

Supplementary Information

Table S1. Distribution of pterosins from ferns.

Family	Fern	Pterosin Type
Adiantaceae	<i>Conigramme japonica</i> (Thunb.) Diels	pterodin X, pterodin Y
	<i>Conigramme maxima</i>	pterodin D, epi-pterodin L, pterodin Z
	<i>Pityrogramma calomelanos</i> (L.) Link	pterodin Z
Dennstaedtiaceae	<i>Dennstaedtia wilfordii</i> (Moore) Christ	(2 <i>S</i>)-pterodin A, (3 <i>R</i>)-pterodin D, (2 <i>R</i> ,3 <i>R</i>)-pterodin L
	<i>Dennstaedtia scabra</i> (Wall. Ex Hook.) Moore	(2 <i>S</i>)-pterodin A, (2 <i>R</i>)-pterodin F, (2 <i>S</i>)-pterodin K, pterodin V
	<i>Hypolepis punctata</i> (Thunb.) Mett.	(2 <i>S</i>)-pterodin A, (3 <i>R</i>)-pterodin D, pterodin I, pterodin Z, pterodin H, (2 <i>S</i>)-pterodin K
	<i>Histiopteris incise</i> (Thunb.) J. Sm.	(2 <i>R</i>)-pterodin B, (2 <i>S</i> ,3 <i>S</i>)-pterodin C, (2 <i>R</i>)-pterodin E, (2 <i>R</i>)-pterodin F, pterodin J, (2 <i>R</i> ,3 <i>R</i>)-pterodin L, pterodin Q
	<i>Microlepia substrigosa</i> Tagawa	(2 <i>S</i>)-pterodin A, (2 <i>R</i>)-pterodin F, pterodin H, pterodin Z
	<i>Microlepia strigosa</i> (Thunb.) Presl	(2 <i>R</i>)-pterodin B, (2 <i>S</i> ,3 <i>S</i>)-pterodin C, (3 <i>R</i>)-pterodin D, pterodin F, (2 <i>R</i> ,3 <i>R</i>)-pterodin L, pterodin O, (2 <i>S</i>)-pterodin P
	<i>Microlepia obtusiloba</i> Hayata	pterodin H, pterodin I
	<i>Microlepia trapeziformis</i> (Roxb.) Kuhn	pterodin H, pterodin Z
	<i>Microlepia speluncae</i> (L.) Moore	(3 <i>R</i>)-pterodin D, pterodin H, pterodin I, (2 <i>R</i> ,3 <i>R</i>)-pterodin L, pterodin Z
	<i>Pteridium aquilinum</i> subsp. <i>wightianum</i>	(3 <i>R</i>)-pterodin D, (2 <i>R</i>)-pterodin F, pterodin H, pterodin I, pterodin Z
	<i>Pteridium aquilinum</i> (L.) Kuhn	(2 <i>S</i>)-pterodin A, (2 <i>R</i>)-pterodin B, pterodin V
	<i>Pteridium aquilinum</i> (L.) Kuhn var. <i>latiusculum</i> (Desv.) Underw.	(2 <i>S</i>)-pterodin A, (2 <i>R</i>)-pterodin B, (2 <i>S</i> ,3 <i>S</i>)-pterodin C, (2 <i>R</i> ,3 <i>R</i>)-pterodin C, (3 <i>R</i>)-pterodin D, (2 <i>R</i>)-pterodin E, pterodin F, (2 <i>R</i>)-pterodin G, pterodin I, pterodin J, (2 <i>S</i>)-pterodin K, (2 <i>R</i> ,3 <i>R</i>)-pterodin L, pterodin N, pterodin O, pterodin Z
	<i>Pteridium aquilinum</i> var. <i>caudatum</i>	(2 <i>S</i>)-pterodin A, (2 <i>R</i>)-pterodin B, (2 <i>S</i>)-pterodin K, pterodin Z
	<i>Pteridium esculentum</i>	(2 <i>S</i>)-pterodin A, (2 <i>R</i>)-pterodin B, pterodin G
	<i>Dicksonia gigantea</i> Karst.	(3 <i>R</i>)-pterodin D
Dicksoniaceae	<i>Cibotium barometz</i> (L.) J. Sm.	pterodin R

Table S1. *Cont.*

Family	Fern	Pterosin Type
Pteridaceae	<i>Acrostichum aureum</i> L.	(2 <i>S</i> ,3 <i>S</i>)-pterosin C, (2 <i>R</i>)-pterosin P
	<i>Jamesonia scammanae</i> A. Tryon	pterosin B, pterosin S
	<i>Onychium japonicum</i> (Thunb.) Kunze	pterosin M
	<i>Pteris bella</i> Tagawa	(2 <i>R</i>)-pterosin B, (2 <i>S</i> ,3 <i>S</i>)-pterosin C, pterosin Q, pterosin T
	<i>Pteris fauriei</i> Hieron.	pterosin W
	<i>Pteris kiuschiuensis</i> Hieron	pterosin Q, pterosin S, pterosin T, pterosin U
	<i>Pteris inaequalis</i> (Fée) Jenm.	pterosin B, pterosin O
	<i>Pteris ensiformis</i> Burm.	pterosin B
	<i>Pteris multifida</i>	(2 <i>S</i> ,3 <i>S</i>)-pterosin C, (2 <i>R</i> ,3 <i>S</i>)-pterosin C, (2 <i>R</i>)-pterosin P, (2 <i>S</i>)-pterosin P, pterosin S, pterosin Q
	<i>Pteris semipinnata</i>	(2 <i>R</i>)-pterosin B, (2 <i>S</i> ,3 <i>S</i>)-pterosin C
Polypodiaceae	<i>Microsorium fortunei</i> (Moore) Ching.	(2 <i>S</i>)-pterosin A

Table S2. Yield of pterodin compounds from three species of fern.

Pterodin-Type	<i>H. punctata</i>		<i>C. thalictroides</i>		<i>P. revolutum</i>	
	Weight (g)	Yield (%)	Weight (g)	Yield (%)	Weight (g)	Yield (%)
Pterodin D	0.05	2.5×10^{-6}				
Pterodin I	0.187	9.4×10^{-6}				
Prerodin Z	2.3	1.2×10^{-4}	0.004	8×10^{-8}		
Pterodin A	4	2×10^{-4}	0.006	1.2×10^{-7}	0.238	4.8×10^{-6}
(2 <i>S</i> ,3 <i>S</i>)-pterodin C					0.162	3.2×10^{-6}
(2 <i>R</i> ,3 <i>S</i>)-pterodin C					0.013	2.6×10^{-7}
2-hydroxypterodin C					0.004	8×10^{-8}
Pterodin G					0.073	1.5×10^{-6}
Pterodin L					0.179	3.6×10^{-6}