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RESEARCH DIRECTIONS

That 'Old Man Weed'

Associate Professor Robert Spooner-Hart and Adjunct Professor David Leach of the School of Science and Health are being supported by funding from the Rural Industries Research & Development Corporation and Industry Partner, BioActives Export Pty. Ltd. (BAX), together with commercial growers, to undertake research into the characteristics of *Centipeda cunninghamii*.

'Centipeda cunninghamii is a unique indigenous Australian plant which commonly grows on the edge of receding billabongs,' says Associate Professor Spooner-Hart. 'Its Koori name Gukwonderuk, literally translates as "old man weed". C. cunninghamii extracts have been recently patented for use in a range of cosmetic applications including skincare, deodorants, exfoliation and as a general anti-inflammatory and anti-oxidant in nutraceuticals and cosmeceuticals. A fledgling industry has developed using the plant but much of the production to date has not been based on scientific research. In this project we aim to tackle specific key agronomic, harvest and postharvest issues which would enable the development of high quality extracts and a viable Australian industry.'

The researchers will evaluate selected phenotypes of *C. cunninghamii* to determine which will produce superior yield and quality of bioactive compounds. They will investigate current agronomic practices for sustainable production, particularly fertilizer use, planting density, and irrigation. Key pests and diseases will be identified, as well as determining the optimal harvest time so as to maximise yield and quality of future crops. Industry growers will play a major role in the project by being involved in the day-to-day maintenance of the field trial sites as well as replicated pot trials over a period of three growing seasons.



This research will provide information on best practice for existing and prospective growers of this Australian plant. By establishing estimates of likely costs of production, the findings will also assist farmers in deciding whether they wish to enter the industry.

Project Title: Agronomic and Extraction Parameters for *Centipeda cunninghamii* Production Funding has been set at: \$200,000 Contact Details: r.spooner-hart@uws.edu.au September 2012