

Soybeans for a soil boost this summer

By Julie Ferguson, Pulses and Grain Legumes, Queensland Primary Industries and Fisheries

Are you looking for a profitable crop this summer? Are you looking for a break from the summer cereal weed problems? Are you thinking that your soil needs a healthy boost this year? Interested in growing a crop with minimal inputs? Then soybeans may be the crop for you and the following checklist will start you out on the right track.

- Varietal choice and planting windows

Soybeans are quite a unique plant, they are photoperiod sensitive. This means that they begin flowering in response to shortening day lengths. The same germplasm (or variety) will perform quite differently across our growing regions in Australia.

So it is essential that growers consider varieties suitable for each growing region. Talk to local agronomists and seed resellers for the most appropriate variety and planting window.

- Choosing good quality planting seed

Soybean seed is quite a large planting seed, especially some of the new varieties. Consider the seed count when doing planting rate calculations as well as germination

and vigour tests. The soybean seed, while being large, is relatively fragile compared to other seeds and needs to be treated with care to avoid vigour issues. Keep the seed in a cool and dry location and do not drop the seed bags off the back of a ute.

- Consider the weed spectrum

Assess the paddock for weeds – grasses are relatively easy to control in soybeans as they are a broadleaf weed and there are quite a few registered options.

Broadleaf weeds are a little more difficult, but there are some very good registered options.

- Nutrition and inoculation

The soybean plant is relatively self sufficient in relation to nitrogen fertiliser as long as it is inoculated effectively. It will benefit from a starter fertiliser such as Supreme Z and depending on soil nutritional status in different areas consider zinc, phosphorus, molybdenum, sulphur, boron and other trace elements.

Effective inoculation is essential if good nodulation is to be achieved, especially in paddocks new to soybeans. The strain of

rhizobium for soybean is E which is different from other legumes.

- Insect control

Insect control is relatively easy in soybeans compared to some other crops. For more information on how to check, when to check, what to look for and what are the latest control options, discuss carefully with local agronomists and check out the IPM blogspot and web site.

- Diseases

Soybeans are susceptible to a range of diseases and in most years none of them seriously threaten yield. Using a common sense approach to managing the disease triangle of host, pathogen and environment will ensure problems are minimised.

- The economics

Each agronomist, consultant, reseller and grower will have different ways of managing their crops and preparing their land. The following gross margin comparison is a useful guide.

For more information contact Julie Ferguson
Ph: 07 4693 2486. For a copy of the *Soybean Growing Guide for Queensland* contact Julie or call 132523.

SUMMARY OF DRYLAND 2009 SUMMER CROP GROSS MARGINS

	Maize	Fallow mungbeans	Navy beans	Sorghum	Soybeans	Sunflower
Gross income						
On-farm price (\$/t)	210	550	980	140	500	600
Yield (t/ha)	3.50	1.20	0.80	3.50	1.00	2.00
Gross income (\$/ha)	735	660	784	490	500	1200
Variable costs (\$/ha)						
Machinery operations	56	44	49	61	44	51
Fallow spraying	26	26	26	26	26	26
Seed	100	40	49	46	48	59
Fertiliser	163	20	63	132	44	119
Herbicide	19	20	12	19	12	15
Insecticide	0	25	32	29	22	4
Aerial spraying/scouting		30	31	16	16	16
Pre-harvest spray		18		12		
Harvesting	80	71	74	53	71	64
Total variable costs	444	295	336	394	282	354
Gross margin (\$/ha)	291	365	448	96	218	846
Other considerations						
Production risk	med	high	high	low	high	high
Price fluctuations	med	med	low	med	med	med
Cash cost of growing	med	med	med	med	med	med
Capital investment	med	low	low	low	low	low
Harvest timeliness	low	high	high	med	med	med
Management skills	med	high	high	med	high	high