

FINAL REPORT

MSA00001

Understanding the development of students into qualified trained agronomists in the GRDC Northern, Southern and Western Regions

PROJECT DETAILS

PROJECT CODE: MSA00001

PROJECT TITLE: UNDERSTANDING THE DEVELOPMENT OF STUDENTS INTO QUALIFIED TRAINED AGRONOMISTS IN THE GRDC NORTHERN, SOUTHERN AND WESTERN REGIONS

START DATE: 10.06.2013

END DATE: 31.12.2013

SUPERVISOR: MIKE STEPHENS

ORGANISATION: MERIDIAN AGRICULTURE

CONTACT NAME: MIKE STEPHENS

Summary

The GRDC Northern, Southern and Western grains industry regions face four problems:

1. A decline in the number of experienced agronomists.
2. A lack of experience of junior advisory personnel at the completion of their studies.
3. Falling enrolments in Agricultural Science courses.
4. Poor awareness of agricultural career pathways.

Despite many workforce skills and training initiatives, agriculture still struggles to:

- o Attract young people to study agriculture and take up careers in the industry.
- o Encourage industry members to participate in further training.

This project considered the current role of pathways for students to become an agronomist in the GRDC Northern, Southern and Western Regions and included:

- o A survey of industry capacity (both current and potential) in agronomy.
- o A review of models in other industries and application to the grains industry for the development of skilled expertise of a similar nature.

o A review of universities and the commercial agribusiness sector for initiatives of interest to the industry.

This project had an oversight of the three scoping studies in the GRDC Northern, Southern and Western Regions.

Report Disclaimer

This document has been prepared in good faith on the basis of information available at the date of publication without any independent verification. Grains Research & Development Corporation (GRDC) does not guarantee or warrant the accuracy, reliability, completeness or currency of the information in this publication nor its usefulness in achieving any purpose. Readers are responsible for assessing the relevance and accuracy of the content of this publication. GRDC will not be liable for any loss, damage, cost or expense incurred or arising by reason of any person using or relying on information in this publication. Products may be identified by proprietary or trade names to help readers identify particular types of products but this is not, and is not intended to be, an endorsement or recommendation of any product or manufacturer referred to. Other products may perform as well or better than those specifically referred to. Check www.apvma.gov.au and select product registrations listed in PUBCRIS for current information relating to product registration.

Copyright

Grains Research and Development Corporation. This publication is copyright. Apart from any use as permitted under the Copyright Act 1968, no part may be reproduced in any form without written permission from the GRDC.

Old or Archival Reports (Projects that concluded in 2007 or earlier)

The information contained in these older reports is now several years old, and may have been wholly or partially superseded or built upon in subsequent work funded by GRDC or others. Readers should be aware that more recent research may be more useful for their needs. Findings related to agricultural chemical use are also potentially out of date and are not to be taken as a recommendation for their use.

Recommendations

1. That GRDC selects a training or education organisation in each of its Panel areas to develop a course which is specifically related to field agronomists and which delivers an appropriate level of scientific background and analytical skills combined with practical field experience.
2. That GRDC institutes an intern system combined with a formal scholarship program to support the early career years of graduates.
3. That GRDC works in conjunction with industry, particularly with Crop Consultants Australia, the Australian Association of Agricultural Consultants Western Australia (AAAC WA), Ag Institute Australia and resellers, to support and develop continuing professional development and accreditation programs.

Outcomes

If the recommendations are followed, there will be an adequate supply of suitably equipped agronomists in each of the GRDC regions.

Achievements/Benefits

Key findings include;

1. There has been an evolution in the role of the agronomist which parallels a revolution with cropping.
2. The majority of agronomists are employed by resellers and this causes concern in some sectors of the industry due to perceptions of lack of independence.

3. Agronomists require basic knowledge, personal skills and empathy, field skills business knowledge and the ability to observe and interpret, often with little data.
4. Universities do not currently and are unlikely in future to provide field ready agronomists.
5. The current supply and demand is, in general in equilibrium, however there is a shortage in some more remote areas of highly experienced field agronomists both willing and able to mentor younger professionals.
6. The corporate retail (re-seller) is the first employer of graduates and the dominant player in early training.
7. There are limited employment opportunities for a new graduate.
8. A career as an agronomist is virtually unknown to students and more importantly is unknown to career advisers.
9. The system is fragile and there is likely to be a shortage in five to ten years of suitably equipped agronomists if some intervention is not taken. This shortage will be most noticeable at the higher end of the profession where there is a need for agronomists who have a deep understanding of what happens in the paddock and are able to think strategically about new or adapted methods, rotations and/or crops. Agronomists are needed at this level to mentor field staff, those who teach emerging agronomists and those who develop curricula.
10. There is an important role for GRDC to work with industry to attract more students and to promote recognition and accreditation.