Supplementary Table S1: The 33 *Pimelea* taxa and eight outgroup taxa sampled for this study.

Family	Subfamily	Section	Species	Source +	Voucher	GenBank Accesion
Thymelaeaceae	Aquilarioideae	_	Aquilaria sinensis†	GenBank	Unknown	KT148967
Thymelaeaceae	Thymelaeoideae	_	Gnidia squarrosa†	NSW	NSW438995	TBA
Thymelaeaceae	Thymelaeoideae	_	Kelleria dieffenbachii †	NSW	NSW834602	TBA
Thymelaeaceae	Thymelaeoideae	_	Passerina montana †	MEL	MEL2377944	TBA
Thymelaeaceae	Thymelaeoideae	_	Struthiola thomsonii†	NSW	NSW222789	TBA
Thymelaeaceae	Thymelaeoideae	_	Wikstroemia indica†	NSW	NSW906137	TBA
Thymelaeaceae	Thymelaeoideae	_	Jedda multicaulis †	BRI	AQ0608846	TBA
Thymelaeaceae	Thymelaeoideae	Calyptostregia	Pimelea ammocharis	NSW	NSW448686	TBA
Thymelaeaceae	Thymelaeoideae	Epallage	Pimelea aquilonia	BRI	AQ0792755	TBA
Thymelaeaceae	Thymelaeoideae	Heterolaena	Pimelea avonensis	CANB	CANB602332	TBA
Thymelaeaceae	Thymelaeoideae	Epallage	Pimelea biflora	MEL	NGW7390	TBA
Thymelaeaceae	Thymelaeoideae	Epallage	Pimelea cremnophila	CANB	CANB653994	TBA
Thymelaeaceae	Thymelaeoideae	Epallage	Pimelea curviflora var. curviflora	NSW	NSW856079	TBA
Thymelaeaceae	Thymelaeoideae	Pimelea	Pimelea drupacea	CANB	CBG54256	TBA
Thymelaeaceae	Thymelaeoideae	Epallage	Pimelea elongata	NSW	NSW251892	TBA
Thymelaeaceae	Thymelaeoideae	Heterolaena	Pimelea ferruginea	CANB	CBG8406525	TBA
Thymelaeaceae	Thymelaeoideae	Pimelea	Pimelea flava ssp. dichotoma	MEL	MEL2031297	TBA
Thymelaeaceae	Thymelaeoideae	Stipostachya	Pimelea haematostachya	NSW	NSW466727	TBA
Thymelaeaceae	Thymelaeoideae	Pimelea*	Pimelea ignota	CHR	CHR 482591	TBA
Thymelaeaceae	Thymelaeoideae	Heterolaena	Pimelea lehmanniana ssp. nervosa †	NSW	NSW613116	TBA
Thymelaeaceae	Thymelaeoideae	Epallage	Pimelea leptospermoides	NSW	NSW842531	TBA
Thymelaeaceae	Thymelaeoideae	Calyptostregia	Pimelea ligustrina ssp. ligustrina†	MEL	MEL2280887	TBA
Thymelaeaceae	Thymelaeoideae	Epallage	Pimelea micrantha	MEL	MEL2354365	TBA
Thymelaeaceae	Thymelaeoideae	Pimelea	Pimelea microcephala ssp. microcephala	MEL	MEL2269596	TBA
Thymelaeaceae	Thymelaeoideae	Pimelea	Pimelea neo-anglica	CANB	CBG9705344	TBA
Thymelaeaceae	Thymelaeoideae	Calyptostregia	Pimelea octophylla	MEL	MEL2354919	TBA

Thymelaeaceae	Thymelaeoideae	Calyptostregia	Pimelea pagophila	MEL	MEL2325844A	TBA
Thymelaeaceae	Thymelaeoideae	Calyptostregia	Pimelea penicillaris	BRI	AQ0783705	TBA
Thymelaeaceae	Thymelaeoideae	Calyptostregia	Pimelea phylicoides †	MEL	MEL2236114	TBA
Thymelaeaceae	Thymelaeoideae	Macrostegia	Pimelea physodes †	NSW	NSW535232	TBA
Thymelaeaceae	Thymelaeoideae	Heterolaena	Pimelea rosea	CANB	CBG9810001	TBA
Thymelaeaceae	Thymelaeoideae	Thecanthes*	Pimelea sanguinea	NSW	NSW856505	TBA
Thymelaeaceae	Thymelaeoideae	Epallage	Pimelea simplex ssp. simplex	MEL	MEL2359109A	TBA
Thymelaeaceae	Thymelaeoideae	Pimelea	Pimelea spicata	CANB	CBG8603829	TBA
Thymelaeaceae	Thymelaeoideae	Pimelea	Pimelea spinescens ssp. pubiflora	MEL	MEL2292556A	TBA
Thymelaeaceae	Thymelaeoideae	Calyptostregia	Pimelea treyvaudii †	MEL	MEL0226949	TBA
Thymelaeaceae	Thymelaeoideae	Epallage	Pimelea trichostachya	MEL	MEL2051446	TBA
Thymelaeaceae	Thymelaeoideae	Epallage	Pimelea umbratica	CANB	CBG8403990	TBA
Thymelaeaceae	Thymelaeoideae	Epallage	Pimelea venosa	NSW	NSW372797	TBA
Thymelaeaceae	Thymelaeoideae	Pimelea*	Pimelea xenica†	CHR	CHR 525117	TBA
Malvaceae	Byttnerioideae	_	Theobroma cacao†	GenBank	Unknown	HQ336404

Notes:

† These taxa were pruned from the data set before all topology clustering analyses.

‡ Herbarium abbreviations are as follows: Queensland Herbarium (BRI), Australian National Herbarium (CANB), Allan herbarium (CHR), National Herbarium of Victoria (MEL), National Herbarium of New South Wales (NSW).

References

Burrows, C.J. (2008) Genus *Pimelea* (Thymelaeaceae) in New Zealand 1. The Taxonomic Treatment of Seven Endemic, Glabrous-Leaved Species, *New Zealand Journal of Botany*, 46, 2, 127–176.

Rye, B.L. & Heads, M.J. (1990) "Thymelaeaceae", in George, A. S. (Ed.) Flora of Australia, 122–215.

^{*} Thecanthes was recently reduced from the generic level to synonymy with *Pimelea*, but was not formally designated an infrageneric rank of subgenus of section (as it once had been). Here, we tentatively designate *P. sanguinea* to "section" *Thecanthes*. Additionally, while the sectional scheme of Rye & Heads (1990) places the NZ species of *Pimelea* into sect. *Pimelea*, Burrows (2008) did not follow this treatment and offered no infrageneric alternative. Here, we tentatively follow Rye & Heads (1990).