

## PULSES FROM ‘PADDOCK TO PLATE’

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### OVERVIEW

- We can put our pulses onto an “overseas plate” direct, or onto an Australian or overseas plate via livestock systems.
- When we target an “overseas plate,” it is important that the varieties and products we produce are what the customer requires, and this has been happening with our latest varieties.
- We can now more reliably grow pulses in higher rainfall environments.
- Pulses can compliment grazing and cropping systems.

We are not talking about the ‘traditional’ pulse servings on the “plate” here. So what does “pulses, from paddock to plate” have to do with a lamb chop, a piece of bread and a sausage, unless the pulse is served as a salad or side-dressing.

Well the chop may have come from a lamb finished on either a pulse stubble, pulse grain fed on farm, or in a feedlot with pulses in the diet. The bread may well have pulse flour in it. The sausage could be a ‘non-meat’ sausage made out of a protein extract from lupin kernels rather than soybean.

So there are other uses of pulses on “the plate” other than the traditional pulses like bean or chickpea in salads, dhal, lentil soups, humus, dips and flours.

Reality is that the domestic consumption of pulses in Australia is low, in total volume and per head. So if we produce pulses “from paddock to plate”, it is usually on some-one else’s “plate”, usually overseas. In our export markets we see the pulses consumed in their traditional forms as part of their diet. Here we consume more pulses indirectly as they form part of the feed ingredients fed to livestock to produce milk, red meats, pork, poultry products, pastry products, perhaps one day as fish. Already there is lupin milk. In the future we will see pulses used as a food and confectionery ingredient replacing soybean.

So what pulse do we grow in our region, and which ones do we consume? Are we purely market driven, chasing the highest priced pulse to grow, or should we choose one that is better suited to the local soils and environment, and fits our “farming system” better? Profit as determined initially by Yield x price per tonne, less costs of production come into the equation. Lentils and chickpea prices are export driven, predominantly into the Indian Sub-Continent. Faba beans are also food driven initially, into the Middle East, but so to do local stock feeder and grazier demand have an impact where there are surpluses. Field peas do also be export driven, predominantly into the Indian Sub-Continent again, but the price has been driven by local feed prices in recent years. Lupins at the moment are purely driven by local stock feeder and grazier demand.

So when we grow our pulses on farm, we can opt to either: sell the grain to food markets or feed users; or use it as part of grazing, supplementary feeding, a finishing program, perhaps even in a feedlot. The stubbles and or the grain can be part of the whole grazing system, even where there is no grazing of the cropped area. Hence the pulse can be 'value added' on farm, and marketed through livestock.

The additional use of pulse stubble and grain can dramatically increase the pulse crop and livestock gross margins. How? By integrating the crop into the whole farm and grazing system. It does require management of the crop, the stock and how the grain and stubble are fed. It may mean sowing only selected areas to the pulse, and growing a forage crop or clover in the wetter areas for example. It may mean additional watering points in the stubble, and several cycles of lambs introduced into the stubble rather than all at once. It may mean pre-conditioning the lambs to the grain before entering the pulse stubble. Growers and graziers are doing it in other higher rainfall mixed cropping areas.

Why grow pulses in the crop rotation? The answers are:

- To enable rotation of herbicide groups and to avoid or manage herbicide resistance
- To prevent weed seed set by crop topping or desiccation
- To allow flexibility of seeding dates and spread of the cropping operations, particularly if later sown, to enable greater knock-down weed control opportunities
- To spread risks agronomically and market-wise
- To assist in disease control, both root and foliar, in all crops
- To benefit soil structure and nitrogen status
- To fit and compliment grazing systems
- To reduce some input costs

The risks are lack of experience, and fear of failure. But we now have better pulse varieties, and a greater understanding of disease control which had been a problem in the past.

## In conclusion:

**We can now more reliably grow pulses in higher rainfall environments, and they can compliment grazing and cropping systems. We can put our pulses onto an “overseas plate”, or onto an Australian or overseas plate via livestock systems. When we target an “overseas plate,” it is important that the varieties and products we produce are what the customer requires, and this has been happening with our latest varieties.**

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