

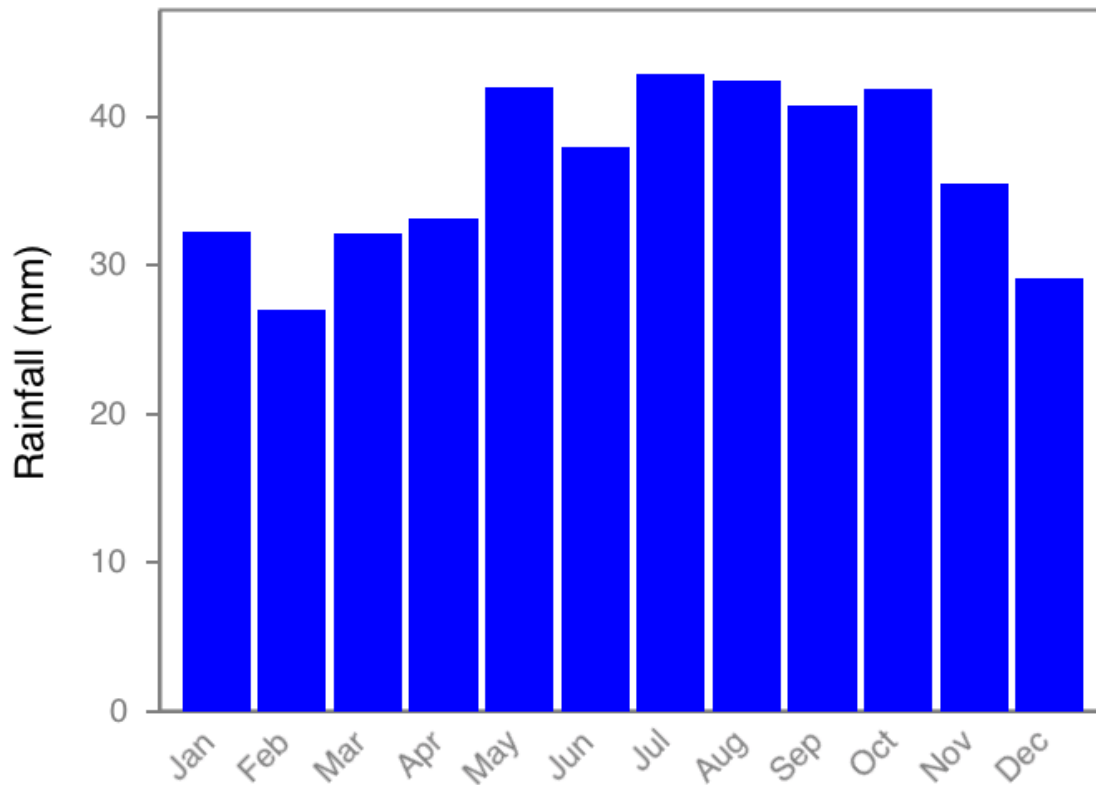


Sims Pastoral Family at Pine Grove



Pine Grove - Victoria
10 000 acres Clay soils

ECHUCA AERODROME monthly average rainfall from Jan 1949-Jun 2017



Average Annual: 435mm

Highest Monthly: 241mm in Mar 1950

6th Generation Farmer













2008
No more MAP
Seed dressings
Fungicides
Insecticide
Rotations



**2015 GSR=159mm
4 days at grain fill 40 deg celsius
yield 1.9t/ha ave.**

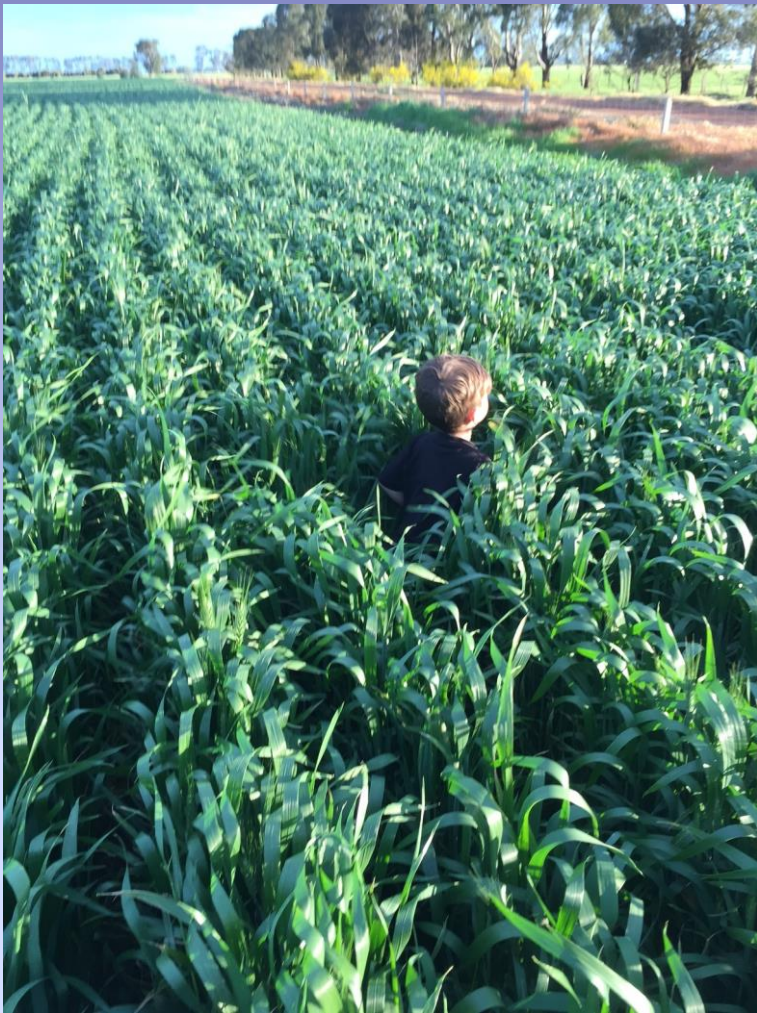




Synthetic Fertiliser MAP



Biological Liquid Fertiliser



2016 GSR 317mm yield double long term ave. Low inputs

1. Eliminate or minimise tillage
2. Keep the soil covered
3. Maximise Diversity and Rotations
4. Minimise Chemicals and Synthetic inputs
5. Stop Compaction CTF
6. Livestock







Zero Till Soil



Tilled Soil

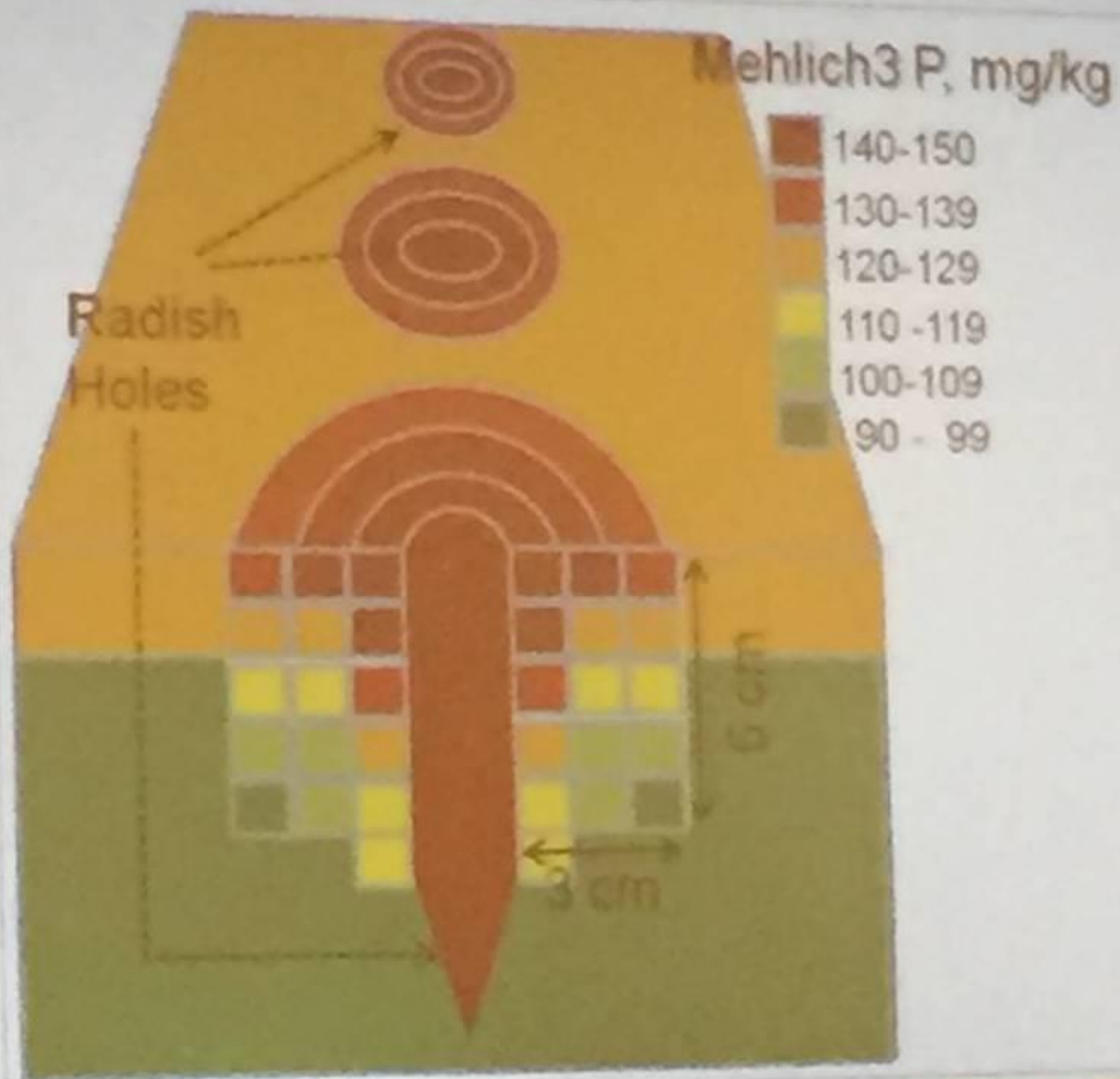


30 Minutes Later !!!





P Concentration around radish holes



White and Weil (2)











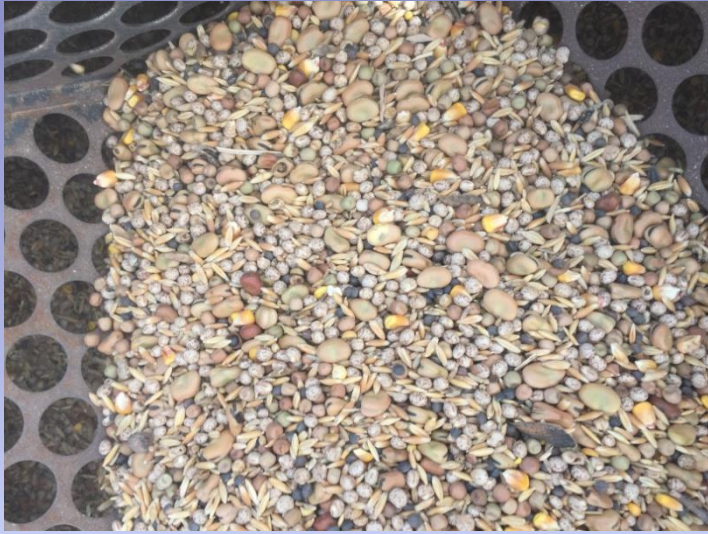


We always try to aim for 100% soil cover either by stubble residue or living plants











Diversity & Rotations

2016 program

- Wheat
 - Barley
 - Oats
 - Cereal Rye
 - Canola
 - Beans
 - Chick Peas
 - Buckwheat
 - Sunflowers
 - Millet
- Vetch/Canola
 - Beans/Canola
 - Peas/Canola
 - Wheat/Beans
 - Wheat/Tillage Radish/Sunflowers
 - 300Ha of 10way mix covers









**Minimise or
eliminate synthetic
ferts and chemical
inputs that are
detrimental to soil
biology**





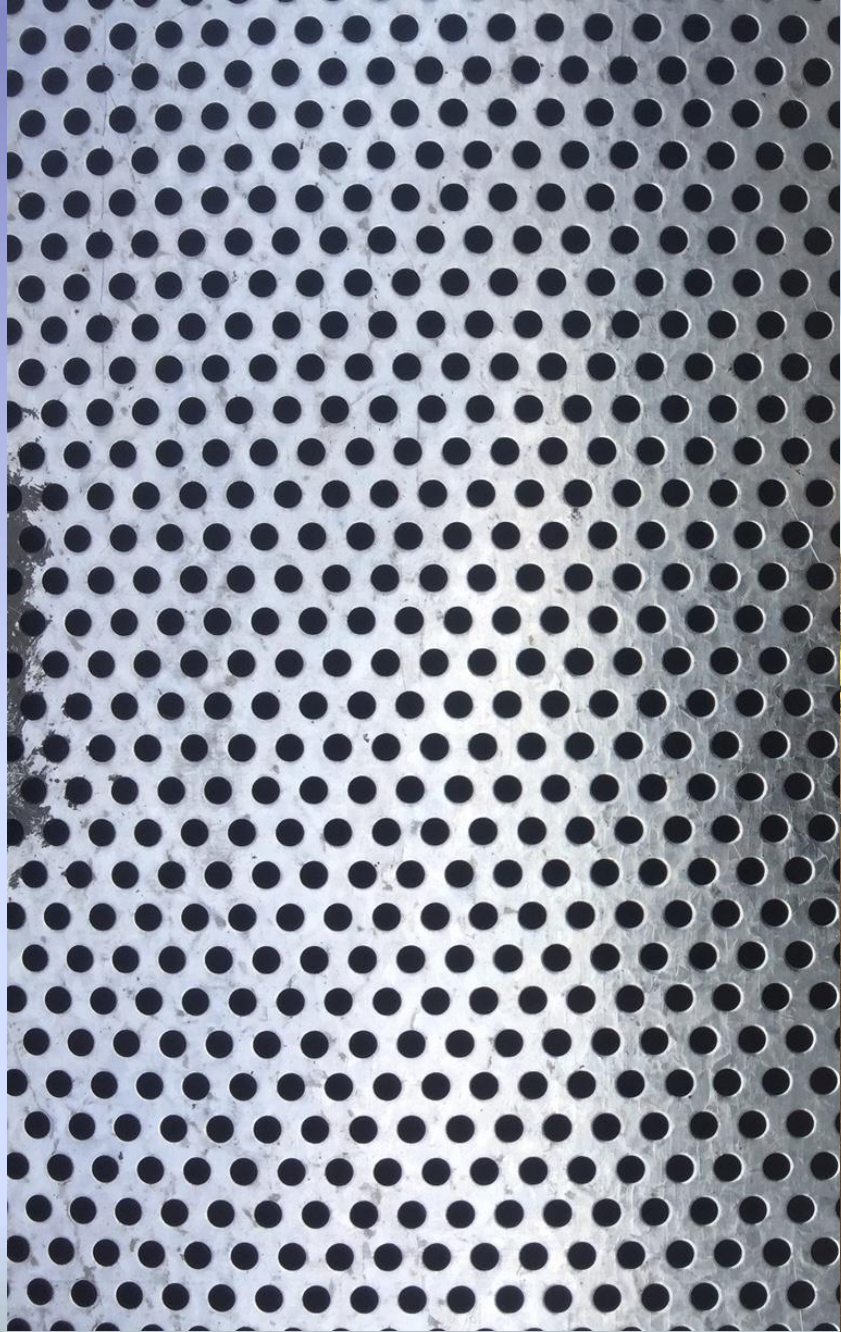












“Solve problems don’t treat symptoms”

Gabe Brown













12mt CTF 3-1



























Thank you!!!

simspastoral@gmail.com

**Twitter:
[@grantsims@grant_sims](https://twitter.com/grantsims)**