



Multikomponent byvoegmiddels

Deur Brian de Villiers

Daar het onlangs 'n tendens begin ontwikkel om eerder multikomponent byvoegmiddels in plaas van veelvuldige produkte te gebruik. Die redes hiervoor sluit in gerief, laer vervoerkoste en makliker berging. Ons het geen probleem met multi-komponent byvoegmiddels nie, en Villa het selfs 'n paar van hierdie produkte in ons byvoegmiddelreeks. Dit is egter belangrik om die implikasies en beperkings van sekere van hierdie produkte te begryp. Ons sal die buffers en southbyvoegmiddels bespreek om ons standpunt te verduidelik.

Buffers

Verskeie buffers op die Suid-Afrikaanse mark bevat benatters in die formulasie. Die primêre funksie van hierdie produkte is om die pH van die spuitoplossing te verlaag, maar dit het ook sekere behoud- en verspreidingseienskappe wat deur die benatter verskaf word. Neem egter in ag dat die spasie in hierdie formulasies beperk is, daarom bevat dit gewoonlik 'n betreklik klein proporsie benatter. Sommige van hierdie produkte is vir boordgewasse ontwikkel waar lae benatterdosisse dikwels toegedien word. Daarom sal die benatterdosis heelwaarskynlik heeltemal te laag vir die meeste rygewastoedienings wees. Maak te alle tye seker watter benatterdosis benodig word. Indien dit meer is as wat die produk verskaf, mag dit die moeite werd wees om eerder aparte buffer- en benatterprodukte te gebruik.

Southbyvoegmiddels

Buiten die waterkondisioneerder, bevat verskeie southbyvoegmiddels ook ander komponente in die formulasie, onder meer benatters, herbenatters en sure. Eerstens moet verseker word dat al die komponente in hierdie produkte benodig word.

Word versuring byvoorbeeld vir die primêre katioon-sensitiewe onkruidodder, sowel as vir die ander tenkmengsel komponente, benodig? Tweedens is dit belangrik om te verseker dat al die komponente teen voldoende dosisse teenwoordig is. Dit is sinneloos om 'n byvoegmiddel te gebruik wat genoeg katioon-neutraliseringsvermoë het, maar nie genoeg benatter of herbenatter verskaf nie. Derdens moet verseker word dat geen komponente in die byvoegmiddel antagonisties teenoor enige produk in die spuitmengsel is nie. Villa streef altyd daarna om byvoegmiddels met die korrekte aktiewe bestanddele aan te beveel, en teen dosisse wat effektiwiteit verseker. Dit kan óf 'n multikomponentprodukt óf veelvuldige byvoegmiddels wees.

Villa se mening

Multikomponent produkte is 'n gerieflike manier om verskeie byvoegmiddel oplossings te verskaf. Dit het baie voordele, maar ook beperkings. Wanneer hierdie produkte gebruik word, moet daar seker gemaak word dat die dosisse, aktiewe bestanddele en kenmerke, voordelig vir die primêre produk is, sonder om ander spuitmengselkomponente te benadeel. Kontak jou Villa landboukundige vir meer inligting oor byvoegmiddels en watergehalte.



Laeveld Agrochem

Together cultivating success

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Multi-component adjuvants

By Brian de Villiers

There is a recent trend to rather use multi-component adjuvants instead of multiple products. Among the various reasons for this are convenience, reduced transport cost and easier storage. We have no problem with multi-component adjuvants, and Villa even has a few of these products in our adjuvant range. However, it is important to understand the implications and limitations of using some of these products. We will be discussing the buffers and salt adjuvants to explain our standpoint.

Buffers

Various buffers on the South African market contain surfactants in the formulation. The primary function of these products is to reduce the pH of the spray solution, but they also have some retention and droplet spreading properties provided by the surfactant. However, it is important to understand that the space in these formulations is limited, therefore it usually only contains a small proportion of surfactant. Some of these products were developed for orchard crops where low surfactant rates are often applied. Therefore, the rate of surfactant will probably be way too low for most row crop applications. Always make sure what rate of surfactant is required. If it is more than what the product supplies, it may be worth your while to rather use separate buffer and surfactant products.

Salt adjuvants

Besides the water conditioner, many salt adjuvants also contain other components in the formulation. These include surfactants, humectants, acids and various others. Firstly, one must ensure that all the components in these products are necessary. For instance, is acidification required for the primary cation-sensitive herbicide as well as for the other

tank-mixture components? Secondly, it is important to ensure that all the components are present at sufficiently high rates. It is pointless to use an adjuvant that has sufficient cation-neutralizing ability but insufficient rates of surfactant or humectant. Thirdly, ensure that none of the components in the adjuvant are antagonistic to any product in the spray solution. Villa always strives to recommend the correct adjuvant active ingredients and rates to ensure efficacy. This can be either a multi-component product or multiple adjuvants.

Villa's stance

Multi-component products are a convenient way to supply several adjuvant solutions. They have many advantages but also have limitations. When using these products, please make sure that the rates, active ingredients and properties, will be beneficial to the primary crop protection product, without antagonising other spray mixture components. Contact your Villa agronomist for more information about adjuvants and water quality.