## README

State's descriptions for all 13 characters used to reconstruct the ancestral character states provided in **Character\_matrix.xls.** Information was obtained directly from herbaria specimens or from available taxonomic descriptions.

Character	States
Growth habit	Terrestrial (0); terrestrial root climber (1); epipetric (2);
Rhizome	erect or decumbent (0); creeping (1);
Sterile-fertile frond	
dimorphism	Monomorphic (0); dimorphic (1); subdimorphic (2);
Venation	Free (0); anastomosing (1);
	Simple (0); 1-pinnate (1); 1-pinnate-pinnatisect (2); 2-pinnate
Laminar division	or more divided (3);
	Conform (0); pinnatifid (1); not applicable (2); subconform
Laminar apex	(3);
Scales on costae abaxially	Absent (0); present (1);
Soral shape	Discrete (0); acrostichoid (1);
Indusia	Absent (0); present (1);
Indusial attachment	Attached at a sinus (0); peltate (1); not applicable (2);
	Smooth (0); sparsely echinulate (1); densely echinulate (2);
Perine surface	papillate (3); spiny (4);
Perine folds	Interrupted (0); elongate-continuous (1); absent (2);
Perine perforation	Absent (0); present (1);