Grain legumes: farming from paddock to plate

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When considering this topic "Farming from Paddock to Plate" it occurred to me to me that a lot of farmers, even today are, "Farming from paddock to gate". It is fair to say that a great amount of thought hasn't gone into what happens to the product once it leaves the farm gate. With many years of statutory marketing of cereals and, up to recently very little market information flowing back to the grower we had become complacent.

I believe farmers very seldom consider the end use of the grain when planning their crop or variety choice. The past marketing systems (while being successful at the time), have masked the market signals for particular qualities within a grade by our pooling systems. For instance the lack of testing at the point of delivery (in the past) has meant that it has taken far too long to identify and try and correct the downward slide in protein in wheat.

In the grower's mind yield has continued to be the dominant factor in selecting a variety and I venture to add this has been so with breeding institutions as well. It has to be understood that the best return may not in fact come from the highest yield. The best gross margin will most likely come from growing what the buyer wants when he wants it. It is fact that all too often buyers or Boards who severely downgrade or refuse to accept loads of grain due to its inferior nature are criticized by the growers who seem to think that because they have grown it, the Board or buyer should take it regardless of its quality.

The trade has been slow to recognize the need to reward the grower with the better product. this in itself has tended to suppress quality. Paying for what you get certainly gets the message across.

There is little doubt that price gives the greatest incentive to growers; unfortunately because a grower normally reacts to last harvest's prices or the price at sowing time, it can be a trap. It is difficult even for the expert marketers to predict next harvest's prices, especially with fluctuating currencies, global weather conditions, supply and demand etc. However, there is no doubt a better understanding of the market place, its requirements and the factors affecting it will help maximize the potential returns for you. It may in fact open up windows of opportunity.

Grain legumes - my own experience

Grain legume: have a dual role in my cropping system, they not only have the ability to return a good gross margin in the year grown, they also can enhance the gross margin of a following crop or crop rotation. Better still, they have the potential to increase the gross margins within an aim for a sustainable farming system.

Needless to say, when choosing a grain legume to grow I take into account its ability to fit into a cropping rotation and as a rotation, produce the best gross margin. In other words its not so simple as just growing a grain legume that yields well in the district. To identify its potential within a cropping system I need to consider a range of factors that occur from the time of planting to its end use. Some of the requirements to consider are:

- Human consumption
- Market timing
- Protein content
- Cooking time
- Shape, colour, size and taste
- How it is purchased

Stockfeed

- Market timing
- Protein
- Other grain analysis

One market that has been paying a premium is faba beans for canning. To be able to succeed in this market it is important to offer beans of an even, light colour with few if any ascochyta or chocolate spot marks and no native budworm holes.

However, it maybe that in the end though that the best gross margin can be achieved from producing stockfeed.

I feel it is important to know something about the end use of the grain so as to be able to better understand the potential returns from any one variety.

Grain legumes play an important part in my cropping system and to maximize returns I try to pay attention to the following once I have selected a variety:

Seed selection

Nil or low seed borne diseases

• Germination test and seed count per kilogram as an aid to establishing the required plants/m2 Sowing

- Depth of sowing
- Seed bed preparation/ direct drilling
- Weed competition

Growing

- Monitoring for weed infestation
- Monitoring for disease or potential disease (prevention being more effective than a cure)
- Monitoring for insect or grub damage
- Treatment of all of the above as required

Harvesting

- Early harvesting as a way of maintaining the best colour and to reduce mechanical damage
- Correct machine settings to minimize mechanical damage.

Storage

- For a quality product you need quality storage; why ruin it at this stage?
- Dry storage
- Reduce temperature
- Fumigate if necessary

Grain legumes have played a very important role in my farming operation, as part of almost continuous cropping rotations, and in our profitability. Peas and faba beans (mainly broad beans) play the major role in a rotation that normally contains two cereal crops followed by a grain legume crop. However, with declining yields especially in peas, high weed density problems and higher costs in controlling diseases I am looking at trying to reduce the grain legume content to once in four years.

The quest for a perfect system in a higher than average rainfall (550mm) goes on while balancing minimum tillage, direct drilling, stubble retention, herbicide resistance and sustainability into the equation.