THE AGRONOMY COMMUNITY

Agronomic Insight
7 July 2017

Take a confident approach to pre-plant cotton

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There's a lot to like about the start of the season for irrigated cotton growers, with healthy cotton prices and dry soils making the upcoming ground preparation and pre-plant fertiliser work easier.

By now, many growers will have either commissioned their adviser to design an appropriate post-harvest soil sampling program, or they may have completed their post-harvest soil testing programs and will soon know of any nutritional deficits.

Last season proved trying and perhaps one to forget for many, but the legacy is likely to be variable and abnormal nutrient removals. It is important to measure to manage this by soil testing following picking, before turning to season 2017-18.

Cotton agronomists can choose from a wide variety of pre-plant fertilisers and blends in their recommendations.

For some, it is an opportunity to create custom blends that will meet the requirements of individual crops and the expectations of dynamic rotations or tight production programs.

For others, it is a chance to offer quality fertilisers that growers have come to know and trust over many years.

When it comes to offering growers confidence, the Granulock® name is surely tough to beat.

Granulock Z, Granulock Z Extra and Cotton Sustain are the backbone of IPF's offer to the cotton market.

That's because they offer just the right balance of plant available nutrients. They are quality, free-flowing fertilisers that are easy to handle on-farm. And they continue to perform in the field year after year.

Here are a few points on the agronomic advantages of each fertiliser for your consideration this season.

Cotton Sustain

The nutrient balance in Cotton Sustain® reflects the nutrient removal ratios of high yielding cotton crops, particularly for phosphorus and potassium.

Cotton Sustain contains 6.1% nitrogen, 12% phosphorus, 22.5% potassium, 2.2% sulphur and 0.55% zinc.

Cotton Sustain is useful at higher application rates in cotton country that has tested low in potassium, marginal in phosphorus and low in zinc.

Where subsoil limitations affect root depth, exacerbate compaction or limit nutrient uptake, a pre-plant basal application of potassium will ensure the nutrient is available in the top layer of the soil.

Early applications of potassium are useful, especially in cotton, which can take up excess amounts of potassium during periods of lower plant demand and release it later as demand from developing bolls increases.

Be aware that foliar potassium may be required if the soil cannot supply enough from early squaring right out to the peak of boll filling. Peak requirements of potassium can be as much as 4 kg/ha of potassium per day in a high yielding cotton crop.

GRANULOCK® Z

Granulock Z often ends up in pre-plant cotton recommendations for its plant available zinc and high phosphorus concentration.

The fertiliser is made right here in Australia and contains 11% nitrogen, 21.8% phosphorus, 4% sulphur and 1% zinc in every granule.

This carefully balanced formulation of nutrients promotes strong early root growth, vigorous establishment, healthy emergence and even crop growth.

Zinc is needed for a range of reasons. Some vertisols in Queensland and New South Wales are known to have high soil pH levels, so plants can find it more difficult to access enough zinc.

Irrigated cotton crops may also find it challenging when they are planted into paddocks following a long fallow, which may have reduced arbuscular mycorrhizal fungi (AMF) populations.

AMF colonise root systems and help plants absorb less mobile nutrients such as zinc and phosphorus. Where they are lacking, a good supply of phosphorus and zinc right where the crop is to be planted can make all the difference to start the crop foraging for more from soil reserves.

Remember that zinc and phosphorus are immobile in the soil, so if distribution is patchy, plant uptake is patchy too.

With Granulock Z, growers can be sure of uniform distribution of plant available zinc in the application trench, because there is zinc in every granule. MAP blends do not offer this!

Granulock Z Extra

With zinc in every granule, Granulock Z Extra is an economic and effective way of supplying higher rates of zinc to cotton crops.

It contains 11.6% nitrogen, 19.8% phosphorus, 5.4% sulphur and 2% zinc.

Granulock Z Extra contains a mix of water soluble zinc that will go into soil solution for immediate availability, more sparingly available zinc oxysulphate to feed later root development and some zinc oxide that will become available later in the crop and build soil zinc levels.

Growers who place a high importance on ease of handling and precise distribution of nutrients in the paddock will appreciate Granulock Z Extra.

As a quality blend of Granulock Z and our exclusive Australian-made blend partner, Granulock Big Z, nitrogen, phosphorus, sulphur and zinc are in every granule of Granulock Z Extra.

This eliminates the potential for nutrient segregation and uneven application that can occur with MAP and zinc sulphate monohydrate blends.

Granulock blends

Agronomists are welcome to create custom blends using quality IPF fertilisers like Granulock Z, Granulock Z Extra or Cotton Sustain.

Also consider adding GranAm®, Muriate of Potash, Sulphate of Potash, MAP, urea or Granulock Big Z (10% zinc and 16.1% sulphur) to address multiple or unbalanced nutrient needs using the one fertiliser application.

Seed safety

It is a good idea to remind cotton growers that any pre-plant fertiliser containing nitrogen and/or potassium should be banded at least 10 cm below and 10 cm to the side of the intended plant line to avoid the potential for fertiliser burn at planting and root pruning later in the season.

For more information on any of these pre-plant fertilisers, call me on 0417 896 377 or email bede.omara@incitecpivot.com.au

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