

Table S2: Posterior probabilities for each species according to the bGMYC analyses on the different loci and the bPTP analysis on the tree resulted from the concatenated dataset, for the Scabrosoid and the Dolichorhizoid clades. Species names refer to the lineages defined in Figure2.

species	ITS			EFT2.1			LSU			IGS3			IGS16			bPTP all loci		
	No. taxa	support value		No. taxa	support value		No. taxa	support value		No. taxa	support value		No. taxa	support value		No. taxa	support value	
<i>P. neopolydactyla</i> 4	10	0.49		9	0.45		9	(0.11)		5	0.51		5	0.41		10	0.5	
<i>P. neopolydactyla</i> 5	3	0.86		2	0.87		3	0.67		1	0.88		1	0.91		/	/	
<i>P. neopolydactyla</i> 6	2	0.95		0	/		2	0.84		2	0.92		2	0.9		2	0.52	
<i>P. neopolydactyla</i> 7	1	0.97		1	0.93		1	0.87		1	0.95		1	0.92		1	1	
<i>P. scabrosa</i> 1	5	0.89		4	0.31		5	0.6		4	0.48		4	0.7		5	0.98	
<i>P. scabrosa</i> 2	6	0.5		5	0.42		5	0.3		4	0.34		4	0.46		6	0.87	
<i>P. scabrosa</i> 3a	3	0.88		2	0.68		2	0.58		2	0.65		2	0.48		/	/	
<i>P. scabrosa</i> 3b				1	0.8		1	0.59		1	0.67		1	0.5		1	1	
<i>P. scabrosa</i> 4	3	0.87		2	0.59		3	0.51		2	0.88		0	/		3	0.81	
<i>P. melanorrhiza</i>	2	0.93		2	0.86		2	0.92		1	0.99		1	0.99		2	0.89	

species	ITS			β-tubulin			IGS1			IGS3			IGS16			bPTP all loci		
	No. taxa	support value	No. taxa	support value	No. taxa	support value	No. taxa	support value	No. taxa	support value	No. taxa	support value	No. taxa	support value	ML tree	support value 50% bayes		
<i>P. neopolydactyla</i> 3	1	0.86	1	0.34	1	0.47	1	0.19	1	0.58	1	1	1	1	1	1		
<i>P. sp. 12</i>	1	0.83	1	0.75	1	0.53	1	0.84	1	0.68	1	1	1	1	1	1		
<i>P. sp. 6</i>	3	0.76	3	0.63	3	0.74	3	0.62	2	0.56	3	0.81	3	0.81	0.51	0.51		
<i>P. sp. 7a</i>	7	0.6	3	0.42	7	0.8	6	0.52	7	0.8	7	0.8	3	0.8	0.53	0.53		
<i>P. sp. 7b</i>			2	0.49									3	0.76	0.52	0.52		
<i>P. scabrosella</i>			2	0.42									2	0.7	0.84	0.84		
<i>P. neopolydactyla</i> 1b	1	0.57			1	0.43							1	0.99	0.98	0.98		
<i>P. occidentalis</i>	7	0.51	5	0.45	4	0.33	4	0.32	4	0.3			2	0.65	0.62	0.62		
<i>P. pulverulenta</i> 3	2	0.5	2	0.47	2	0.54	2	0.35	2	0.35	2	0.65	6	0.75	/	/		
<i>P. pulverulenta</i> 1	6	0.48	6	0.28	/		3	0.34	3	0.56	3	0.75	2	0.64	0.63	0.63		
<i>P. pulverulenta</i> 2	2	0.46	2	0.25	2	0.45	2	0.36	2	0.55	2	0.64	2	0.64	0.63	0.63		
<i>P. hawaiiensis</i>	1	0.39			0	/							2 (with-out P907)	0.59	0.98	0.98		
<i>P. sp. 2a</i>	3	0.38	2	0.29 (with-out P907)	2	0.42 (with-out P907)	2	0.28 (with-out P907)	2	0.59	2 (with-out P907)		6 (with-out 640-645-1252)	0.52	0.88 (with-out P907)	0.88 (with-out P907)		
<i>P. neopolydactyla</i> 1	9	0.37			9+1	0.32 with P325								0.52	0.39	0.39		
<i>P. sp. 3</i>	4	0.33	4	(0.23)	0	/			3	0.8				0.36 with <i>hawaiiensis</i>	0.64	0.64		
<i>P. trunculenta</i>	8	0.33			5	(0.15)												
<i>P. sp. 5</i>	1	0.29			0								1	0.75	1	1		
<i>P. sp. 4</i>	1	0.27			0								1	0.94	1	1		
<i>P. pacifica</i>	2	0.27	2	0.33	1	0.47			2	0.35	2	0.88	2	0.88	0.82	0.82		
<i>P. neopolydactyla</i> 2a	6	0.24			4	0.69	4	0.69					3	0.43	0.38	0.38		
<i>P. neopolydactyla</i> 2c			0	/	0	/			2	0.54	3							
<i>P. dolichorhiza</i> b	2	0.22	/		/													
<i>P. neopolydactyla</i> 2b	4	0.2			2	0.38							8	0.62	0.62	0.62		
<i>P. dolichorhiza</i>	8	0.18	8	0.46	6	0.19	7	0.41					2	0.51	0.89	0.89		
<i>P. sp. 2b</i>	2	0.14			2	0.57	2	0.38	2	0.66	2	0.47	7 (but without P1229)	0.47	0.29	0.29		
<i>P. hymenina</i>	/	/			4	0.27			3	0.72								
<i>P. sp. 1</i>	/	/	/		/				2	0.45	2	0.54	1	0.54	0.56	0.56		
<i>P. dolichorhiza</i> 2	/	/			/		2	0.22	2	0.46	2	0.84	2	0.84	0.73	0.73		
P1202 alone							1	0.5				0.99		0.99	0.98	0.98		
P1596 alone							1	0.44				0.99		0.99	0.98	0.98		