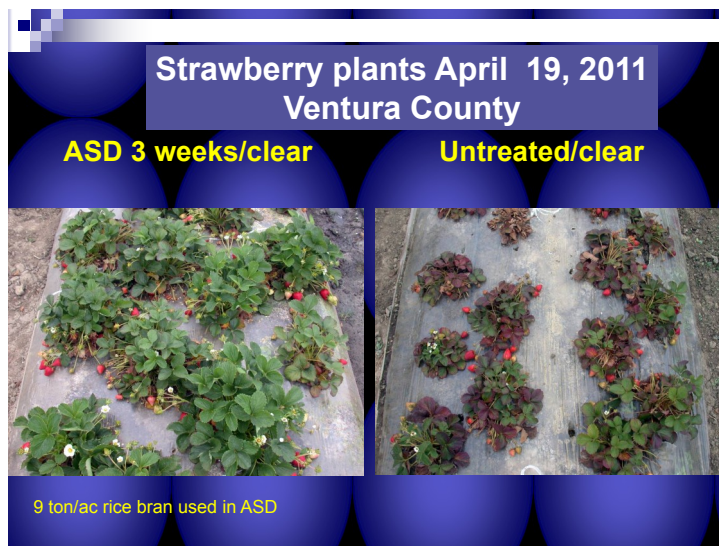


Anaerobic Soil Disinfestation (ASD)

- ◆ With ASD we consistently get an 80-100% reduction of *Verticillium dahliae* microsclerotia in soil using 9 ton/ac of rice bran as a carbon source.
- ◆ Yields under ASD generally equivalent or better than fumigant controls.
- ◆ Initial data suggest it is an economically viable option.
- ◆ Currently testing its effectiveness against other key pathogens.
- ◆ Also now testing at a larger field scale.



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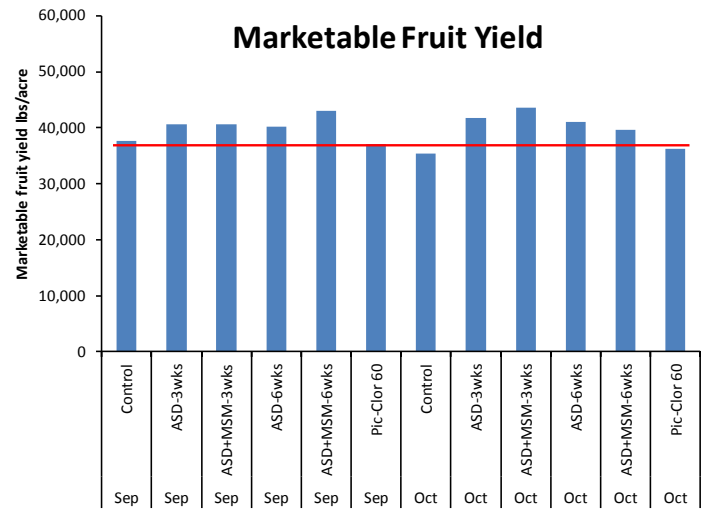
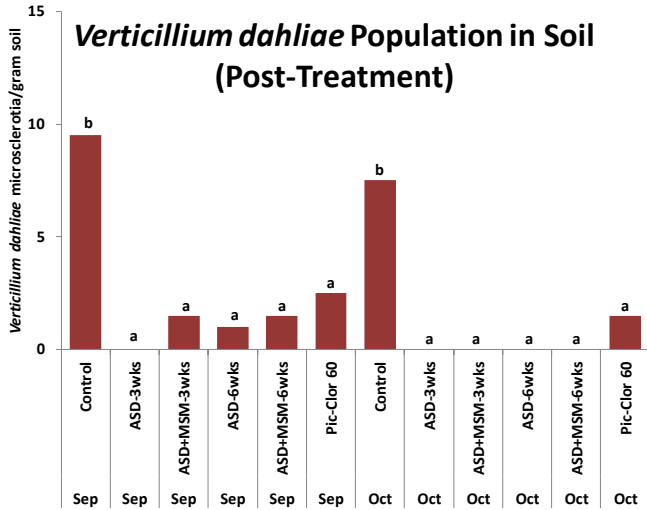
History of ASD

- ◆ ASD was developed as an alternative to soil fumigation in the Netherlands and Japan, and is currently used extensively in greenhouse production in Japan.
- ◆ It has been found to be effective at suppressing many soil borne diseases, as well as nematodes for a range of crops.
- ◆ When combined with solarization, where temperatures are high enough, it may also control weeds.

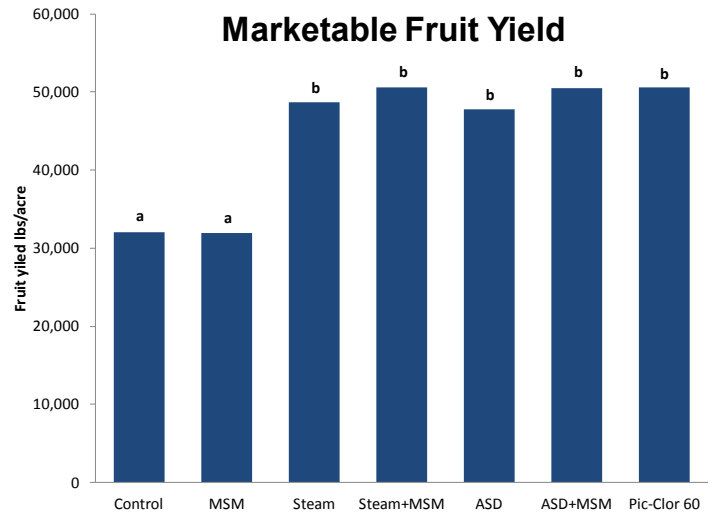
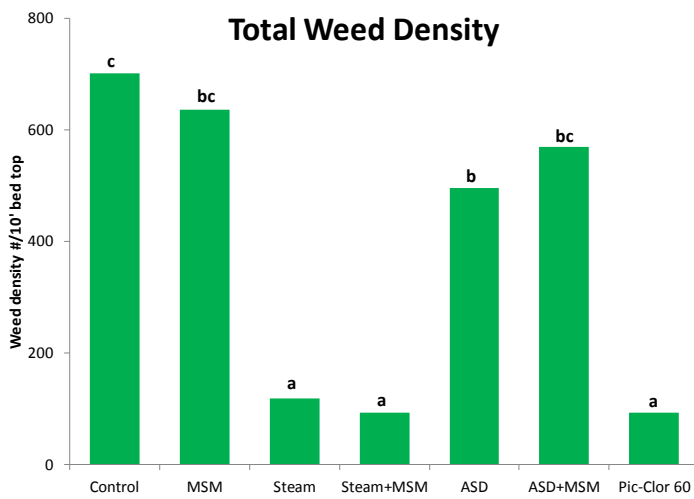
How to do ASD

1. Spread carbon source such as rice bran
2. Incorporate in soil
3. Form beds and lay drip tape
4. Cover with plastic tarp
5. Irrigate and keep at field capacity
6. Leave for 3 weeks
7. Punch holes in plastic
8. Transplant strawberries a few days later

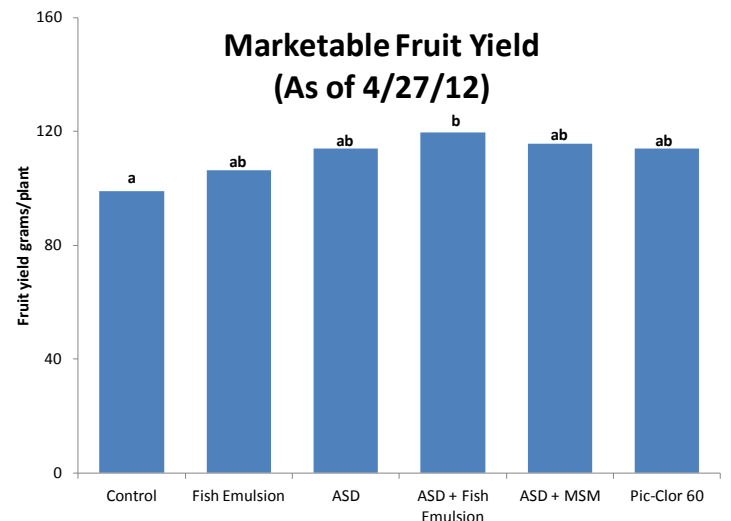
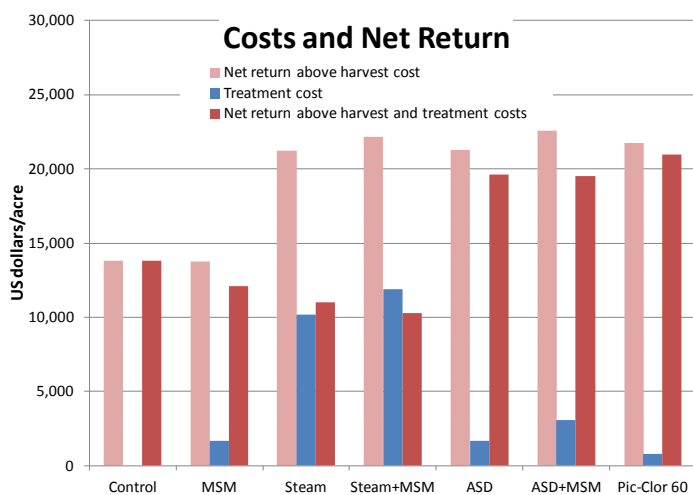




Castroville 2010/11



Watsonville 2010/11



Watsonville 2010/11

Santa Maria 2011/12

MSM: Mustard seed meal.