

# Fertcare Accredited Advisor - what is it all about and should I become one?

Jeff Kraak - Fertilizer Australia (M: 0407 663535 E: jeff.kraak@fertilizer.org.au)

## Key messages

- The Fertcare Accredited Advisor (FAA) program provides an objective basis to assess the competence of advisors providing soil management, crop nutrition and fertiliser recommendations. The FAA logo signifies to farmers, natural resource managers and government that quality advice which not only optimises yield and quality is being provided, but the recommendations also contribute to reduced environment and food safety risks. It is currently the only independent quality assurance scheme for advisors providing nutrient advice based on soil and plant testing.
- Fertcare seeks to promote productivity while contributing to environmental protection. The program is grounded in accepted science with the technical content of the program overseen by a committee of leading public and private sector experts in the fields of soils, plant nutrition, food safety and environment. It is further strengthened by training that meets national competency standards and Accredited Advisors that are independently audited every 2 years to ensure that they consistently meet rigorous standards set by the Australasian Soil and Plant Analysis Council (ASPAC).
- The quality of fertiliser advice farmers receive can vary widely, failing to adequately address matters including yield / quality, profitability, environment or food safety matters. Prior to the FAA program, farmers could only find out if an advisor provided “comprehensive science based advice” to a high standard by experience or word of mouth.

## Background

The Food and Agriculture Organisation of the United Nations (FAO) estimate the world population is anticipated to reach 9.1 billion by 2050 requiring an overall food production increase of 70% between 2005/07 and 2050 (FAO 2009). While this increase can be achieved through higher yields, increasing the area farmed, higher cropping intensity (number of crops per year) or a combination of these, the International Fertilizer Industry Association (IFA) suggest that enhancing agricultural productivity will have a key role in providing food in the future. The data presented indicates intensification through technologies such as targeted fertiliser use will not only limit further land use change and conserve natural habitats, but will also limit the amount of greenhouse gas emissions generated per tonne of agricultural product (IFA 2012). Agricultural intensification offers opportunities to mitigate greenhouse gas emission while increasing food security.

Whilst fertilisers in both inorganic and organic forms can have a number of negative environmental effects, particularly when used inappropriately, eutrophication is the greatest concern in Australia. Raising soil fertility with fertilisers can increase the risk of nutrient movement from agricultural land to waterways. Intensification has the potential to increase this risk without careful stewardship.

Currently there are no legal or registration requirements to qualify an individual to provide soil management, plant nutrition or fertiliser recommendations. Anyone can call themselves an agronomist and start providing nutrient advice to farmers either as part of a service package associated with the supply of fertiliser products or as an independent advisory business. There are times when the quality of advice farmers receive from both fertiliser supply companies and independent advisory businesses varies widely. Advice to farmers may not

always adequately address matters such as, crop yield / quality, profitability, nutrient use efficiency, environment or food safety.

The Australian fertiliser industry, through Fertilizer Australia, has taken a responsible approach to manage risks associated with fertiliser use and the provision of advice. The industry has made a strong commitment to promoting productivity while contributing to environmental protection through the national product stewardship program Fertcare.

Fertcare is a training, certification and accreditation program delivered by independent third parties on behalf of the fertiliser industry. The program is designed to lift the skills and knowledge of everyone involved in the supply of fertiliser products and services. Fertcare focuses on providing high quality advice to users of fertilisers as the greatest environmental risks occur at the point of end use. This advice assists users to optimise productivity and minimise environmental and food safety risks.

There are three main components of the program:

- Fertcare Training
- Fertcare Accredited Advisor
- Accu-Spread (not covered in this paper)

## **Fertcare Training**

The Fertcare program trains industry staff in the competencies required to meet their responsibilities for food safety and environmental risk management. It includes the competency to warn, advise and refer customers to information about the risks and how to manage them.

Fertcare training was developed by professional educators and overseen by a technical committee that included leading public and private sector expertise in plant nutrition, food safety and environment. In addition, sections of material were reviewed by prominent scientists in the relevant field of expertise. The Fertcare program continues to be updated with the latest information, practices and guidelines as new science based information comes to hand.

Fertcare training is delivered nationally by independent and qualified providers, through a Registered Training Organisation. Each training course meets national competency standards under the Australian Qualifications Framework. Individuals can attain statements of competency by successfully completing the courses and these may be used as part of a formal qualification, e.g. Certificate Level III in Rural Operations.

At the time of writing, over 2,600 people have successfully completed Fertcare training since the competency based program began in 2003.

## **Fertcare Accredited Advisor**

The aim of the FAA component of the Fertcare program is to provide farmers and other food and fibre production supply chain stakeholders with confidence that farmers are receiving fertiliser advice based on soil and / or plant testing of a high standard and that the process of making recommendations, the underlying supporting data, sampling methodology and laboratory competence are based on good practice and accepted science in Australia.

The FAA program assesses the competence of advisors to make nutrient recommendations and is currently the only independent quality assurance scheme for advisors providing nutrient advice based on soil and plant testing. Assessment is based on standards set by the Australasian Soil and Plant Analysis Council (ASPAC), which have been mapped to

national competencies. The standards used are updated over time to ensure they keep pace with best practice from a productivity, environment and food safety perspective as well as keeping pace with advances in sampling and analytical techniques.

The standards cover sampling, analysis, interpretation, recommendation and monitoring. Recommendations are tested for completeness and for appropriate management of environmental and food safety risks. The standards are based on accepted scientific consensus with ASPAC providing advice on any dispute or review.

The program draws on key texts and national industry initiatives like the “Better Fertiliser Decisions for Cropping Systems” project in the grains industry and the “Better Fertiliser Decisions” project in the intensive grazing industries, as standards for critical values. Adherence to these critical values is likely to optimise yields and contribute to reduced nutrient losses. However in some regions, e.g. the Swan Coastal Plain, adhering to these critical values may still contribute to eutrophication, but at a much lower level. Fertilizer Australia is an active participant in these national industry initiatives along with farmer organisations, public and private sector scientists.

Once advisors have been assessed as competent, they are subject to a biennial audit of randomly selected recommendations made in the preceding two year period.

The audit is a quality assurance process to ensure that competence is being routinely applied and provides mechanisms to improve and rectify any underperformance.

Both the assessment of competence and the biennial audit can be completed either on an individual applicant basis or on a systems basis.

For a system to be successfully assessed, it must be capable of demonstrating that the standards for individuals are systematically applied to all users of the system and that appropriate training, assessment and record keeping is maintained. This is further tested by individual assessment of a selection of advisors who use the system during the biennial audit process.

The assessments and audits are delivered by third party contractors with standards overseen by ASPAC.

The FAA program along with initiatives such as the national industry projects bring together sound science, good industry practice and use to inform and assist public policy development and implementation.

At the time of writing there were 368 FAA operating across Australia. Go to [www.fertcare.com.au](http://www.fertcare.com.au) and click on “Accredited Advisor” for more information and lists of FAA.

### **Why should an agronomist consider becoming a Fertcare Accredited Advisor?**

There are three key reasons for an agronomist to consider becoming a FAA:

1. The FAA logo signifies the provision of high quality, independently audited advice based on sound practices and accepted science to promote farm productivity while protecting the environment. It provides a minimum standard for advice.
2. The process of accreditation of either systems or individuals invariably leads to improvements in the quality and or consistency of advice.
3. Nutrient management, along with off-site impacts, e.g. eutrophication feature amongst the issues that are of high priority to the community, consumers and marketers of branded food and fibre products. Assurance on these issues is increasingly being sought

throughout the supply chain. In seeking this assurance, not only are the practices employed by farmers to produce the food and fibre being scrutinised, but also the quality and source of professional advice farmers receive is being questioned by resource manager's and some branded food and fibre processing companies. The FAA is well positioned to address these matters.

Fertcare has been accepted by policy makers and natural resource managers as a means to move toward improved outcomes for farmers, the environment and consumers. The Swan Coastal Plain is one example, and others include the catchments of the World Heritage Listed Great Barrier Reef in Queensland (not discussed in this paper).

In September 2006, the WA Environment Minister announced a phase out of highly water-soluble phosphorus (P) fertilisers on the Swan and Scott River Coastal Plains by 2010 due to declining water quality and increasing frequency of algal blooms in the Peel-Harvey, Swan-Canning, Vasse-Geographe, Leschenault and Hardy estuaries. The movement of nutrients (from the soil store and applied as fertilisers) are one of a number of factors contributing to poor water quality in the region.

At the time, the fertiliser industry argued the case for objective measures such as soil or plant testing, appropriate analysis and interpretation methods to arrive at evidence based, site specific nutrient management plans at a paddock level to help reduce offsite nutrient losses. The basic premise being to match crop nutrient demand with the nutrient available from the soil, applied fertiliser and other nutrient sources, e.g. animal manures etc. Minimising nutrient application to crop requirements reduces the potential for offsite nutrient impacts. Fertcare provides substance to the above approach and was accepted by the state government as one of a number of strategies to reduce agricultural nutrient loss. The ban on highly water-soluble P fertilisers on the Swan and Scott River Coastal Plains was subsequently avoided.

Nutrient management continues to be a focus for the Department of Agriculture and Food WA (DAFWA). As part of its whole farm nutrient mapping activities, DAFWA is partnering with FAA to provide fertiliser advice based on nutrient maps developed from soil test results and critical soil test values. The aim is to increase the use of evidence based fertiliser decisions by producers rather than using traditional fertiliser practices.

As there is a specific lack of independent FAA in WA, DAFWA are subsidising Fertcare training activities and the initial assessment of some independent advisors to become FAA.

Prior to the FAA program, farmers could only find out if an advisor provided comprehensive science based advice to a high standard by experience or word of mouth.

## **Conclusion**

The quality of fertiliser advice farmers receive can vary widely, with consequences for farm productivity, profitability, off-site environmental impacts or food safety.

The FAA logo signifies the provision of high quality, independently audited advice based on sound practices and accepted science to promote farm productivity while contributing to environmental protection. It provides an objective basis to assess farm advisors who provide soil and nutrient recommendations.

All advisors, including independent businesses and those who provide advice as part of a service package associated with the supply of fertiliser products are encouraged to become

FAA and proudly display the logo on recommendations, business cards and other personal communication. FAA's are also encouraged to tell their farmer customers what the logo stands for.

When seeking professional soil management, plant nutrition and fertiliser advice, farmers are encouraged to consider seeking the services of a FAA listed on the Fertcare website.

## **References**

Fertcare: [www.fertcare.com.au](http://www.fertcare.com.au)

Food and Agriculture Organisation of the United Nations (2009) How to feed the world in 2050. Available at

[http://www.fao.org/fileadmin/templates/wsfs/docs/expert\\_paper/How\\_to\\_Feed\\_the\\_World\\_in\\_2050.pdf](http://www.fao.org/fileadmin/templates/wsfs/docs/expert_paper/How_to_Feed_the_World_in_2050.pdf)

International Fertilizer Association (2012) Increasing agricultural productivity to mitigate greenhouse gas emissions. Available at

<http://www.fertilizer.org/ifa/HomePage/LIBRARY/Publication-database.html/Increasing-Agricultural-Productivity-to-Mitigate-Greenhouse-Gas-Emission.html>

## **Key Words**

Accredited, Advisor, Environment, Fertcare, Fertiliser, Nutrient

**Paper Reviewed by** David Weaver (DAFWA)