Within the family Fabaceae, the Tribe Wisterieae (Zhu 1994) based on the genus *Wisteria* Nutt., is expanded to include 13 genera based on evidence provided by morphology, chloroplast and nuclear markers which was analyzed using Maximum Likelihood and Bayesian Inference. Our results have necessitated the break-up of the genus *Callerya* Endl., previously with 36 species but now much reduced in size, into six new genera, *Austrocallerya, Kanburia, Nanhaia, Serawaia, Sigmoidala* and *Wisteriopsis*. In addition, the genera *Padbruggea* and *Whitfordiodendron* are reinstated and all genera are emended. We have also shown that *Afgekia, Endosamara, Sarcodum* and *Wisteria* belong within the tribe but that *Adinobotrys*, with two tree species, which we have also reinstated here and emended, is excluded from Tribe Wisterieae.

The tribe is redefined as consisting of woody lianas or scrambling shrubs from tropical or temperate east Asia (with one species, *Wisteria frutescens* occurring in eastern North America). All species have bracts which mostly enclose the immature flower buds prior to anthesis and have either true racemes or true panicles (as opposed to pseudoracemes or pseudopanicles often found in Tribe Millettieae). In addition, all genera within the redefined tribe lack the 25 kb long inverted repeat thereby comprising part of the Inverted Repeat Lacking Clade or IRLC (Palmer et al. 1987) in the plastid genome and, in comparison to all other genera within the IRLC, the retention of the *rps12* intron, which is also present in *Adinobotrys* (Jansen et al. 2008).

A key to all genera is provided and each genus is fully described with keys to each species and infraspecific taxa. A full list of synonymy is provided for each taxon and typifications are made where necessary.

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