

Scientists work to drought-proof beer

6 February 2014

University of Queensland scientists are helping to drought-proof barley – an ancient and important ingredient in beer.



Researchers at UQ' s Queensland Alliance for Agriculture and Food Innovation (QAAFI) have identified ' stay-green' characteristics in types of barley.

They believe the discovery could help barley breeders develop barleys that are far less susceptible to environmental fluctuations such as drought and heat.

And from a brewer's point of view, consistency is the key to a great brew – and a better product.

QAAFI' s Dr Glen Fox said sorghum breeders had long taken advantage of ' stay-green' characteristics for improved yield, and a similar trait in barley could present growers with an innovative way of responding to the challenges of climate change.

" Until now, no one had seriously looked at stay-green traits in barley," he said.

" Sorghum and barley are distantly related plants which both evolved in the warmer parts of the world, so if we can help growers produce barley that is more in-tune with what industry wants, we' re well on the way to improving productivity and profitability."

" Each year Australia produces about two million tonnes of malting barley, and a good proportion of that is exported throughout Asia and the Pacific.

" Our team' s research has shown that normal grain development and starch composition can survive significant water and heat stress in selected barley lines."

The QAAFI research paper published in the *Journal of Cereal Science* reports that preliminary studies have demonstrated that stay-green traits appear to be evident in barley, but more precise and detailed experiments would be required to better understand the genes that control this effect.

About QAAFI

The Queensland Alliance for Agriculture and Food Innovation (QAAFI) is a UQ research institute, comprised of three frontline centres, which was formed as a strategic alliance between The University of Queensland and the Queensland Government. QAAFI brings together scientists from across the plant, animal and food sciences, working closely with the Department of Agriculture, Fisheries and Forestry (DAFF). Our mission is to significantly improve the competitiveness and sustainability of tropical and sub-tropical food, fibre and agribusiness sectors through high-impact science. Our vision is to pursue sustainable agriculture and food through science and innovation. We deliver world-leading research in the plant, animal, nutrition and food sciences, resulting in discovery, learning, and engagement.

Media: QAAFI Centre for Nutrition and Food Science researcher Dr Glen Fox, +61 7 4639 8830, g.fox1@uq.edu.au or QAAFI Communications Officer Ron Hohenhaus, 0417 425 510, +61 7 3346 0553, r.hohen@uq.edu.au.

Share link:

http://tinyurl.com/oe62scc



Subscribe to the UQ News weekly newsletter

Subscribe



AGRICULTURE + FOOD, ENVIRONMENT + SUSTAINABILITY, RESEARCH

Algae could boost livestock productivity 19 August 2014

AGRICULTURE + FOOD, ENVIRONMENT + SUSTAINABILITY

Media alert: Taste Australia with a native barbecue at UQ 19 August 2014

AGRICULTURE + FOOD, BUSINESS + ECONOMY, ENVIRONMENT + SUSTAINABILITY, GLOBAL CHANGE



Expert urges a worldwide rethink on food supplies 18 August

ENVIRONMENT + SUSTAINABILITY, RESEARCH, SCIENCE



Prickly prediction issue plagues Great Barrier Reef 15 August 2014

ENVIRONMENT + SUSTAINABILITY

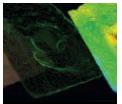


Work starts at UQ Gatton on solar research facility 6 August

Living the award-winning dream 21 July 2014



Flood of entries for G20 water challenge 15 July 2014



imaging stamps on

High-tech

Queensland dinosaur stampede theory 9 July 2014

ENGINEERING + TECHNOLOGY, ENVIRONMENT + SUSTAINABILITY



RECENT HEADLINES



Needlefree vaccine delivery

selected as a technology pioneer 26 August 2014



QBI to

establish world' s largest international research centre for dementia 26 August 2014





celebrate outstanding alumni 26 August 2014

UQ to

More headlines

Home > Scientists work to drought-proof beer

Brisbane St Lucia, QLD 4072 +61 7 3365 1111

Other Campuses: UQ Ipswich, UQ Gatton, UQ Herston

Maps and Directions

© 2014 The University of Queensland

Λ	IBER	
		UI

ectX

K GROUP OF EIGHT

Privacy & Terms of use | Feedback

Authorised by: Director, Office of Marketing and Communications ABN: 63 942 912 684 CRICOS Provider No: 00025B

QUICK LINKS

➡ For Media
➡ Emergency Contact

SOCIAL MEDIA

NEED HELP?

EMERGENCY

3365 3333

EXPLORE

- Giving to UQ
- Faculties & Divisions
- UQ Jobs
- Services & Facilities
- 🖻 Login