

TABLE S1. Family Whiteiidae: Content, geographic distribution, and age.

<i>Atacamaia</i> Arratia and Schultze herein	<i>Atacamaia solitaria</i> Arratia and Schultze herein	Quebrada Vaquillas Altas, Cordillera de Domeyko, northern Chile	Lower Jurassic, middle to upper Sinemurian (199–191 Ma)	Naranjo and Covacevich, 1979; Covacevich and Escobar, 1979; Arratia and Schultze, 1999
<i>Axelia</i> Stensiö, 1921	<i>Axelia elegans</i> Stensiö, 1921	Mount Congress, West Spitsbergen	Lower Triassic, Olenekian (251–247 Ma)	Schaeffer and Magnus, 1976; Cloutier, 1990
	<i>Axelia robusta</i> Stensiö, 1921 (type species)	Mount Congress, West Spitsbergen	Lower Triassic, Olenekian (251–247 Ma)	Schaeffer and Magnus, 1976; Cloutier,

				1990)
<i>Guizhoucoelacanthus</i> Liu et al., 2006	<i>Guizhoucoelacanthus</i> <i>guanlingensis</i> Liu et al., 2006 (type species)	Xinpu, Guizhou Province; Fuyuan, Yunnan Province, China, Asia	Upper Triassic, Carnian (235– 228 Ma) Middle Triassic, Ladinian (242– 235 Ma)	Liu et al. 2006; Geng et al., 2009).
<i>Piveteauia</i> Lehman, 1952	<i>Piveteauia</i> <i>madagascariensis</i> Lehman, 1952	Madagascar, Africa	Lower Triassic, upper Induan, Middle Sakamena Group (252 Ma)	Cloutier, 1990; Beltan, 1996
<i>Whiteia</i> Moy- Thomas, 1935	<i>Whiteia africanus</i> (Broom, 1905)	Orange Free State, South Africa	Lower Triassic	Forey, 1998
	<i>Whiteia nielsenii</i> Forey, 1998	Cape Stosch, East Greenland	Lower Triassic, Induan, Nordenskiöld Sub-Group, Wordie Creek Formation (252– 251 Ma)	Nielsen, 1936; Schaeffer and Magnus, 1976; Forey 1998

	<i>Whiteia tuberculata</i> Moy-Thomas, 1935	Madagascar, Africa	Lower Triassic, Middle Sakamena Group (252 Ma)	Schaeffer and Magnus, 1976; Cloutier, 1990; Beltan, 1996
	<i>Whiteia woodwardi</i> Moy-Thomas, 1935 (type species)	Madagascar, Africa	Lower Triassic, Middle Sakamena Group (252 Ma)	Schaeffer and Magnus, 1976; Cloutier, 1990; Beltan, 1996
	<i>Whiteia</i> sp.	Madagascar, Africa	Lower Triassic, Middle Sakamena Group (252 Ma)	Nielsen, 1936

	<i>Whiteia</i> sp.	Needham Creek-Graham River-Horn Creek, British Columbia, Canada	Lower Triassic, lower Olenekian, Toad-Grayling Formation (251 Ma)	Schaeffer and Magnus, 1976
	<i>Whiteia</i> sp.	Wapiti Lake, British Columbia, Canada	Lower Triassic, lower Olenekian, Sulphur Mountain Formation, Member (251 Ma)	Gardiner, 1966; Schaeffer and Magnus, 1976; Cloutier, 1990
	<i>Whiteia</i> sp.	Banff-Massive, Alberta, Canada	Lower Triassic	Schaeffer and Magnus, 1976
<i>Wimania</i> Stensiö, 1921	<i>Wimania</i> <i>multirostrata</i> Stensio, 1921	Mount Congress, Mount Rotunda, Mount Trident,	Lower Triassic, Olenekian, Sassendalen Group, Sticky Keep Formation	Cloutier, 1990

		Mount Milne Edwards, West Spitsbergen	(251-247 Ma)	
	<i>Wimania sinuosa</i> Stensiö, 1921 (type species)	Mount Congress and Mount Andersson, West Spitsbergen	Lower Triassic, Olenekian, Sassendalen Group, Sticky Keep Formation (251–247 Ma)	Schaeffer and Magnus, 1976
	<i>Wimania</i> sp. Stensiö, 1921	Mount Milne Edwards and Mount Trident, West Spitsbergen.	Lower Triassic, Olenekian, Sassendalen Group, Sticky Keep Formation (251–247 Ma)	Schaeffer and Magnus, 1976; Cloutier, 1990