Using commercial and Australian native rice species in north Queensland: the correct species for the correct environment

Potential for Australian native rice species as a commercial crop in north Qld

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The potential of Australian rice for commercial production in northern Australia

- Rice is the second most produced and top consumed cereal in the world
- Most rice grown in Australia, using irrigation from the Murrumbidgee river system, in southern NSW and grown in the summer
- Australia has three species of native rice that grow in northern Australia, over the summer and during the wet season
How I explored the research question…

• Over several seasons, a number of specimens of Australian rices have been collected from North Queensland

• These collections were characterized for
  ➢ plant type
  ➢ potential yield
  ➢ disease
  ➢ grain quality
  ➢ food quality
Results to date…

• These collections were characterized for
  - height: approximately 90 – 100 cm
  - grain yield potential similar to current varieties
  - good disease resistance
  - medium size grain similar to current varieties
  - grain size suitable for commercial milling
  - good sensory profile

• Some issues to overcome:
  - variable seed maturity
  - shattering
  - ‘sticky’ awns
The ‘global change’ aspect of my water research

• Native species – right at home
• Specialty food resources to add to current agriculture production
• Potential new sources of parental material in breeding
• Australian rice: the right crop in the right location: tropical (wet) Australia
• High value export market
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References: