PEARSONS

Pearson's Grain and Transport
Swan Hill Stockfeeds

Agronomy News June 2019

In this issue:

Weather report:

For quite a while since New Years' Day things appeared ominous- extended heat and a very dry autumn.

It broke in May, and some areas have done quite well;

May rainfall totals (BOM):

Balranald 46.6; Annuello 40.8; Ultima 53.2; Swan Hill 54.2

ENSO Outlook: "Watch"

Spot SOI: -9.6 Spot IOD: +0.53

30 day rolling SOI (26/5): -7.4

Imidazolinone tolerant barley marketing situation

Some very important export marketing issues have appeared for IMI barley, and is detailed in the ***Barley Australia*** statement 29/3/2019

Grain Traders Association (GTA) Statement 2/4/2019:

"The industry statement identifies that IMI tolerant barley varieties (Spartacus CL or Scope CL) released and classified as MALT varieties may have some restrictions on market access for some export destinations (eg. Japan and South Korea). This potential restriction is due to the existing Maximum Residue Limits (MRLs) in those destination markets being below the residues allowed in Australia following the use of IMI registered chemicals according to approved Australian label directions in the production of these barley varieties." •

What can we expect?

The implications to members of the GTA instantly become implications to us as barley growers.

1. Appropriate segregation at delivery sites
2. Commodity vendor declarations for IMI barley is almost a certainty.

Three IMI herbicides are registered for use in IMI barley;

1. Sentry pre-emergent
2. Intervix post-emergent
3. Intercept post-emergent

Please talk to us at SHSF about this chemistry and your tank mix options

PEARSONS

Pearson's Grain and Transport
Swan Hill Stockfeeds

Ticking off trace element deficiencies

The topic of trace element nutrition is not fully supported by research information here as much as it is in WA (Dr. Ross Brennan) and SA (Dr. Nigel Wilhelm).

More work needs to be done in the Victorian Mallee with tissue testing against specific soil type zones. However, the work of King and more recently Dr. Nigel Wilhelm in SA confirms;

Zinc and manganese deficiencies are exacerbated when carbonates are close to the surface (calcarosols)

Copper deficiency is common on alkaline sands and deep siliceous sands (Kandosols)

There is also an environmental influence that is sometimes overlooked- Copper is aggravated by dry topsoils, and zinc is aggravated by cold snaps.

Here is a brief summary of risk factors:

Micronutrient	Crop with highest sensitivity to deficiency
Copper	Wheat, barley
Manganese	Lupins, peas
Molybdenum	Legumes, canola
Zinc	Wheat, barley, oats

Source: R. Norton, IPNI

Further reading: Unkovich (2014) "A review of the potential constraints to crop production on sandy soils in low rainfall south-eastern Australia"

Soil type	Frequency of trace element deficiency
Deep siliceous sands	Moderate: Zinc, copper, molybdenum
Calcarosols	High: Zinc, manganese

Trace elements for early post-ems

Swan Hill Stockfeeds Sandhill and Limestone mix: 8.5% Zinc, 5.1% Manganese, 1.7% Copper. 0.17% Molybdenum.

An application of 1.2L/ha of this product delivers a base load of 100 grams of zinc per hectare.

This mix is sulphate based, and mixes readily with MCPA LVE, grass herbicides, Brodal. We have found the only products it will not mix with are amine formulations of MCPA and 2,4-D.

The ***S & L*** mix is a low-cost, heavily nutrient dense product which comes in at only $2.16/hectare.

Copper deficiency in wheat

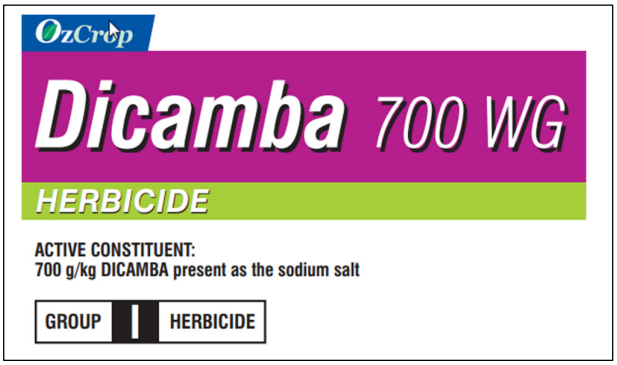
PEARSONS
Pearson's Grain and Transport
Swan Hill Stockfeeds

Dicamba 700WG

We have access to a granular (sodium salt) formulation of dicamba

Dicamba 700 WG avoids potential problems with the old dicamba DMA salt (500 or 700 liquid)- marginal crop safety under dry conditions and frosts, late application timing (5 leaf onwards), low safety margin mixed with LVE.

Dicamba 700WG is an ideal alternative to clopyralid for in crop control of volunteer legumes, especially vetch. The increased crop safety means it can be mixed with LVE and Tigrex.



Can we graze cereal grain crops?

The winter feed dip could be overcome by grazing certain cereal crops. The BCG work in the wet years of 2010 and 16 showed no yield decline in all tested wheat and barley varieties following grazing. The same trial in a drier type season of 2009 showed Hindmarsh barley suffered a yield penalty from grazing whilst Buloke barley, Wyalcatchem, Derrimut, Yitpi and Correll wheats did not suffer from grazing.

Well managed grazing delays crop maturity a few days- this can be very useful in mitigating frost impacts in August.

Guidelines:

Grazing commence sometime through the brief 3-5 leaf stage- check for some development of secondary (crown) roots first. Grazing duration 7-14 days

Stock need to be removed prior to the first node stage to prevent grain yield losses.

Early maturity barley varieties can hit the first node stage quite quickly. The lack of vegetative vigour in Spartacus does not lend itself to being truly "dual purpose"

Best bet; Kord CL wheat (see withholding periods), Scepter, Trojan, Beckom wheat, Compass and Fathom barley

Best to avoid; Spartacus CL barley

Candidate paddocks; dry sown crops, high nitrogen, frost prone, low brome grass population

Chemical grazing withholding periods; MCPA LVE 7 days, propiconazole 7 days, Intercept 28 days, Midas 28 days, Tigrex 7 days, Triathlon 14 days, Atlantis 28 days

PEARSONS

Pearson's Grain and Transport
Swan Hill Stockfeeds

Triathlon- now also registered in oats

Triathlon has had a proven history for brilliant weed control in wheat and barley; not only brassica weeds including radish, but fumitories, amsinckia and iron weed to name a few.

Triathlon has bromoxynil (Group C) included (and therefore 3 modes of action) for resistance managnement, and has a great reputation for controlling wild radish populations with a history of both phenoxy and DFF use

Triathlon is now registered in oats. A few hot tips though- spray early (late applications of bromoxynil can suppress oats temporarily). The same caution as with Bromicide MA exists for temperatures exceeding 20C the week following application

Adama has trialled tank mixes with results showing that Lontrel, Topik/ clodinafop, UAN 32 up to 50L/ha and fungicides look very acceptable.

Another bonus is the short 4 week residual from the DFF component, which provides ongoing control of turnips, mustards and radish.

The most typical application rate come in at $4.55/ acre which is great

Have a nitrogen plan in place

International urea values bottomed out a few weeks ago, and it since moved up to the $525 mark. It is likely that India will be in the market this month for a very large parcel, and this is exerting demand pressure. The currency is also hovering around US$0.69; note that a 2 cent drop in currency equates to AUD$20 for a US$500 item.

Within Australia the major fertiliser traders appear to have modest stocks on hand and a fair bit of commitment to that existing volume- whilst more shipments are due in July, a broad rain event or two could create temporary supply shortages in the meantime.

In advance of such a rain, we need to think about having nitrogen coverage for cereal on cereal at the least, to encourage tillering. Should urea be tight, the first cereal following a legume could wait until the second round.

The opposite applies with canola, which should have been already top-dressed; the hybrids in particular need nitrogen early, at the 4-6 leaf stage

A potentially very rewarding exercise would be to construct variable rate topdressing maps to prioritize nitrogen expenditure according to soil type. These maps can be made very cheaply in collaboration with the firm ***Data Farming***. See us for further information.

PEARSONS

Pearson's Grain and Transport
Swan Hill Stockfeeds

Spot form of net blotch seen in barley

Since the recent showers we have seen the first appearance of blotch in Spartacus CL barley, especially if its Spartacus on Spartacus due to IMI soil residues. We have also frequently seen the effects from 2- and 3- year-old stubble.

In the Wimmera (4.0t/ha) environments with lush canopies it is not unusual to spray LaTrobe (cousin of Spartacus) 2-4 times with the low rate of propiconazole. Here we would take a watch and act (the act being spray prior to a rain event). GRDC trials at Quambatook show yield losses of 3-4% and loss of retention 10-13% in average years.

A highly effective way of minimising yield loss and maximising grain size is a one or two spray programme aimed at end of tillering and possibly again prior to head emergence ***Throttle 500*** at 125mL/ha.

Herbicide resistance- there are different kinds

1.Target Site resistance- seen in the paddock as patches or a sprinkling of "complete fail" of the herbicide> Often has instant cross resistance with other herbicides of similar mode of action. Common in Groups A and B

2. Non target site mutations are seen in the paddock as sick weeds that may not necessarily die. We can often see this as "rate creep", where a little more chemical needs to be used each year to get a decent job

2a. Non target site mutations- increased detoxification. Surviving weeds have an enzyme or multiple enzyme activity that detoxify the herbicide. Can happen with Groups A, B, C, D and I

2b. Non target site mutations- decreased translocation. Seen in Group M and L, sometimes A

The prime example is that some farmers that relied on Hoegrass (fop A) frequently without using other chemistries found that resistance occurred reasonably fast. When they switched to Achieve (dim A), it performed only moderately well because of cross resistance.

Key message: Talk to us about your recent herbicide usage to create a spray and crop rotation that will prevent costly weed blow-outs

SHSF technical services and product supply information:

Doug 0418 527849 Tore 0438 324591 Shop 50332880