

Weed Research at UNE

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<http://www.une.edu.au/agronomy/weeds/>

Outline

Groupings
Collaborators
Staff
Research directions
Current projects
Completed projects
Future projects
Education
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What we can offer

Groupings

- CRC for Australian Weed Management
 - Enhanced sustainability through science and the development and promotion of IWM.
- Centre for Sustainable Farming Systems
 - Quality cross-disciplinary research that leads to more sustainable farming systems.

Collaborators

- NSW Department of Primary Industries
- Qld Department of Primary Industries
- CSIRO
- Other Universities
- Funding Bodies (MLA, GRDC, CRDC, NHT, Weed CRC, Cotton CRC, RIRDC)
- New England Weeds Authority
- Landcare

Staff

Brian Sindel*	Weed ecology/management
Robin Jessop*	Crops
Paul Kristiansen	Organics
Jim Scott	Pastures
Jack Sinden*	Economics

Oscar Cacho*	Bioeconomic modelling
Susie Hester*	Economics/environmental weeds
John Duggin*	Ecology/environmental weeds
Ian Reeve	Sociology
Wal Whalley	Grasses and rangelands
Susanna Greig*	Weed resources for schools

* involved in CRC **Research Directions**

CRC

- Weed incursion and risk management
- Sustainable cropping systems
- Landscape management

UNE

- Economics of weeds
- Weed ecology (understanding weeds within the systems in which they are found)
- Better weed management with less reliance on herbicides in cropping, pastoral, horticultural and environmental systems in northern NSW and southern Queensland

Current Projects

- Tienieke Cowan (PhD) - Ecology and management of serrated tussock on the Northern Tablelands of NSW
- Charles Grech (PhD) - Grazing management for the long term utilisation and control of Chilean needle grass • Sandeep Narwal (PhD) - Characterisation and depletion of glyphosate resistant ryegrass soil seed banks • David Phelps (PhD) – Controlling feathertop grass in Mitchell grasslands with fire and grazing • Mark Trotter (PhD) – National survey of best weed management practices for sheep graziers
- Avishek Datta (PhD) - Factors affecting the sensitivity of chickpea to isoxaflutole • Amy-Louise Kruger (Masters) – Factors affecting the dessication of alligator weed
- Matt McDonald (PhD) – Ecology and management of lippia in the Murray Darling Basin
- Michelle Keenan (PhD) – Morphological and molecular characterisation of barnyard grasses in Australia
- Simon Turpin (Hons) – Relative weed competitive ability

Completed Projects

- Irawati Chaniago (PhD) - Soyabean resistance to weeds • Anne Houlton (PhD) - Using crop residues to control weeds • Mark Gardener (PhD) - Biology of Chilean needle grass
- Blair Grace (PhD) - Population dynamics and management of saffron thistle in pastures • Stephen Johnson (PhD) - Ecology and management of the "take-all" weed, Peak Downs curse, and Malvaceae weeds in cotton
- Lynn Madden (Hons) - Allelopathic effects of weeds
- Scott McArdle (Hons) - The impact of Coolatai grass on biodiversity in a National Park in northern NSW
- Paul Kristiansen (PhD) - Sustainable weed management in organic herb and vegetable production

- Keith Pengilley (Hons) - Effect of temperature on the efficacy of Roundup® for controlling nutgrass
- Rebecca Perry (Hons) - Roundup Ready® cotton volunteer survey
- Greg Stockings (Hons) - The effects of night cultivation and tillage method on weed emergence
- Scott Wallace (Hons) - The effects of bromoxynil and glyphosate on bladder ketmia
- Jeremy Whish (PhD) – Competition of weeds in chickpeas
- Michael Widderick (PhD) - Biology & management of sowthistle
- David Van Ryswick (Hons) - Effect of night sowing on weed emergence and competition in buckwheat
- Brian Sindel – Colonisation of weeds on railway tracks

Future Projects

- Ecology of fleabanes
- Ecology of tiger lilly
- Role of weeds as alternative hosts of fusarium wilt in cotton
- Sociology of weed management decisions amongst graziers

Education

- Postgraduate education (Dip, Masters, PhD)
- Undergraduate education – Weed science and management can be included within various degrees including BRurSc, BAgr, BNatRes, BAgBus, BAgLaw and BSc
- Schools education (Weed CRC)
 - Weed management competition (secondary)
 - Unit of work ‘Ghastly guests’ (primary)
 - Computer game (secondary)

- Australian Weed Management Systems
 - The Pasture Weed Management Kit
 - Proceedings of the 14th Australian Weeds Conference
- What We Can Offer**
- Undergraduate educational opportunities
- Postgraduate training
- Research expertise, advice and collaboration
- Consultancies