



## **Delineating the Dilleniaceae: An update on the taxonomy and systematics of *Hibbertia* (Dilleniaceae).**

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*Hibbertia* (Dilleniaceae) is a genus with c. 310 species native to Australia, 24 species native to New Caledonia and one endemic to Madagascar. The number of species in Australia is likely to increase by more than a hundred with several forthcoming publications, especially those by retired botanist Hellmut Toelken (AD). These proposed species will make *Hibbertia* one of the largest plant genera in Australia. My postdoctoral project, funded by an ABRS National Taxonomy Research Grant Program (2020) and an ASBS Marlies Eichler Postdoctoral Fellowship (2021), has been to provide genus, species and infra-species profiles of Dilleniaceae for the *Flora of Australia* (i.e. including *Dillenia* and *Tetracera*), complete comprehensive identification keys for the Australian species, and to reconstruct a near-complete molecular phylogeny using hybrid capture methods of nuclear and plastid genomes, utilising Angiosperm353 and OzBaits kits and genome skimming. An initial 96 species were sequenced as part of the Genomics for Australian Plants initiative. In this presentation I will share the progress that has been made on this project, give an overview of the forthcoming taxonomic revisions in *Hibbertia*, and share preliminary insights into the evolution of this hyper-diverse genus.

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