



Laeveld Agrochem

Saam boer ons vooruit

Sept 2025

DIE VOORUITGANG VAN BYVOEGMIDDELS

Deur Brian de Villiers

Byvoegmiddels word al vir dekades saam met gewasbeskermingsprodukte (GPE'e) gebruik. Hul primêre funksie is om GBP'e te help om hul volle potensiaal in die meeste toestande te bereik. Dit beteken dat die effektiwiteit van die GBP'e meer stabiel sal wees onder swak weerstoestande, of wanneer dit met swak spuitwater toegedien word. Verkeerde byvoegmiddelkeuses word egter nog dikwels gemaak, wat tot swak effektiwiteit lei. Byvoegmiddels word ook nog verkeerdlik vir gewasskade blameer. Hierdie verkeerde keuses van byvoegmiddels, en wanpersepsies oor hul rol in oneffektiwiteit of gewasskade, is deels omdat ons nie beseft hoe byvoegmiddeltegnologie en -aanbevelings oor tyd ontwikkel het nie. Soos in ander bedrywe het byvoegmiddeltegnologie geweldige vordering gemaak oor die afgelope drie dekades. As ons hierdie produkte korrek aanwend, sal hulle beheer onder uiteenlopende toestande bevorder en stabiliseer.

Produktegnologie

Dertig jaar gelede het ons geweet dat glifosaat sou baat by die gebruik van 'n herbenatter. Dit hou die spuitdruppelresidu vir 'n verlengde tydperk vogtig en verhoog die opnametyd en -hoeveelheid. Daar is egter eers later ontdek dat sekere herbenatters baie effektiwer as ander is. Oor tyd het die glifosaatbyvoegmiddels wat herbenatters bevat, dus ontwikkel. In die verlede, toe glifosaat dikwels alleen toegedien is, was dit aanvaarbaar om die pH van die spuitoplossing betekenisvol te verlaag. Glifosaat word egter tans dikwels in tenkmengsels toegedien waar 'n uiters lae pH tot fisiese onverenigbaarheid kan lei. Die lae watervolumes wat dikwels daarmee gepaardgaan, vererger hierdie probleem. Glifosaatbyvoegmiddels het daarom deurlopend ontwikkel om met die moderne tendense tred te hou.

Aanbevelings

Sekere byvoegmiddelformulasies het vir dekades nie verander nie, en dit is nog net so effektief soos toe dit vrygestel is. Die aanbevelings het egter oor tyd aangepas om met moderne GBP'e en tegnologie tred te hou. Dertig jaar gelede was die gebruik van buffers feitlik standaardpraktyk. Dit is voordat ons geweet het dat 'n uiters lae pH die oplosbaarheid en effektiwiteit van sulfonielureums en sekere ander produkte verlaag. In die verlede is oliebyvoegmiddels gereeld saam met glifosaat gebruik. Dit is voordat ons geweet het dat sekere oliebyvoegmiddels nie so effektief is nie, en selfs antagonisties teenoor glifosaat kan wees. Villa sal slegs die gebruik van byvoegmiddels met olie goedkeur indien dit voordelig is. Aanbevelings het daarom ook oor tyd ontwikkel om met die nuutste tegnologie en navorsing tred te hou.

Villa se mening

Byvoegmiddelprodukte en -tegnologie het oor die afgelope dertig jaar baie gevorder. Alhoewel baie ouer byvoegmiddels nog steeds suksesvol toegedien word, weet ons soveel meer oor wanneer en hoe om dit toe te dien. Wanneer byvoegmiddels korrek aangewend word, sal dit beheer verhoog en stabiliseer. Verkeerde byvoegmiddelgebruik kan egter lei tot swak effektiwiteit, gewasskade en wisselvallige beheer. Kontak jou Villa landboukundige vir meer inligting oor byvoegmiddels en watergehalte.



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Together cultivating success

Sept 2025

THE PROGRESSION OF ADJUVANTS

By Brian de Villiers

Adjuvants have been used with crop protection products (CPPs) for decades. Their primary function is to help CPPs to reach their full potential under most conditions. This means that the efficacy of CPPs will be more stable under adverse weather conditions, or when applied with poor quality spray water. However, incorrect adjuvant choices are still often made, resulting in poor control. Adjuvants are also still wrongfully blamed for crop damage. These incorrect adjuvant choices, and misconceptions, are partially because we are not aware of how adjuvant technology and recommendations have evolved over time. Adjuvant technology, just like in many other industries, has made great strides over the last three decades. If we use these products correctly, they will enhance and stabilise control under various conditions.

Product technology

Thirty years ago, we knew that glyphosate would benefit from the use of a humectant. This keeps the spray droplet residual moist for an extended period and increases the absorption time and amount. However, it was only discovered later that certain humectants were much more effective than others. The glyphosate adjuvants that contain humectants have therefore evolved over time. In the past, when glyphosate was frequently applied alone, it was acceptable to decrease the spray solution pH significantly. However, nowadays glyphosate is often applied in tank mixtures where an extremely low pH can lead to physical incompatibility. This is compounded by the low water volumes that are frequently applied. Therefore, glyphosate adjuvants have consistently progressed to keep pace with the modern trends.

Recommendations

Some adjuvant formulations have stayed the same for decades and are just as effective as when they were launched. However, the recommendations have been adapted over time to stay abreast of modern CPPs and technology. Thirty years ago, the use of buffers was standard practice. This is before we knew that the solubility and efficacy of sulfonyleureas and certain other products were compromised by an extremely low pH. In the past, oil adjuvants were also often used with glyphosate. This is before we knew that certain oil adjuvants are not effective and may even be antagonistic to glyphosate. Villa will only condone the use of oil-containing adjuvants if they are beneficial. Therefore, recommendations have also evolved over time to stay abreast of the latest technology and research.

Villa's stance

Adjuvant products and technology have come a long way over the last thirty years. Although many older adjuvants are still applied successfully today, we know so much more about how and when to use them. When adjuvants are used correctly, they will increase and stabilise control. However, incorrect adjuvant use could lead to poor efficacy, crop damage, and inconsistent control. Contact your Villa agronomist for more information about adjuvants and water quality.