



Adoption of Strip Tillage Practices



National Vegetable
Extension Network

NEW SOUTH WALES

Background

The *Soil Wealth and Integrated Crop Protection* (VG16078) project engaged with some influential growers in NSW on soil health improvement by using strip tilling as a postharvest procedure and bed preparation for the next cash crop. Other affiliated projects are

- *Integrating sustainable soil health practices into a commercial vegetable farming operation* (VG12115)
- *Adoption of precision system technology* (VG16009) and
- *Optimising cover cropping for the Australian Vegetable Industry* (VG16068).

Activity

Applied Horticultural Research’s Marc Hinderager set up a demonstration site at Mulyan farm in Cowra. The objective of this demonstration was to prove the application of strip tillage has great benefits to farmers, such as fewer tractor passes, increasing organic matter, and improved water holding capacity in soil. A rye corn cover crop is grown over the summer months between cash crops. It’s then sprayed with glyphosate and crimped down using a Northman 1.2 ripper. Shortly after cucumbers (pickles) were planted in the demonstration plot and also in a plot that remained fallow over the summer. Rye corn was also planted for weed suppression. Wildeye soil moisture probes were placed in each plot.

In rain events, moisture was retained in the rye corn demonstration plot and soaked through to the root zone.

In the control plot of fallow ground over summer, water ran straight off and into the tyre rows. Conventionally three tractor passes would have been made to get to that stage. Now only one pass with a tractor is required.



A healthy high yielding cucumber crop

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Other success stories

Val and Sam Micallef of Agnes Banks trialled and now use strip tillage for corn. They found it reduced erosion and helped build healthier soils.

The beds held up when there was a rain event of 90mm and the soil surface was undisturbed.



Wildeye Soil Moisture monitoring tool

Jeff McSpedden of 'Spring Farm' near Bathurst has also embraced strip tillage in the field. He has got five tractor passes down to two; tillage followed by the planter. Time and fuel savings that are the most benefit. Stubble trash in the inter rows also retained more moisture. Jeff says it's a "faster turnaround between crops," the "soil seems to hold up better after heavy rain," "should have done this years ago." "Logistically strip till is way better than conventional cultivation" and you "don't have to beat soil dead to get the next crop in."

Benefits

- fewer tractor passes
- quicker to get the next crop in
- get onto the ground earlier following rains
- even crop establishment
- manage crop or cover crop residues without too much tillage
- increase organic matter.

More information

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