

Dr Tracey Steinrucken

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and Biosecurity in Brisbane

 @tvsteinrucken



Tracey has now been working in weed biological control for 10 years. She started at RMIT University in 2011 in a collaboration with the (then) Victorian DPI, working on the rust fungus *Melampsora hypericorum* to control the invasive shrub, tutsan. She then did her PhD with CSIRO and Western Sydney University on dieback in *Parkinsonia aculeata* to determine if dieback could be used to control this important rangeland weed.

Tracey's current research is a collaboration with Biosecurity Queensland and the Brisbane Plant Pathology Herbarium (BRIP) on an Agrifutures Australia Rural R&D for Profit project to develop a mycoherbicide for the five invasive rat's tail grasses: *Sporobolus natalensis*, *S. fertilis*, *S. africanus*, *S. pyramidalis* and *S. jaquemontii*. She's using the generous funding from the CAWS Early Career Travel Award to fund her attendance at the 2022 Australasian Weeds Conference, where she will be presenting her work from this project.

The overarching aim of Tracey's research is to find applied biological solutions for the integrated management of weeds. She wants to reduce the labour and cost associated with weed control and limit the environmental impact of weed management. She does this by identifying native plant pathogens which are damaging and specific to the target weed(s) and by testing them in a series of laboratory, genetic, glasshouse and field-based studies. She uses systematic, empirical, and evidence-based approaches, which are essential for developing safe and effective biocontrol tools. She makes sure to visit, consult, and contribute to discussions with landholders, farmers and local council members to create tools that, if successful, will be widely and easily adopted.

Outside of research, Tracey is a passionate science communicator. She was the 2015 Queensland Fulbright Scholar, which funded her fellowship to UC Berkeley in California for a year. She is also the current President of the [Australasian Mycological Society](#) (AMS), but most importantly, Tracey is a proud Mum of two little kids who have no choice but to be fascinated with the natural world around them.