

CTF in horticulture: implementation and impact

Ed Windley

Farmer, Kalbar



I studied Agricultural science at UQ in Brisbane before working as an agronomist in Central Queensland for 5 years. I then returned to the family farm in the Fassifern valley in 2005. In 2009 I was fortunate enough to join a vegetable CTF tour to Europe at about the same time as we were in the process of implementing a CTF system on the farm.

ABSTRACT: We operate a 93 ha (230 acre) vegetable farm in the Fassifern Valley. Almost all of the farmed area is double cropped every year, with some blocks having 5 crops in a 2 year period. We currently grow Sweet Corn, Green Beans, Carrots and Onions.

A series of wet years beginning in 2007/8 was the motivation to look for a better growing system on our farm. I had seen CTF working well in the grain/cotton industries and it just made so much sense for our intensive operation, where timeliness of operations and tight planting schedules put you under pressure.

Machinery modifications have been ongoing, however the single biggest change was to standardise the row spacing for all 4 main crops. We now grow on 80cm spacings with a 1.6m tractor wheel spacing, where previously onions/carrots were different from beans/corn. The system has evolved and although there is always room for continual improvement, I would consider that it is now working well, even though harvesters are not yet integrated into the system.

- Improved soil condition and increased timelines of operations are the 2 key advantages of our system. The third would be the pleasure of using GPS guidance.
- Initially we had some issues with tractors slipping off tracks. This has mostly been solved by cutting wheel tracks deeper. You lose some of the benefits of untouched wheel tracks, but it stops a whole lot of irritation!

In the future I would like to think we could work out a way of incorporating the harvesters into the system, and encourage a culture of drivers staying in wheel tracks and minimising random traffic. Yield monitoring is also an area that would be of benefit.

Best estimates of CTF effects on:

- The Bottom Line - I would prefer to be deliberately vague about the % yield improvements attributable to CTF, as we have made a lot of enhancements to our growing system in the last few years. However, suffice to say, we have definitely seen a very real lift in average yields, some reduction in costs and have certainly built a more resilient growing system