## **SADGA Cropwalks 2017**

Plan a crop walk, expect it to rain!



A great roll up of over 30 growers, researchers and industry stakeholders were in attendance at both crop walks this year.

#### **MID NORTH:**

# Roseworthy, September 6<sup>th</sup>, 2017

The rain held off until lunch which meant that despite windy conditions we were able to access the trial sites at Turretfield/Kingsford and Roseworthy.

At Turretfield Marg Evans gave attendees the findings from the SAGIT/SADGA Crown Rot Trial.



The group then travelled to the trial site out near the Roseworthy College and after a quick bite to eat heard from Stuart Hentschke and Jason Able from the University of Adelaide about the SAGIT Trial for Durum Wheat vs Bread Wheat.





John Green (left) took the opportunity to present Rob Wheeler with a gift and certificate of appreciation for all the work and support Rob has given The Southern Australia Durum Growers Association.

Jason gave us an update of how well the new potential varieties are doing in the field with some very exciting results for varieties due for multiplication in 2019. We also got to hear about findings from the GRDC CAIGE trials which is offering potential for parental material for new variety release and the UQ-UA Speed trials which is generating 6 cycles of lines per annum for prescriptive breeding.





Dr Rhiannon Schilling's report on Improving Wheat Yields on Sodic Soils, a University of Adelaide Trial UA00159 gave some interesting insights into dispersive soils and how wheat diversity lines are being screened to identify novel tolerance to subsoil constraints.

Rhiannon also reported on the SAGIT-funded Drone Trials being conducted at the same site. The Drones are fitted with various cameras and are being used to record images of trial plots at multiple time-points in the growing season. The results then link back to the GRDC Sodic project for biomass, canopy, density and temperature and leaf greenness..

Jason completed the cropwalk with a tour through PBR and Line



The group then went back to the Roseworthy Hotel and enjoyed lunch and continued discussion whereby the heavens opened up with drenching rain.



### **SE & VIC Cropwalk:**

### Wolseley Community & Recreation Centre, October 11th, 2017

The day commenced with BBQ lunch and salads at the Wolseley Community Centre and a light sprinkling of rain however the predicted forecast and BOM radar's confirmation meant the planned cropwalk became a crop 'talk' as the rain became a torrent and the trial sites a muddy trap for the unwary.

First speaker after lunch was Charlie Crozier of MacKillop Group who presented his outcomes for Gross Margins against Durum vs Bread Wheat vs Milling Oats. The SAGIT Trials determined durum to come out on top for gross margins.

Great discussion then ensued with questions being asked around the room to Charlie, Jason Able from the University of Adelaide and Hugh Wallwork of SARDI with responses supported by experienced growers. As a number of people in the room were new to growing durum they found they got more out of the day than they expected with questions relating to:

- Limitations to growing durum in this region
- Protein manipulation
- Frost tolerance
- Any irrigation bonuses?
- What are the silver bullets to getting the best gross margin from a cereal?
- Rotations and variety selection



Dr Hugh Wallwork spoke on the findings from the SAGIT/SADGA Crown Rot trials in which a breakthrough was identified in a breeding line which had a low but useful level of resistance from a bread wheat parent. After crossing and with heavy selection both for resistance and for agronomic adaptation the new lines have consistently demonstrated good resistance

and good adaptation. The 12 best lines from these trials are now in multi-replicated trial sites around SA in the University of Adelaide Durum Breeding Program which includes Roseworthy and Bordertown and show good economic benefits to breeding resistance to crown rot.

Jason Able followed Hugh with his report for the New Varieties, results of the CAIGE trails and the Nitrogen Use Efficiency (NUE) project that has just commenced. Jason said we are entering very exciting times for the future lines of durum. The NUE project will aim to identify a genetic signature



that matches a rice signature and once validated in the lab it can then be validated in the field for breeding adaptive varieties.

Rob Harris of AGT reported that new variety AGT043 should get a quality classification decision later in the month. This new variety, like the majority of durums released, has triple rust resistance, but is slightly taller although shows reasonable lodging tolerance and a good disease resistance package (excluding crown rot).



After a quick cuppa the room reassembled for two panel sessions involving SADGA sponsors and industry representatives. The discussion was strong and valuable to all who attended with long time durum growers contributing their knowledge and experience with best time of sowing, best timing for fertiliser application, seeding rate and rotations.

The day concluded with a magnificent spread of BBQ, Salads and sweets at Alwyn Dyer's Shed.