Table 3: Reconstruction of ancestral states. T=tripartite, P=pannarioid, C=collematoid. SB=SIMMAP results on the 50% consensus Bayesian tree, S20 = SIMMAP results on the subset of 20 trees, M= Mesquite results, BF= Bayes Factor of the BayesTraits analysis, T>P= Tripartite rather than pannarioid ancestor, T>C=Tripartite rather than collematoid ancestor

Node	SB	S20	M	BF[T>P]	BF[T>C]
F. leucosticta + *F. praetermissa*	P=0.99	P=0.99	P=0.99		
Fuscopannaria s. str. (incl. *F. ignobilis*, wo *F. sampaiana*)	P=0.99	P=0.99	P=0.99		
Fuscopannaria group (incl. *F. sampaiana*)	P=0.99	P=0.97	P=0.73		
genus *Pannaria*	T=0.99	T=0.98	T=0.91	9.66	
genus *Pannaria* wo *P. implexum*	T=0.99	T=0.8	T=0.84		
Psoroma + *Psorophorus* + *Fuscoderma*	T=0.98	T=0.93	T=0.83		
Pannaria group (incl. *Psoroma*, *Staurolemma* etc.)	T=0.94	T=0.86	T=0.81		
Fuscopannaria + *Pannaria*	T=0.91	T=0.84	T=0.77	1.4	
Physma + *P. mariana*	P=0.58	P=0.5	P=0.39	0.32	3.94
Physma + *P. mariana* + *Xanthopsoroma*	T=0.99	T=0.99	T=0.91	11.7	8.7
Fuscopannaria + *Pannaria* + *Physma*	T=0.92	T=0.89	T=0.815	1.06	
Parmeliella s. str. Group (incl. *Erioderma* etc.)	P=0,98	P=0.99	P=0.87		
Family Pannariaceae	P=0.7	P=0.71	P=0.46		