

Plant science competition encourages next generation of agricultural scientists

Kerrie Rubie

The annual Schools Plant Science Competition began in 1997 as an activity to help celebrate the Queensland Government's Hermitage Research Facility's centenary year and has reached over 100,000 students across Australia, with between 150 and 200 schools registering to participate each year.

The Hermitage Research Facility in Warwick, is the Queensland Department of Agriculture and Fisheries' (DAF) oldest agricultural research station, commencing operations in 1897.

Its current research programs focus on the breeding, agronomy and physiology of grain crops including sorghum, chickpeas, mung beans and barley. Hermitage staff



Photo courtesy Cecil Plains State School.



Photo by Kerrie Rubie, DAF.

are passionate about helping to raise the profile of science and its relevance to the daily needs of modern society in a very hands-on way through the annual Schools Plant Science Competition.

The competition runs from January to June each year (during Queensland school terms 1 and 2) and concludes during National Science Week in August with an Awards Day and Agricultural Science Expo held at Hermitage.

Students from Prep to Year 12 are invited to participate and complete an engaging, hands-on unit of work involving experiments and activities based on an agricultural

science topic, which is chosen and designed by Hermitage staff. Past topics have included: soil health, insect pests, salinity and glasshouse modelling.

A full set of instructions, with links to relevant learning objectives in the National Curriculum, are forwarded to teachers upon registration.

In 2017, the theme was 'The Dirt on Soils', which focussed on the value of this natural resource and the importance of healthy soils in producing healthy plants that provide our food and fibre.

Hands-on activities included: experimenting with different soil types in growing healthy plants; a soil sedimentation observation;

attend Queensland Agricultural Training Colleges' TASTE camps, as well as a range of visa gift cards, trophies and medallions.

The presentation event in Warwick attracts hundreds of students and guests and celebrates all things agricultural science, further promoting the important role agricultural science plays in improving our daily lives and providing a sustainable future.

Following the formal awards ceremony, students and guests participate in a tour of the research facilities and view the displays in 'ScienceShow Alley', which for next year includes: drones/new technologies, entomology, soil health, beekeeping, biosecurity sniffer dogs, local high school agriculture displays, careers information and agricultural machinery.

Many teachers consider the competition to be a valuable resource and learning tool for students of all ages and learning abilities. For example, a parent of a major prize-winning student said:

Thank you once again for another well organised Hermitage Awards Day. We appreciate all the work that you have put into organising this big event so smoothly and perfectly ... Michelle has commented that she has learned and discovered so much from doing Hermitage projects than from school assignments for a whole year!

A Year 12 student said:

I thought the conference was great, definitely a worthwhile experience. It provides a chance to meet real scientists and learn about their work ... The opportunity has given me a much better perspective on agricultural science, and, along with the Schools Plant Science Competition, led me to think about a career in or related to agricultural science. I think in the future this would be a great addition to the current prizes, as it is very motivational for people interested in science.

Another major award-winning student currently enrolled in a Bachelor of Science course at The University of Queensland said:

I feel so lucky that I got involved in the competition at Hermitage. I discovered my passion for plant science and can't imagine studying anything else!



Photos courtesy
Cecil Plains
State School.

researching the global importance of soils for food security; acting out the role of soil organisms in the 'A Day in the Life of Soils' card game; creating soil mind maps, dioramas and soil food webs; and depicting what 'future agriculture' will look like in an art activity using different soils and plant materials as a featured medium.

A great range of prizes are on offer over the competition's four year categories (Years P-2, 3-6, 7-9 and 10-12). For example, prizes include: \$1,000 conference awards, a \$1,000 scholarship for tertiary education materials, a \$500 subscription to a scientific journal, \$500 scholarships to



Photos by Kerrie Rubie, DAF.

The 2018 competition, which opens on 22 January, will focus on 'Drones and New Technologies in Agriculture' and a summary of the competition details are now available on the competition website. The full competition details will be available in January 2018, prior to the opening date. The Awards Day and Agricultural Science Expo will be held on 14 August 2018.

To register your interest, please complete the on-line registration form or phone the DAF Customer Service Centre on 13 25 23 (Queensland residents) or (07) 3404 6999 (interstate residents).

The DAF Hermitage Research Facility Schools Plant Science Competition is proudly supported by:

- Queensland Government's Department of Agriculture and Fisheries
- Advance Queensland Initiative, Queensland Government
- Grains Research and Development Corporation
- Paul Johnston Memorial Trust
- The University of Queensland
- Queensland Agricultural Training Colleges (Longreach and Emerald campuses)
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- Grains Research Foundation Ltd.
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- Nuseed
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- John and Chris Purdie.

For further information about the competition, please visit the website: www.daf.qld.gov.au/hermitage-competition

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