



Cropping Enabled Cattle project

Cottonseed boosts weight gain in northern steers

Simple dry season feeding strategy delivering faster growth and better feed efficiency

Cottonseed may offer a cost-effective way to improve liveweight gain in northern cattle during the dry season when pasture quality is poor. This research examined whether feeding whole cottonseed along with Rhodes grass hay could help *Bos indicus* cross cattle gain weight faster in tropical northern Australia.



The problem

- Dry season feed is low in protein and energy
- Cattle often grow slowly or maintain weight
- Delays reaching market weight



The strategy

Supplement a Rhodes grass hay ration with whole cottonseed at ~0.5% bodyweight (DPIRD Kununurra Research Station)



The benefits

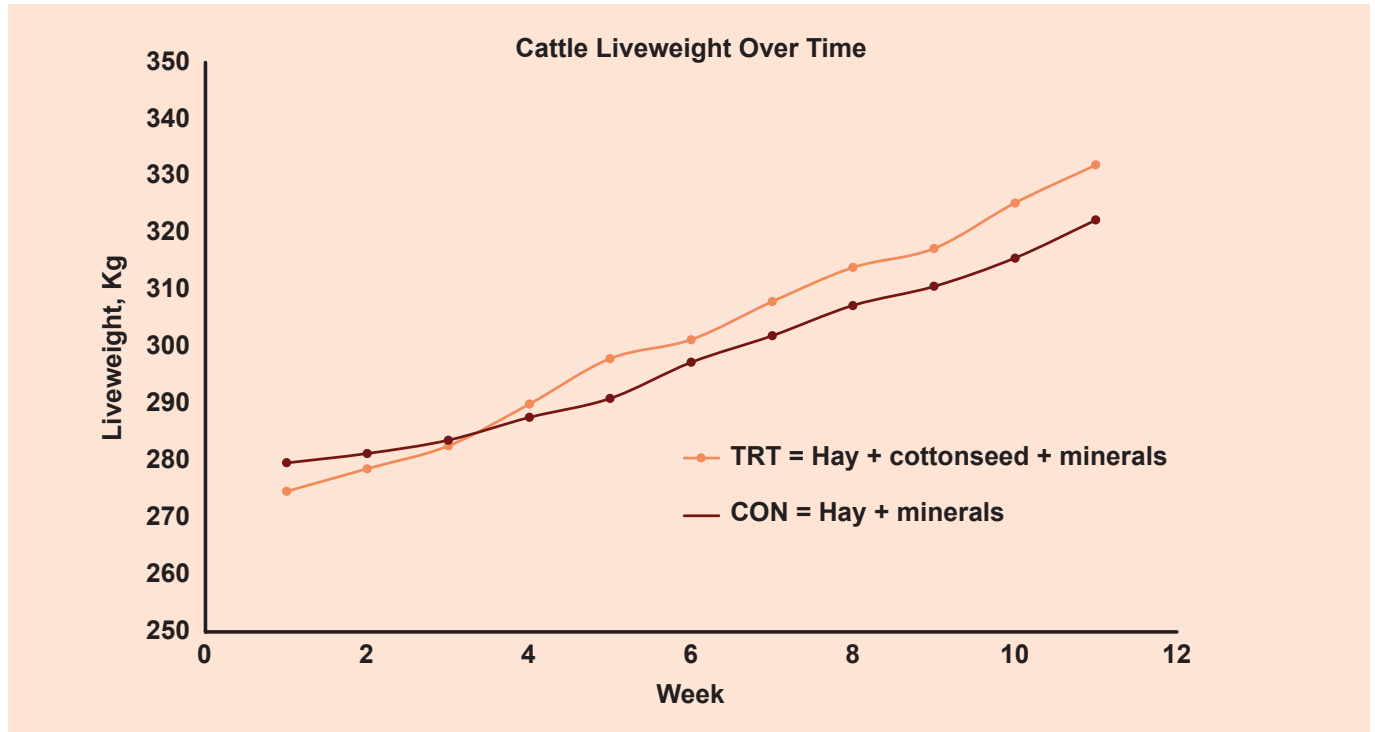
- Faster dry season growth
- Improved feed efficiency
- Lower cost per kilogram gain

Trial summary

72 Brahman cross steers assigned to one of 2 groups over 75 days.

1. **Control group (CON)** – ad lib Rhodes grass hay + mineral mix
2. **Treatment group (TRT)*** – control + 0.5% pen average liveweight whole cottonseed

* TRT steers ate 5% less feed but had 25% higher energy intake due to the additional energy from cottonseed



Key results – Steers fed cottonseed had:

- +0.19 kg/head/day extra weight gain (0.77 vs 0.58 kg/day)
- +9 kg final liveweight after 75 days
- Higher feed efficiency (9.4 vs 13.4 kg dry matter intake / kg of liveweight gain)
- Lower cost of liveweight gain (\$4.25 vs \$6.27 feed cost / kg liveweight gain)

Acknowledgement

This project is funded through the Cooperative Research Centre for Developing Northern Australia, the Cotton Research and Development Corporation and the WA Agricultural Research Collaboration, bringing together networks from the Department of Primary Industries and Regional Development WA, CSIRO, Murdoch University and the University of Western Australia.

More information

For more information on the Cropping Enabled Cattle project, visit the DPIRD website.



Important disclaimer

The Chief Executive Officer of the Department of Primary Industries and Regional Development and the State of Western Australia accept no liability whatsoever by reason of negligence or otherwise arising from the use or release of this information or any part of it.

Products on display or shown in images do not imply endorsement or recommendation.

Copyright © State of Western Australia (Department of Primary Industries and Regional Development), 2026