

**Project:** SYN00008: Early seeding - a knowledge gap strategy for very early season starts, Craig Brown, Synergy

**Bio:** Craig Brown, Synergy Consulting WA. – [cbrown@synergyco.com.au](mailto:cbrown@synergyco.com.au). “Works to travel” & “If you are not eating Samboy salt and vinegar chips are you really eating chips at all?”

### TRIAL PROGRESS:

Two fully replicated identical trial sites were developed within an east west sloping paddock in the low rainfall south one of WA. Trials were developed on the back of some solid 2015 data (as presented to RCSN in 2016) showing limited downside from multiple crops being sown earlier in the landscape. The two 2016 sites had north of a 30m difference in elevation in order to maximise frost exposure. 4 crop types, wheat, barley, oats, canola by 2-3 varieties selected. The main aim was to select a regionally adapted variety as a priority and then also to maximise any maturity length differences eg. Long and short season. Significant differences in TOS and frost damage were recorded however 2016 data showed the elevation aspect was of greater significance. The early TOS was April 20<sup>th</sup> and “normal” was May 20<sup>th</sup>. FIS scores were also conducted.

### EXTENSION ACTIVITY:

86 farmers inspected the sites in 2016 at various stages. Possible changes for future work: possibly aiming for a 1-15<sup>th</sup> April sowing window as the first TOS and/or a 3<sup>rd</sup> TOS as seasons present.

### KEY POINTS:

- There was approximately a 30-50% difference in yield between the two trial sites (1km) for all crop types except oats. (Farmer 3.6-4t/ha wheat top of hill – 500kg bottom)
- Excellent statistical differences between not only crop types but TOS and elevation. Many variables at play but significant trends observed across both trial sites.
- April 20<sup>th</sup> TOS yield was higher for ALL varieties of cereals than May 20<sup>th</sup> at higher elevation.

### FURTHER WORK REQUIRED:

With excellent data created over two years now this work needs continuing validation, probably over a three year project to continue to develop TOS, crop type, variety and elevation differences within seasonal variation.



*Nyabing farmer group visiting trial site 8th August 2016*



*Mid-July phenology differences observed between TOS*