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HART

**MEDIA RELEASE** 

## Trials open for inspection at Hart Winter Walk with a focus on soil fertility and crop nutrition

With the crop now in, it is the perfect time to see how the plants are progressing and hear from some leading agronomy experts at the Hart Field-Site Group's trial site.

The 2016 Hart Winter Walk will be held on Tuesday, July 19, with a special focus on soil fertility and crop nutrition.

Also on the agenda will be pest management including aphids and snails, latest chemical product releases, and pulse updates on disease, bean time of sowing, innoculants and nodulation.

Dr Sean Mason, Research Fellow from The University of Adelaide's School of Agriculture, Food and Wine will be a special guest at the event, talking about his research in the GRDC's More Profit from Crop Nutrition project.

Dr Mason will speak about Hart's potassium (K) and sulphur (S) response trial and how soil test results link with the trial observations.

While soil tests often suggest more S and K should be applied, a response to fertiliser application is not always seen and Dr Mason will further discuss why and how it relates to the depth of the soil sample.

"Some of the recent work we have been involved in with GRDC suggests that in the first instance critical soil test levels for S need to be refined and therefore this is the first point of inaccuracy," he said.

"There is also some discrepancy between the two most common soil tests for S and the one most commonly used may not actually be measuring the right pool of S.

"In terms of K there is a distinct lack of data for the south in terms of matching soil K test levels with crop response so there is more importance placed back on the grower/agronomist to generate K strips and to marry up crop response with soil K test values from that paddock.

"Nutrient stratification can also be an issue when trying to identify if S or K will be limiting to a crop. Due to S mobility it can move away from the surface soil layer and therefore a traditional 0-10cm soil depth is inappropriate.

"Therefore sampling for S needs to be treated as you would for N. K is less mobile but its stratification is more driven by inherent soil properties and consequently sources of K can also be found in soil layers below 10cm which are important for crop uptake."

Cultivar and variety responses to phosphorus (P) Is another area of interest, and Dr Mason said recent work with South Australian Grain Industry Trust (SAGIT) had been investigating whether new varieties of either wheat or barley were more efficient at scavenging phosphorus (P) sources and therefore could have lower P requirements.

"To date we haven't been able to obtain any significant differences between varieties and their external P requirement," Dr Mason said.

"Economically the benefit of increased yields through the most suitable choice of varieties outweighs any differences between P use efficiency of the varieties.

"Of interest is that this project has identified that P can still be a major limitation to crop yields on specific soil types.

"These soil types tend to have a moderate to high ability to fix applied P and therefore have low soil test values. On these soil types higher than normal P replacement rates are required to obtain the most economical P application rate which has been around 20-30 kg P/ha."

Hear more from Dr Mason, along with the opportunity to ask questions at the Hart Winter Walk on Tuesday, 19 July, 2016, from 9am-midday.

Hart Field-Site Group research and extension manager Sarah Noack said the event was an excellent opportunity to see and learn in an informal setting.

"It's our first post-seeding opportunity to see how the Hart trials are progressing," she said.

"It is also a chance to catch up with other growers and agronomists, have a chat and also ask any questions they might have about what is happening in their own paddocks."

The free event includes morning tea, and no RSVP is required – just turn up to the Hart Field-Site (between Blyth and Brinkworth) on the day.

## Media contact:

HFSG chairman Damien Sommerville on 0417 850 587 *or* research and extension manager Sarah Noack 0420 218 420.



Dr Sean Mason, Research Fellow from the University of Adelaide's School of Agriculture, Food and Wine Photo: Deanna Lush, AgCommunicators

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