

Succeeding with soybeans in my farming system

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Our Farm

- **South of Bundaberg, supplying cane to ISIS central mill**
- **We farm a total of 120 Ha**
- **Good water supply (scheme and on-farm)**
- **Variable soil types each with their own difficulties**

Farming Systems

- Harvest cane green and retain trash on soil
- Controlled traffic on 1.83 m beds (2 rows of soybeans, 1 row cane)
- Recently moved from cane monoculture to soybean fallows



ISIS Target 100

- **An initiative by a cooperative mill area to improve the sustainability and profitability of local farmers**
- **Encourage, support and co-ordinate the local soybean industry**
- **The support and assistance has helped us establish the crop on our farm**

Starting out with soybeans

- A large summer fallow in the past few years
- We considered soybean fallow a better option than bare fallow. Cash crop and soil health benefits
- Planting and harvesting contractors the clincher

Our experience so far

First crop	Second crop	Current crop
<ul style="list-style-type: none"> • Small area (5.5 ha) • Grass pre-emergent & broadleaf knockdown • IPM helped us to get away with only one insecticide for Green Vegetable Bug • High irrigation requirements during pod fill • Defoliant • Cane spray equipment 	<ul style="list-style-type: none"> • Most of fallow planted, earlier • Post emergent grass control including volunteer cane • IPM, one GVB spray (aerial) • Unfortunately the contractors planter did not suit our controlled traffic plans • Foliar zinc, molybdenum and urea, defoliant • More water 	<ul style="list-style-type: none"> • Local contractor planting with GPS eliminated the cane/soy row mismatch enabling true controlled traffic • Dry conditions at plant, some poor establishment and nodulation • Low water allocations mean that water budgeting between soybeans and cane important • IPM
<p><i>2.5 t/ha flour grade</i></p>	<p><i>3.7 – 4.3 t/ha (3/4 edible, 1/4 flour)</i></p>	<p><i>Depending on rain</i></p>

Good points

- Soil health
- Free nitrogen
- Potential cane yield response
- \$\$\$\$\$\$
- Easy to grow compared to vegetables
- No extra machinery needed
- Better weed management



Challenges for future success

- Important to remember our primary crop is sugarcane
- Need flexible planting windows (new varieties?)
- Planting with good soil moisture
- Cane farms not designed for large harvesters
- Moving to direct drill soybeans