



Tip of the Month

January 2020

WHAT ADJUVANTS CAN AND CAN'T DO

Adjuvants are incredible products and if used correctly, they will increase the efficacy of many crop protection products (CPP). However, it is also important to know that adjuvants also have limitations and are not an insurance policy against poor practices. In this edition, the do's and don'ts of adjuvants will be discussed briefly.

What adjuvants can do

The six major groups of adjuvants are buffers, salt adjuvants, deposition agents, surfactants, oils and stickers. These six groups of products improve spray water quality (salt adjuvants & buffers), manage the droplet spectrum (deposition agents) and increase retention, coverage (surfactants, oils & stickers), spreading of droplets (surfactants & oils), encapsulation (stickers) and absorption of CPP (surfactants & oils). Therefore, adjuvants reduce the influence of external factors and restore the activity of the CPP to a level closer to its potential. It is important to use the correct adjuvant to address specific factors and also to adhere to label recommendations.

What adjuvants can't do

Adjuvants are not an insurance policy against unregistered tank-mixtures and practices. Adjuvants limit the influence of external factors on CPP. However, CPP should always still be applied according to label recommendations and under the correct climatic conditions.

Adjuvants are not a rate-reducing tool. Adjuvants should be used to improve the stability and efficacy of CPP, and not to reduce rates. Never apply a reduced and untested CPP rate, even when using adjuvants.

The aim of adjuvants is to primarily improve control, not to reduce the CPP rate.

Adjuvants, if used correctly, are not crop damaging products. Adjuvants do not normally make the CPP "hot," as many people still believe. Adjuvants restore the activity of the CPP to attain more of its potential. If phytotoxicity is encountered, other factors are far more likely to have contributed. These factors include improper application, unregistered tank mixtures, too many components in the spray tank, hot and dry conditions, low humidity etc. If adjuvants actually do contribute to crop damage, it will probably be associated with one of the above. However, unregistered and incorrect adjuvant selection may contribute to phytotoxicity, and should be avoided.

Adjuvants are not silver bullets. They are designed to stabilize and increase the efficacy of CPP. Don't believe any outrageous claims about adjuvants. If it sounds too good to be true.....it probably is!

Villa's stance

Villa believes in the use of adjuvants as they stabilize and increase the efficacy of spray mixtures. However, there are still so many myths about adjuvants that need to be clarified. Adjuvants are not silver bullets and should be used responsibly to attain effective control of pests and weeds.

Contact Brian de Villiers
for more information on
adjuvants and water quality
082 880 0974 or
bdevilliers@villacrop.co.za