

CAWS Early Career Scientists Travel Award Report – 2022

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I was honoured to receive the 2022 CAWS Early Career Scientist Travel Award to attend the long-awaited 22nd Australasian Weeds Conference in Adelaide. When I was a PhD student, I attended AWC 2016 in Perth and AWC 2014 in Hobart. I'd had such a great time at those conferences that I was really looking forward to AWC 2022 after the multitude of COVID-induced delays. And with good reason! The Weed Management Society of South Australia did an excellent job organising the conference. Their perseverance, patience and tenacity paid off with a final event that was well run and deliciously catered for.

The plenary on the first day by Dr Jane Catford's on "Context Dependence in Invasion Ecology" was a major highlight, as was Patricia Lu-Irving's talk on the genomics of *Lantana* flower morphology; the calls for more social science in weed research; and the many impressive and beautifully designed research posters on display.

It was inspiring to see the 2022 CAWS Medal for Leadership presented to Professor Michael Walsh and Dr Louise Morin for their lifetime of weed science achievements. Other highlights for me were Sonia Graham's talk on the social science of weed management, and the PIRSA workshop dedicated to community led action on unpalatable grasses, which generated great discussions and explored some creative and important ideas. I was also fascinated by the incredible effect cultural burning and traditional practices have on regenerating biodiversity and managing weeds.

On the second day I had the opportunity to present my postdoc research: "Funding Fungi to Fight Invasive Grasses". My project is funded by Agrifutures Australia and is a joint effort with CSIRO and Biosecurity Queensland on the biocontrol of weedy *Sporobolus* grasses (WSG). The broader project includes both classical and inundative biocontrol strategies. My part focuses on looking for, identifying, and testing fungal pathogens isolated from diseased WSG in Queensland. I spoke about the high-throughput approach we've developed to prioritise our library of over 300 fungal isolates to work towards developing a mycoherbicide. I presented the results of [published](#) phylogenetic work, several novel fungal species, and the lab and glasshouse methods we are using to screen pathogens against target and non-target grass species. I was grateful to have a very interactive Q&A session with several opportunities for follow-up discussion.

As I have a background in biocontrol, I felt that the conference was a really great way for me to meet other researchers in this field; discover innovative and "next-gen" biocontrol options from the likes of Dr Andy Sheppard and Dr Michelle Rafter; and chat with organisations like MLA who want to continue supporting integrated weed management research. There were several success stories told about working with important weeds such as cacti, and many lessons that could be learned from coordinating management efforts with local community groups. I was also really interested in the contrasts and similarities between the approach New Zealand takes on biocontrol compared to that of Australia, and how we could learn from each other.

The great thing about the Weeds Community is that we all strive for applied outcomes, and whether we approach agricultural or environmental problems, from a chemical, biological, community-based, or molecular

solution, the synergies between our work are powerful. Thank-you to WMSSA and CAWS for the valuable opportunity to enjoy the beautiful city of Adelaide, present my work, and engage with other weed scientists [in person!](#)



The walk across the Karrawirra Pari (River Torrens) to the CAWS venue at the Adelaide Oval was a great way to get a unique perspective of this beautiful city in the heart of Kuurna country.