



## Tip of the Month

December 2018

### ADJUVANT SELECTION WITH GLYPHOSATE

It has become a standard practice in South Africa to apply glyphosate with an ammonium sulphate adjuvant. The use of the correct ammonium sulphate adjuvant is also endorsed by Villa.

However, glyphosate is also often applied with other adjuvants, including surfactants, oils, stickers and various others. It is assumed that all of these adjuvants have a beneficial effect on glyphosate weed control.

Unfortunately, this is often not the case and certain adjuvants can be highly antagonistic to glyphosate and could result in reduced weed control. The glyphosate ultimately gets the blame for the poor efficacy while the poor adjuvant selection is the actual culprit.

#### Oil adjuvants

Oil adjuvants are sometimes used with glyphosate or are a part of the tank mixture because they are recommended with the tank mixture partners. Oils are very effective adjuvants if they are applied with certain herbicides at the correct rates.

However, glyphosate is particularly sensitive to the antagonistic effect of certain oils and there are only a select few oil adjuvants that can be applied effectively with glyphosate. Many glyphosate registration holders in the USA have very strict guidelines about what oil adjuvants can be used with their products.

The reason for this is because some oils can inhibit the glyphosate absorption process. These antagonistic oils can include certain petroleum (mineral), vegetable (plant) or methylated seed oil adjuvants.

There are only a few oil adjuvants that have been specifically formulated for use with glyphosate. Please consult the glyphosate registration holder before using an oil adjuvant.

#### Other adjuvants

Other adjuvants, besides oils, are also often applied with glyphosate. These include surfactants, stickers, buffers, fulvic acid, adjuvants that claim penetrant properties, and various others. The use of some of these adjuvants could be problematic because glyphosate labels tend to be specific about adjuvant use.

When applying an adjuvant with glyphosate, please get the approval of the glyphosate registration holder. Furthermore, please make sure that the adjuvant actually increases glyphosate efficacy and that it is not antagonistic.

Adjuvants are often used with glyphosate with very good intentions, but if the incorrect adjuvant is selected, it could decrease efficacy and weed control.

#### Villa's stance

Glyphosate weed control will be improved by the use of the correct adjuvant. Unfortunately, the opposite is also true, where glyphosate weed control is reduced by incorrect adjuvant selection.

Please ensure that the adjuvant use is supported by the glyphosate registration holder and that efficacy is enhanced. Also make sure that adjuvant claims with glyphosate are based on scientific trial results and not on assumptions.

If the adjuvant claim sounds too good to be true... it probably is too good to be true!

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