

Keeping glyphosate resistance at bay

With 87 sites across Australia now confirmed with glyphosate resistant ryegrass, the fight against its spread in Western Australia is becoming an imperative.

The Grains Research and Development Corporation (GRDC) has been a leader in the battle against glyphosate resistance, supporting research into practical means of defeating the problem.

Weed consultant, Andrew Storrie from Agronomo, stresses that while WA's dry summers work in its favour, with less glyphosate use than in eastern Australia, the potential for increased use, if Roundup Ready canola crops were widely grown, could pose problems.

"But if growers remain vigilant, do some planning and stay on the ball, glyphosate resistance needn't be a big issue," Andrew said.

He stresses that growers need to pay particular attention to firebreaks and fence lines, which can harbour glyphosate resistant weeds.

"Resistance can appear in areas with little competition, like fence lines and firebreaks and can be dragged into the cropped area with harvest and seeding equipment.

Not expensive, but effective

"A total vegetation control approach, using herbicides with different modes of action is effective and needn't be expensive. Paraquat, diuron and simazine can control resistant and susceptible annual ryegrass.

"A handful of resistant plants can become a problem if nothing is done about them, so vigilance is important. Small numbers of plants can be hand-pulled and there is no plant resistance to this."

Andrew says there are currently eight to 10 populations of glyphosate resistant ryegrass in WA.

"It's a problem that could increase if climate change brings increased summer rainfall, so it's essential that we keep control over the problem, now," he concluded.

Further information: Andrew Storrie,
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CROP DOCTOR SOUTH

With Peter Reading

WAKE UP TO VRT THEN SLEEP TIGHT

With far too much stress and anxiety in the world, it's nice to reduce it wherever possible.

So, if you've been lying awake half the night, tossing and turning, worrying about whether targeting your fertiliser applications to your paddocks' different soil types is going to pay off, you can relax. Well, probably.

According to Dr Bill Bowden of the Department of Agriculture and Food WA (DAFWA), fertilising paddocks differently using Variable Rate Technology (VRT) pays off – you just have to know where and when to do it, because it doesn't pay off in all circumstances.

Bill really ought to know.

The GRDC Western Region 2009 *Seed of Light* Award winner is the scientific 'guru' of Australian broadcast fertiliser application.

His early research contributed to the development of 'Decide' – the first fertiliser decision support system in Australia. And it remains the basis for recommendations for profitable fertiliser applications to crops and pastures.

So, it's no surprise that he had an attentive audience at this year's WA Agribusiness Crop Updates when presenting a model for fertilising different soil types that he co-developed with CSIRO's Dr Michael Robertson and Dr Roger Lawes.

The Crop Updates, organised by DAFWA and supported by the GRDC, allow consultants, grower groups and agri-business advisers to catch up on the latest research and trial results.

Bill told the audience that modern seeding equipment makes it easy to change fertiliser rates and sources on the run, so there's no reason not to change rates within paddocks if the variability in potential crop yields justifies it.

Returns from VRT are highest across a wide range of yield levels where background soil fertility is low. This holds true even in low yielding seasons, however at very high soil fertility there's no effect of VRT for any seasonal conditions.

At low and moderate levels of paddock fertility, returns from VRT increase with better seasonal conditions, magnifying the potential yield differences between zones.

In short, Bill said there has to be a significant yield and/or soil fertility difference on significant areas in a paddock for it to pay.

While those differences are everywhere in WA, the challenge is to find out how large they are and where they exist in your particular cropping paddock.

As Bill's old school motto, '*savoir c'est pouvoir*', says – 'to know is to be able'. Or, if you prefer plain English, stick to English philosopher Francis Bacon's dictum: 'Knowledge is power'!

Bill pointed out that the benefits of VRT have to be weighed against the size of the investment needed to buy it.

So, the good news is that if you've been fine tuning your fertiliser applications to your paddocks then you really can afford to sleep soundly tonight.

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According to DAFWA's Dr Bill Bowden (right), fertilising paddocks using variable rate technology pays off, provided you know where and when to do it. He's pictured admiring his GRDC Western Region 2009 *Seed of Light* Award after it was presented by GRDC Western Region Panel Chair, Neil Young of Kojonup.