	
Spore shape (N=408)	Edged	38	5	Attributes were grouped as such to test whether the aerodynamics of spore shape has an effect on the spore dispersal.
	Rounded	305	60	
Spore ornamentation (N=480)	High ornamentation	159	36	Different ornamentations were grouped as lowly/highly ornamented, inspired by Zanatta <i>et al.</i> (2016).
	Low ornamentation	239	46	

Table S2B: Descriptive statistics of the continuous functional traits, showing the mean, standard deviation (SD), number of occurrences (N), minimum (Min) and maximum (Max) values.

Trait	Unit	Non-threatened			Threatened			Total			Min	Max
		Mean	SD	N	Mean	SD	N	Mean	SD	N		
Stem length	mm	41.43	51.44	485	31.08	36.07	131	39.23	48.74	616	0.55	600
Leaf length	cm	0.28	0.20	531	0.24	0.19	149	0.27	0.20	680	0.02	1.5
Capsule length	mm	2.02	1.00	416	1.50	0.96	99	1.92	1.01	515	0.2	8
Seta length	mm	15.33	13.45	438	8.30	11.02	114	13.88	13.29	552	0.0	130
Spore diameter	μm	19.78	14.93	466	20.51	9.36	89	19.89	14.18	555	6.5	190
Substrate breadth	N	1.78	0.99	567	1.24	0.50	148	1.67	0.94	715	1	6

Table S2C: Descriptive statistics of the binary functional traits, showing the number of occurrences per state (present or absent) (N) and per state for threatened and non-threatened species.

Trait	State	N	Non-threatened	Threatened
Sporophyte presence	present	662	530	132
	absent	77	37	40
Vegetative reproduction	present	109	97	12
	absent	630	470	160
Persistent protonema	present	15	14	1
	absent	724	553	171