



Benatters en olies

Deur Brian de Villiers

Van al die soorte byvoegmiddels is benatters en olies sekerlik dié waaroor daar die meeste verwarring heers. Hulle formulasies is verskillend – benatters is wateroplosbaar en olies vorm weer 'n emulsie in water. Hoekom hulle so misverstaan word, is omdat hulle soortgelyke eienskappe het, naamlik behoud, druppelverspreiding en opname. Daarom word die twee produkte dikwels omgeruil, met swak resultate. Alhoewel hierdie byvoegmiddels soortgelyke eienskappe het, behoort dit met verskillende gewasbeskermingsprodukte (GBP'e) geposisioneer te word. Produk-etiket is normaalweg duidelik oor of 'n benatter of olie gebruik behoort te word, maar nogtans word duur foute nog dikwels gemaak.

Posisionering

Wanneer 'n GBP registrasiehouer besluit om 'n benatter of olie met hulle produk te registreer, geld daar 'n paar belangrike kwessies. Eerstens moet die formulasie van die GBP in ag geneem word. GBP'e met wateroplosbare formulasies, soos die oplosbare vloeistowwe of korrels, is dikwels meer effektief met wateroplosbare benatters. Daarteenoor vaar die oliegebaseerde GBP'e met byvoorbeeld emulgeerbare- of suspensiekonsentraat-formulasies beter met 'n oliebyvoegmiddel. Tweedens moet tenkmengselkomponente in ag geneem word. Indien twee GBP'e dikwels in die tenkmengsels gebruik word, maar verskillende byvoegmiddelbehoefte het, moet 'n kompromie gemaak word. Dan word 'n byvoegmiddel gewoonlik gekies wat voordelig vir die sensitiefste produk is, sonder om die ander GBP te benadeel. Registrasiehouers neem ook ander faktore in ag, soos fitotoksiteit, omgewingstoestand, teiken-onkruid en gewasse. Daarom is dit uiters belangrik

om die etiket-aanbevole byvoegmiddel te gebruik omdat baie werk vir die registrasie gedoen is.

Uitsonderings op die reël

Daar is egter altyd uitsonderings op die reël. Soms mag onkruidodders met spesifieke formulasies met die "verkeerde" byvoegmiddel geregistreer wees, byvoorbeeld 'n benatter in plaas van 'n olie. Daar kan baie redes hiervoor wees. Een rede kan die kans op fitotoksiteit wees. Daarom mag die benatter 'n bietjie minder effektief as die olie op onkruid wees, maar dit is ook die veiligste opsie op die gewas. Dit is uiters belangrik om by die etiket-aanbevole benatter of olie te bly. Versuim om dit te doen kan tot oneffektiwiteit, of in sekere gevalle, tot gewasskade lei. Daar is gewoonlik 'n goeie rede vir 'n byvoegmiddel registrasie, daarom is dit belangrik om die etiket se aanbeveling te volg.

Villa se mening

Die besluit oor of jy 'n benatter of oliebyvoegmiddel moet gebruik kan heel verwarrend wees. Moenie die risiko van 'n toediening verhoog deur die verkeerde byvoegmiddel te gebruik nie. Etiket gee gewoonlik 'n goeie aanduiding van watter byvoegmiddels gebruik behoort te word. Kontak jou Villa landboukundige vir meer inligting oor byvoegmiddels en watergehalte.



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Surfactants and oils

By Brian de Villiers

Surfactants and oils are probably two of the most misunderstood adjuvant groups. Their formulations are different, with surfactants being water soluble, while oils form an emulsion in water. The reason for the misunderstanding is because they have similar properties, namely retention, droplet spreading, and absorption. Therefore, they are often used interchangeably with poor results. Although these adjuvants have similar properties, they should be positioned with different crop protection products (CPPs). Product labels are often clear whether a surfactant or oil should be used, but costly mistakes are still frequently made.

Positioning

When a CPP registration holder decides whether to register a surfactant or oil with their product, a few important issues arise. Firstly, the formulation of the CPP must be considered. CPPs with water-soluble formulations, like the soluble liquids and granules, are often more effective with water-soluble surfactants. On the other hand, the oil-based CPPs with emulsifiable, suspension or other concentrates, often do better with an oil adjuvant. Secondly, tank-mixture components must be considered. If two CPPs are frequently applied in tank mixtures, but have conflicting adjuvant requirements, a compromise needs to be made. Then an adjuvant is normally selected that is beneficial to the most sensitive product, without antagonising the other CPP. Registration holders also take other factors into consideration, such as phytotoxicity, environmental conditions, target weeds and crops. Therefore, it is vitally important to use the label recommended adjuvant because a lot of work has gone into the registration.

Exceptions to the rule

However, there are always exceptions to the rule. Sometimes, herbicides with specific formulations may be registered with the "incorrect" adjuvant, for example a surfactant instead of an oil. There could be many reasons for this. One reason could be to reduce the chance of phytotoxicity. Therefore, the surfactant may be slightly less effective than the oil on weeds, but it is also the safest option on the crop. It is vitally important to stick to the label recommended surfactant or oil. Failure to do so could result in inefficacy or, in rare cases, crop damage. There is normally a good reason for an adjuvant registration, therefore it is important to adhere to the label.

Villa's stance

Surfactant and oil adjuvant use can be quite confusing. Do not increase the risk associated with a CPP application by using the incorrect adjuvant. Labels normally give a good indication of which adjuvants should be used. Contact your Villa agronomist for more information about adjuvants and water quality.