

Australian native rice: a high-value low-volume specialty food

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Australian native rice:

- Three species: *Oryza rufipogon*, *O. meridionalis* and *O. australiensis*
- Widespread in northern wetlands and floodplains in NT, WA and Queensland
- Close relatives of domesticated Asian rice *O. sativa* – precious global source of genes for disease resistance, environmental tolerances.
- Eaten by generations and generations of Aboriginal people
- A delicious and nutritious food

Market values for native Australian rice

Novel, healthy, harvested, grown by Aboriginal people, delicious, Australian

So why aren't we eating it already?

Barriers to commercialisation of Australian native rices:

- Difficult to **access** in the wild on crocodile infested floodplains
- Difficult to **collect** - seed is shed from the plant gradually rather than at one time (known as shattering)
- Grains are difficult to **process** (thresh and mill) - husk is thick and includes long awns and hooks

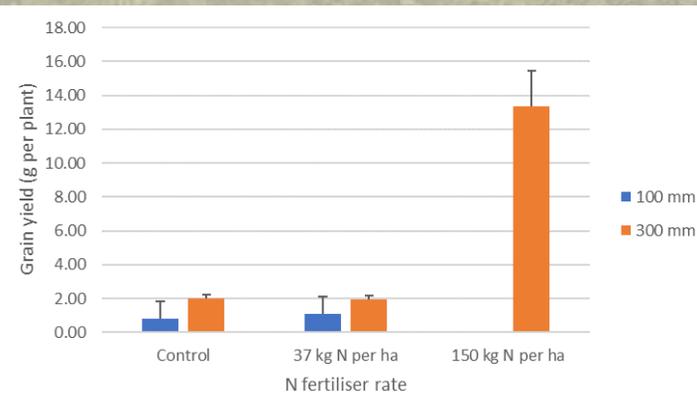
The project aims to address these problems:

By investigating **cultivation**, grain quality grown under different conditions and processing technology - of three species

By developing **agronomic protocols** for commercial production

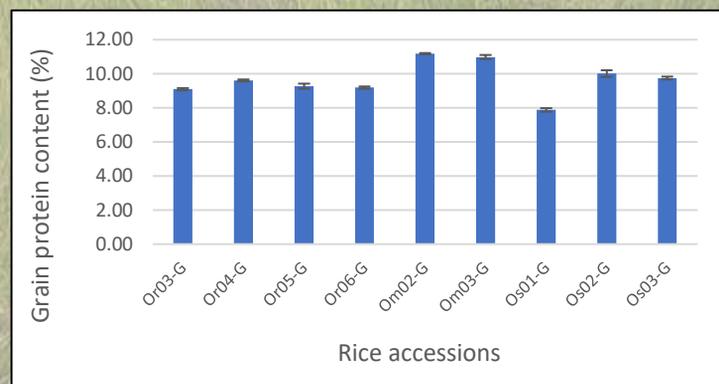
Project achievements so far:

- Seeds collected from wild populations and bulked up using nursery cultivation for ongoing trials
- Germination and dormancy studies
- Experiments underway or designed to investigate: establishment, planting density, soil nutrient management, water management in 2021 to 2024.
- Preliminary trials of native rice responses to nitrogen fertiliser and soil volume.



Yield of *O. rufipogon* per plant, in 100 mm and 300 mm diameter pots, control and two fertiliser rates.

- Testing of protocols for analysis of grain quality



Protein content of accessions of native rice species (Or, Om) and cultigen rice varieties (Os).

Further information: nativerice@cdu.edu.au



Wild harvesting *O. rufipogon* in April 2021, Fogg Dam Reserve, Wulna Country, Adelaide River