GLYPHOSATE RESISTANCE

Weeds do become resistant to glyphosate. There are now 24 species in 17 different countries that have developed resistance to normal rates of glyphosate. Australia is one of the worst countries and there about 25% of all resistant species developed it on the roadside following frequent use of glyphosate only to control roadside vegetation.

Resistance to glyphosate will also happen in NZ if precautions are not taken:

Do you know what herbicide resistance is?
Do you have procedures in place to avoid it?
Do you use glyphosate repeatedly and by itself?
Do you know the benefits of using herbicide mixes or an alternative herbicide every 2 or 3 years?

If metsulfuron is regularly used as a tank mix with glyphosate the probability of developing glyphosate resistance is considerably reduced. However if glyphosate is used alone then information from Australia indicate that resistance will develop within 15 years.

Not concerned about it?

Currently it costs about $3.80/km for sufficient glyphosate to spray a 1 m wide strip on either side of the road. Adding metsulfuron would cost a further $1.20.

Alternatives to glyphosate are not only more expensive but are less friendly to the environment. Activated amitrole as a substitute would cost $7.40/km but other herbicides would still need to be added to the mix, either metsulfuron at $1.20/km or terbuthylazine at $30/km.

If non-residual alternatives (e.g. Bio-Safe) were required the cost would balloon to $245.00/km.

So what should I do?

Learn about glyphosate resistance.
Put protocols in place to avoid it happening.

What if it has already happened?

Scout roadsides about 3-4 weeks after spraying and look for any weeds that are still green.
If found, get them identified.

There is help (free of charge) available, contact:

- Mike Parker at the Foundation for Arable Research
  - parkerm@far.org.nz
- Trevor James at AgResearch
  - trevor.james@agresearch.co.nz