Information? What Information? Lots of Information! Where do Western Australian growers source their information?

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Key messages

1. Growers use a wide range of information sources to solve problems on the farm. The sources used are dependent upon whether the information is specific, such as solving a pest or disease problem on the farm, or of a more general nature.
2. The two main sources of information that are very relevant to growers for solving both general and specific problems are the private agronomist / consultant and attending field days.

Aims

There is a large amount of literature on the exchange of information (extension) in the farming community. The literature is based on different models of how to transfer knowledge and this is very dependent upon whether the extension officer is working with an individual or with a group of people. The role of extension is to promote learning and build capacity in skills and knowledge that lead to change within a community, whether it's a farming community or other (PISC 2011, Jones and Garforth 1998, Fulton et al 2003).

PISC (2011) state that the tools and delivery mechanisms used will be very diverse, and those chosen are dependent upon the final outcome wanted. Extension methods include broadcast, electronic and print media, field days, specific advice, focus farms, demonstrations, subject specific videos, and general and specific publications. Regardless of the method, information needs to be synthesized, processed, and delivered to learners in a format that is based on their needs (Fulton et al 2003, Jones and Garforth 1998).

The training needs of Western Australian wheatbelt growers were determined using a survey tool, which encompassed a number of different sections. Part of the survey was designed to answer the following questions:

Where do Western Australian growers get their information to solve general and specific problems on the farm?

Is the source of the information used dependent upon whether the problem is general or specific?

Method

A questionnaire was developed to determine growers' use of different information sources when solving general problems on the farm and when managing crop pest and diseases.

This survey was tested at a Regional Crop Update in Lake Bolac, Victoria before distributing to farmers in February and March 2014 within Western Australia. The survey was distributed in two ways: as an online survey and as a paper based survey. The online survey was advertised through local Grower Group newsletters and the paper-based survey was handed out at six Regional Crop Update meetings with a reply paid envelope. The survey was closed on 30th June 2014.

The first question asked participants: "How important are these methods for you when you are looking for general information to help you make a change or solve a problem on the farm?" They were given 17 sources of information and four ratings; not important, slightly important, very important and extremely important. Question 2 examined how often they used eight different types of electronic media when looking for information about farming issues. The third question asked where they sought information when having to manage pests and diseases in crops, by selecting those applicable, from 14 different sources.

The data was analysed using SPSS (Statistical Package for the Social Sciences (SPSS) IBM ver. 22). Frequency tables were used to generate the graphs in Excel.

Results

From 400 paper-based surveys handed out, at six Regional Crop Updates meetings, 63 were returned. 69 people started the online survey, and 26 from Western Australia completed it. Thus the total (n-=89) response rate for Western Australia was 19%, which is considered low. Pennings, Irwin and Good (2002) suggest that an average response rate of 20% within the first two weeks, and then using follow up reminders the response rate will increase to 35% within the 8th week.

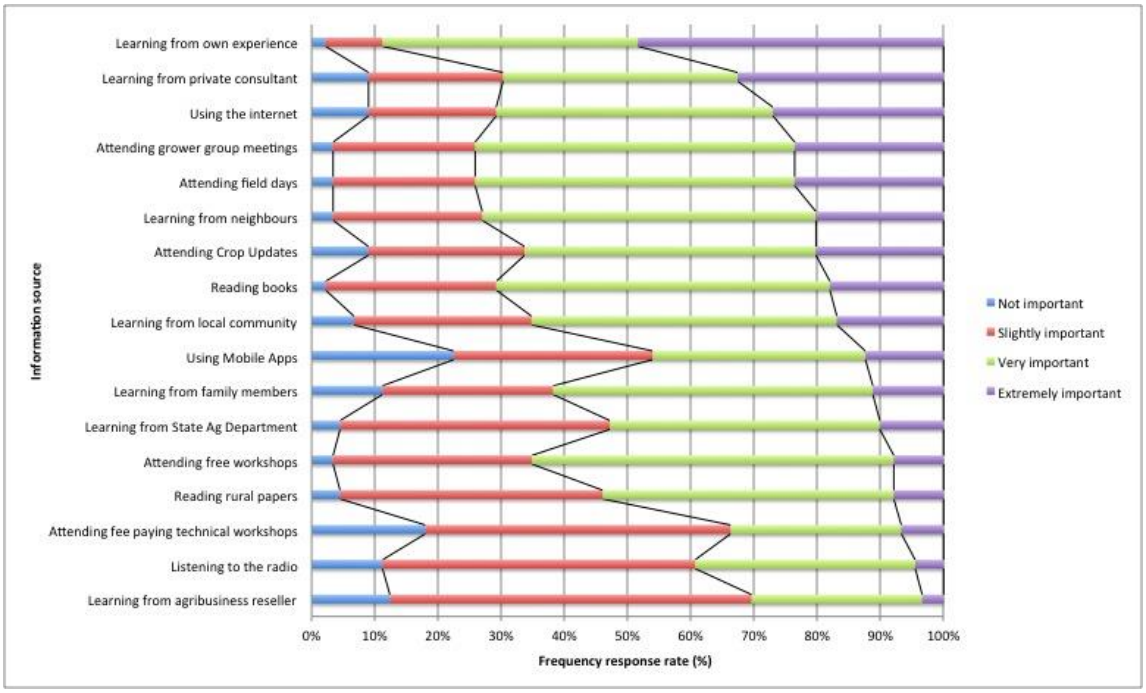

Figure 1. Sources of information used by growers when looking for general information to implement a change or to solve a problem on the farm, listed in order of importance.

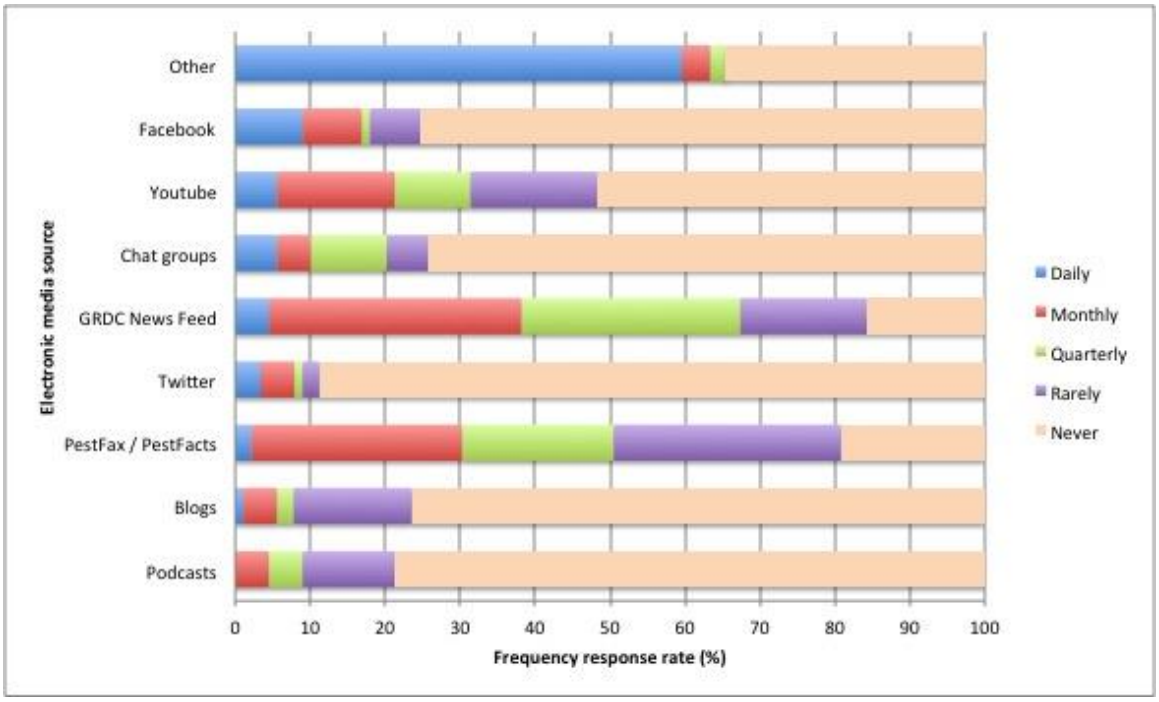

Figure 2. The usage of electronic media by growers to solve general problems on the farm, listed in order of frequency of use.

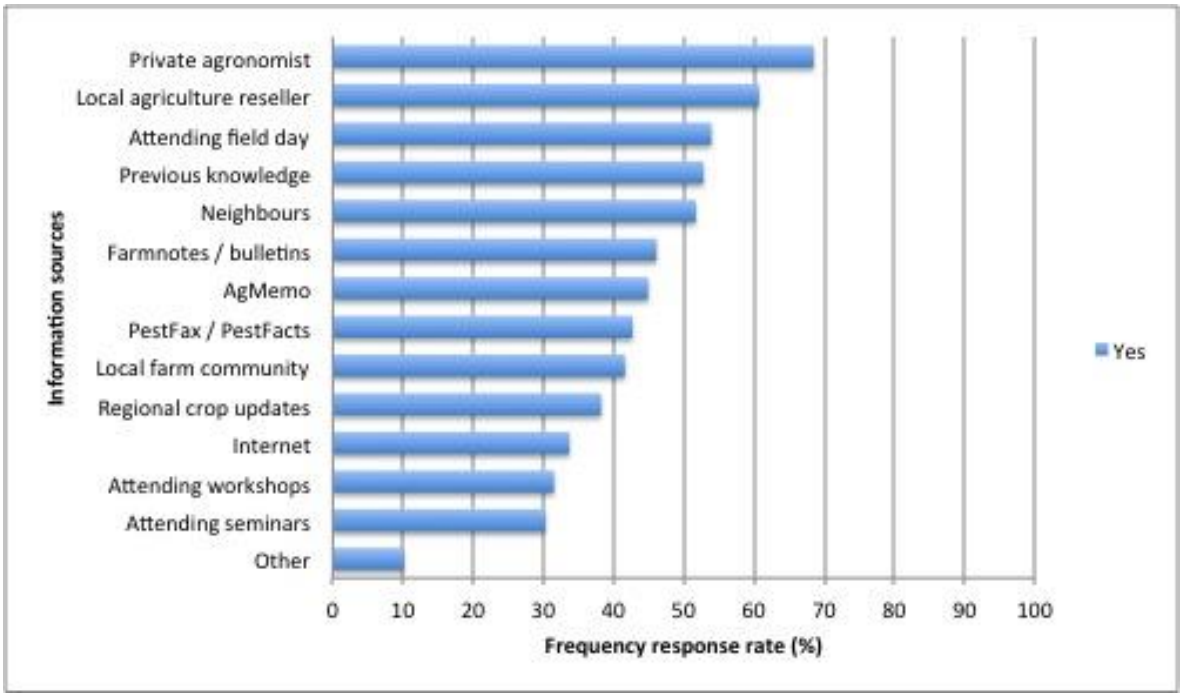

Figure 3. Sources of information used by growers when trying to solve a specific crop pest and disease issue on the farm, in order of frequency.

Solving general problems on the farm

Overall, growers used a range of information for solving a general problem on the farm (Figure 1). The sources of information varied; “learning from own experience”, “attending workshops to reading literature”, “speaking to neighbours” and “agronomists”. “Listening to the radio” was not seen to be as important as learning from own experience or a private consultant.

The use of electronic media was not as frequent as expected (Figure 2). A detailed analysis of the information collected under “other” category has not been completed at this stage. It is expected that this will change as growers become more familiar with the use of smart phones. During this survey, the ownership of smart phones / tablets was related to their age. 92.3% of people younger than 50 years owned a smart phone / tablet. However, only 54.1% of those over the age of 51 owned a smart phone or tablet (*Fisher’s extact test* (2, n=101) = 18.588, *p* = 0.000).

Solving crop pest and disease problems on the farm.

Growers used a wide range of information sources to solve specific pest and disease problems in crops (Figure 3). The private agronomist is the most frequent source of information consulted along with local agricultural resellers. Less than 40% of the growers who answered the survey used regional updates, the Internet and seminars or workshops as a source of information.

When disseminating information of this type, it is important to target consultants and agribusiness resellers because growers make most use of both of these sources.

Conclusion

In conclusion, the results indicate that there are distinct differences where growers source their information. The preferred source depends upon whether the problem is a general problem or is specific to managing crop pest and disease problems. For example, when solving a general problem the Internet is seen as the 3rd most important source of information, whereas for a specific pest or disease problem it is seen as the 11th most frequently used source of information. Agribusiness resellers are ~~the~~ rated lowest ~~for~~ when solving general problems but are well used for helping with pest and disease problems.

Seminars and workshops are less popular than field days, which present another opportunity to provide information at these events.

These results indicate that researchers and RDC’s need to consider their audience when providing information. Growers in Western Australia are progressive and use a wide range of information sources to solve both general and specific problems on the farm.

Key words

Information source, growers, electronic media

Acknowledgments

I would like to thank the participants who filled in the survey.

I would like to thank COGGO for funding my PhD research under project “Up-skilling the Western Australian grains industry in disease surveillance for a more productive and bio-secure future**”**.

GRDC Project Number: GRS10666

Paper reviewed by: Dr Miriam Sullivan, UWA and David Kessell, DAFWA**.**

References

Fulton, A., Fulton, D., Tabart, T., Ball, P., Champion, S., Weatherley, J., & Heinjus, D. (2003). Agricultural extension, learning and change. Canberra: RIRDC

Jones, G.E., & Garforth, C. (1998). The history, development and future of agricultural extension. In B. E. Swanson, R. P. Bentz & A. J. Sofranko (Eds.), *Improving Agricultural Extension. A reference manual* (pp. 1-16). Rome: FAO

Pennings, Joost M.E., Irwin, Scott H., & Good, Darrel L. (2002). Surveying Farmers: A Case Study. *Review of Agricultural Economics, 24*(1), 266-277

Primary Industries Standing Committee. (2011). Grains Industry National Research, Development and Extension Strategy. Canberra: GRDC.