



PURSEHOUSE RURAL

a g b u s i n e s s s e r v i c e s



Kickin Clods

Weed control in late sorghum

Some districts have been fortunate to receive some good rain which has allowed a late sorghum planting. Dry conditions leading up to rains have often made it difficult to control established fleabane and now some crops will be carrying a population of maturing fleabane. While weeds may not always be at competitive levels, the consequence of uncontrolled seed production for the management of the weed in the subsequent fallow and successive crops heightens the need to consider effective control in sorghum.

Few options are available for in-crop fleabane control but plants can be effectively treated with Starane Advanced plus atrazine, providing soil moisture conditions are sufficient to promote active growth. Treatments can be applied from the 4 leaf stage of sorghum once secondary roots have formed. Both Starane and atrazine providing activity against fleabane. Applied alone at commonly used application rates, these products are usually insufficient to provide acceptable control. To obtain the best results, Starane Advanced should be included in the tank mix with atrazine, which should not be applied at a rate of less than 1 kg of active constituent per hectare. However, there is evidence that higher rates of atrazine may be more effective.

Activity of atrazine applied post-emergence to fleabane is contact in nature so effective spray coverage is important. For this reason, the application of at least 70 L/ha of water as a carrier is recommended and should be applied as either a fine or medium spray quality.

Atrazine will provide good pre-emergence control of fleabane at rates not less than 1 kg of active constituent per hectare, though this rate may not be sufficient to provide residual control of weeds germinating later in the crop.

Starane Advanced plus atrazine treatments provide good safety for over-the-top treatments up to the booting stage of sorghum, although it is recommended to apply treatments with droppers or even as shielded treatments (allowing for coverage into the plant-line) when spray coverage of the target weeds is compromised by the development of the sorghum canopy.

Tordon 75D plus atrazine, while effective against fleabane, does not offer the same level of crop safety when applied as an over-the-top treatment in sorghum and is generally not a preferred option in this situation. This is despite the obvious advantage of utilising picloram (the active ingredient in Tordon) as an additional residual treatment for the control of late in-crop emergence of fleabane and other weeds including milk thistle. Be aware that Tordon products and their plant back periods to certain broad leaf winter crops if double cropping becomes an option. If you wish spray your sorghum crop or discuss things further please contact your Purseouse Rural Agronomist.

2009-10 in review

The year of 2009 in agriculture will be written down as one of the most volatile years in recent history. Prices have been at all time highs and lows and product demand has been outstripping the ability to supply. Glyphosate prices have reduced from between \$13.00-\$15.00 per litre to \$3.50-\$4.00 per litre. Similarly, fertiliser prices have dropped from \$1700 per tonne to \$820 per tonne. While growers were happy to see their costs decrease, there was also a dramatic fall in the price of grain.

As prices decreased people became reluctant to purchase product early and decided to hold off until the last minute to ensure they received the cheapest price possible. This had a flow on effect to supply, with many suppliers having an extremely high priced product being sold well below their cost position. As with the global financial crisis throughout 2009, many companies including resellers reported large financial losses. Suppliers became reluctant to import large quantities of product into Australia.

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With the Australian dollar low throughout the first half of 2009 and with large high priced stock holdings already in the system, it was a case of sell what you can as quickly as you can, creating the sudden drop in prices. The volatility in technical prices, shipping rates, fuel prices and the escalation of the Australian dollar, led to the eventual rebound in costs being at a level where they had never been seen before.

In 2009, corporate resellers made many changes to their business structures leading to rationalization. Volatility in the stock and grain market created instability in the workplace as well. Late 2009 saw Graincorp announcing the closure of their Ag-Plus division. Elders and Landmark are still looking to sell Hi-Fert and the largest Ag-Chem business in Australia, Nufarm, have rejected an offer from Sinochem and is now positioning itself with a 20% offer from Sumitomo.

So what does that mean for 2010?

We have already seen major shortages of supply on key products such as glyphosate, amine, fertiliser and some insecticides. Added

to the shortages in supply is the small amount of summer cropping in the ground. With water stored in the soil and with cropping rotations, you can only assume a higher than average winter crop to be planted. This will no doubt see further shortages on seed, winter herbicides, fungicides and insecticides and the possibility of further increases on glyphosate and fertiliser prices. With this in mind we will need to prepare for future volatility.

Growers and resellers need to work closely together to forecast and secure seasonal requirements early. This will allow some security in supply and possibly a better purchasing position if the market trends continue upwards.

We all ask when is the 'norm' going to return? What is the "norm"? Maybe we have to acknowledge we may be heading into a new phase in the way we all perform business. A closer relationship between reseller and supplier and a closer relationship between grower and reseller/Agronomist?

Mirids in Mungbeans

Mirids can cause significant crop losses in mungbeans with yield reductions of up to 25-50% common where high mirid populations (eg 10/m²) are left uncontrolled. Mirids can be present in mungbeans at any stage from seedlings to podding. Budding, flowering and early-podding crops are at greatest risk as Mirid populations usually increase with the onset of budding and peak during late podfill.

Damage caused by mirids

Mirids are sucking insects and feed by piercing the plant tissue and releasing a chemical that destroys cells in the feeding zone. This causes plant tissue to discolour and die. Mirids prefer to feed on flowers, buds and young pods, causing these to abort (shed). Mirids may also attack more mature pods, damaging the seeds inside without causing shedding.

Monitoring for mirids

Mirids are very mobile and in-crop populations can increase rapidly from budding onwards. As such, crops should be inspected weekly during the vegetative stage (to pick the start of budding) and twice weekly from budding onwards until post flowering.

Action level

Mirid thresholds for budding/flowering mungbeans are 0.3-0.6 per m² for aerial and ground rig respectively. While this may seem very low, this is more a reflection of the cheapness of the preferred mirid pesticide – dimethoate (\$4/ha + application). Note that these thresholds are the break even point (cost of control = value of likely damage) and that action generally only needs to be taken if populations exceed these levels. However, in practice, mirid populations usually increase rapidly from budding onwards, and due to the low cost of control, spraying at or below -threshold populations would be justified. **Cultural control** A crop that has a short flowering period reduces the risk of mirid damage. Flowering periods can be shortened by planting on a full moisture profile and by watering crops just before budding. Consider planting crops in at least 50 cm rows (as opposed to broadcast planting) to facilitate easier pest sampling.

Dimethoate is often applied at lower than label rates (eg 200-250 mL/ha). These rates give excellent mirid control but have far less impact on many beneficials. Trial results have shown that the addition of salt (0.5% NaCl) as an adjuvant, improves the effectiveness of dimethoate at lower rates. The amount of salt used (0.5%) has no phytotoxic effect on summer pulse crops. 'Hard' and 'Alkaline' water can markedly lower the effectiveness of dimethoate and should be countered by adding a buffering agent such as LI700.

Source: QDPI&F 'Beatsheet' newsletter.



Mirid damage reduced mungbean pods (above)
Severe mirid damage to pods (right)