



Tip of the Month

April 2019

ADJUVANTS – A NECESSITY AND NOT JUST AN INSURANCE POLICY

It is often assumed that adjuvants are just an insurance policy to ensure optimal crop protection product (CPP) performance. By assuming this, it is implied that they are an optional extra.

This may have created the perception that adjuvants are a luxury and that they can be left out when the growers want to save money. Villa's stance is that even though adjuvants can be regarded as an insurance policy, they also form an integral part of spray mixtures. If the recommended or correct adjuvant is not used, it will most probably result in unacceptable control or it could even cause other unwanted issues like physical incompatibility.

Why are adjuvants a necessity?

All CPP have limitations, including sensitivity to salt antagonism from carrier water, alkaline hydrolysis, poor coverage, limited spreading, slow absorption, poor performance under lower humidity conditions etc. It is often impossible to rectify these limitations with in-can adjuvants because there is limited space in the CPP formulation. Therefore, tank-mix adjuvants are often recommended to address the limitations of the CPP in order to maximize the efficacy.

If the correct adjuvant is not included in the spray mixture, the limitation will not be addressed, and the control will be poor. Adjuvants are cost-saving products because they increase control and decrease the probability of having to do a re-application.

Adjuvants are therefore not a luxury and should be regarded as an important part of the spray mixture.

It's all about the numbers

Any CPP limitation that is rectified will ensure that more of the active ingredient reaches the site of action to ensure more effective control. If the limitations are not addressed, it equates to a lower rate of CPP being applied. It's all about getting sufficient active ingredient onto and into the plant to ensure effective control.

Remember, every little bit of efficacy counts. If the CPP has two limitations that only decrease the efficacy by 5% each, there could be a 10% decrease in control if an adjuvant is not used. This could probably be just enough to result in unacceptable control and a re-application!

Villa's stance

It is crucial to rectify the limitations of the CPP to give it the best possible chance to succeed. If a CPP is registered with an adjuvant, it is important to use it. Please ensure that quality adjuvants are used as they are an integral part of the spray solution and not just an insurance policy.

Never substitute the recommended adjuvant with another product as the chemical and physical properties can differ, which could result in poor efficacy or other problems like physical incompatibility or even crop damage.

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