

Cover Crops in Specialty Crops (Vegetables)



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Crops We Grow With Cover Crops

- Cucumbers
- Yellow Squash
- Zucchini
- Bell Pepper
- Hot Peppers
- Eggplant
- Cabbage
- Sweet Corn
- Green Beans
- Hard Squash
- Tomatillos
- Colored Bell Pepper





Why did we start looking into cover crops?
What got us on a path for something
different?

Nematode

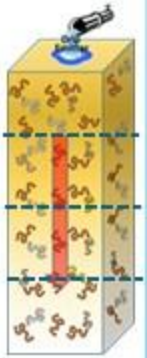
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Started Looking at Depth Distribution of Nematodes



An underpaid over worked Field Assistant ☺

- We started monitoring soil populations
- 1 ft increments to 4 feet deep
- Nematodes at all increments
- 20,000 / 100 cc
- We were placing fumigants wrong
- Started deep turning with Telone



*Bare ground Planting into an
Organically Rich Mulched Environment*





The In-House Experiment: Pepper Production on Bare Ground

Shouldn't we
be able to do
this under
Plastic mulch
to avoid weeds



Cover crops in Plasticulture

- Winter Time Cover-
Oats, Rye Grass, Rye
- Summertime
Cover-Millet,
Sunn-hemp, Cowpeas
- Fertilize the cover-
treat them as if they
are helping you
- Keep the land covered
and something growing
all the time, this helps
improve soil health
- Put as much thought
into your cover crops
as you do the cash
crops



Crops Are Overall Better Because Of The Cover Crops---Why???

Improved erosion control

Improved water retention

Improved weed control

Reduced weeding labor

Less loose plastic from washing the tucks off

Improved yields from healthier soil

Improved fruit quality from healthier soil

Improved fertilizer efficiency

Soil Organic Matter Increases

Life comes back into the soil

Fertilizer Retention in the Soil

Some of the COVER CROPS USED

Winter combinations



Sunnhemp- *Crotalaria juncea*



•Life Starting in the
Soil

Maybe this
works?





Started Incorporating Cover Crops into
Plastic
This has to work, it cant fail....But I had plenty of
Failures

- Live Cover Crops will Inhibit most Synthetic Nematicides.
- Showed a decrease in yield where we had live cover crops in the plastic
- The beds were not as firm while laying plastic
- Plastic layers didn't like the Live Grass Matter



Integrating Raw Organics to Bed from previous Cover Crops





Starting free of weeds is a very important part

Cover Crops are Part of Our Success

- White Fly Control in the Fall has been amazing to see. We saw at least a 50% reduction in white fly's from using Big Cover Crops in the middles of the plastic






Without Cover Crops
we will Lose our Precious
Soil

EPA
Regulations
Erosion





Success
with Cover
Crops
starts with

- Asking The Lord for Wisdom
- Being willing to Change
- Being willing to Fail
- Focusing on Soil Health
- Getting Started



Thank you!

