



Tip of the Month

December 2020

ARE THERE REALLY DIFFERENCES BETWEEN ADJUVANTS?

Over the past few years Villa has tried to encourage the correct use of adjuvants to increase and stabilize the efficacy of our crop protection products (CPP). However, we still occasionally get feedback suggesting that there is no difference in CPP efficacy, regardless of the adjuvant that is used. This is because adjuvant performance is evaluated over only one or two applications. When comparing products, we must gain a broad perspective of numerous applications over various environmental conditions. The reason for the misperception that all adjuvants are equally effective will be discussed in more detail below.

The role of adjuvants

It is vitally important to understand precisely what the role of an adjuvant is before making any incorrect assumptions. An adjuvant is used to assist the CPP to reach more of its potential. Each CPP has a potential that it could theoretically reach if all environmental factors are perfect. Obviously, this potential is never reached because it is impossible for all environmental factors to be optimal. Adjuvants are therefore used to help the CPP to perform more effectively under the harsh conditions that CPP are often exposed to.

Correct adjuvant choice makes a difference

CPP are sometimes applied when conditions are quite favourable. These conditions include high humidity, warm weather, actively growing plants and acceptable water quality. Under these conditions it may be difficult to see differences between adjuvants. The reason for this is because there is very little opportunity for the adjuvants to assist the CPP efficacy because there are few limiting factors. It is under these conditions that people often make the incorrect assumption that all adjuvants are equal and that there is no merit in using the recommended adjuvant as the replacement product is just as effective. This is a very dangerous assumption because adjuvant differences are difficult to pick up under optimal conditions.

It's under harsh conditions when these differences will be most pronounced. The efficacy of a CPP that is applied with two adjuvants in separate applications may not show a significant difference under optimal conditions. However, when this CPP is applied with the same two adjuvants under harsher conditions, the difference in efficacy could be huge. It is under these sub-optimal conditions where incorrect adjuvant choice will be exposed. Unfortunately, in South Africa these sub-optimal conditions are often the norm and not the exception.

Villa's stance

Quality adjuvants have the most benefit when the CPP is exposed to limiting factors. It may be possible to get away with incorrect adjuvant choice under optimal conditions, but adjuvant differences will be exposed when there is one or more limiting factor that can only be addressed by certain adjuvants. It's under these circumstances that complaints may arise about the efficacy of the CPP, while the problem is actually the incorrect adjuvant choice. It is important to know that when the recommended adjuvant is replaced with another product, the chance of poor control becomes a reality. Choose adjuvants wisely and talk to your Villa marketing advisor when in doubt.

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

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