AusTraits: Australia's plant trait database.

Hervé Sauquet (Botanic Gardens of Sydney and University of New South Wales); Elizabeth Wenk (University of New South Wales); Rachael Gallagher (Western Sydney University); David Coleman (Western Sydney University); Lily Dun (Western Sydney University); Fonti Kar (University of New South Wales); Sophie Yang (University of New South Wales); Daniel Falster (University of New South Wales).

AusTraits is an open-source, harmonised database of Australian plant trait data. First released in 2021, AusTraits is establishing itself as the key resource for trait data on Australian plants, with data distributed through multiple portals including Zenodo, the Atlas of Living Australia, and the austraits R package. AusTraits includes some data for nearly all of Australia's 26,000+ plant species and ~500 traits, with near-complete datasets for plant growth form, life history, and woodiness. At its core, AusTraits is committed to the FAIR Data Principles (Findable, Accessible, Interoperable, and Reusable), to ensure data and the trait database workflow are readily discoverable and available for reuse. All traits included in AusTraits are documented in the AusTraits Plant Dictionary (APD), a comprehensive vocabulary that includes trait descriptions, keywords, references, and links to other trait databases, allowing straightforward, consistent interpretation of trait data within AusTraits and the reuse of trait definitions by other researchers. Here we present an overview of these resources and recent developments, including an effort to increase coverage of floral traits for a sample of species matching the Australian Angiosperm Tree of Life and a new workflow to extract trait data from taxonomic descriptions.

Hervé Sauquet: herve.sauquet@gmail.com