

## ADJUVANTS IN THE CROP PROTECTION INDUSTRY



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# ADJUVANTS IN THE CROP PROTECTION INDUSTRY



## **CERTIFICATION**

MSA Competency based short learning programme



## **DURATION**

1 day



## **COMPETENCE ASSESSMENT**

Practical assessment



## **ENTRY REQUIREMENTS**

No previous experience is required, however a background in agriculture at farm level, sales, or technical advice would be beneficial

Senior Certificate or equivalent NQF level 4 qualification with appropriate experience



## **COURSE FACILITATOR**

Dr Brian de Villiers completed both his BSc Agric and BSc Agric Hons degrees at the University of the Free State. He commenced working at the Small Grain Institute in Bethlehem in 1988 as a researcher, where he also completed his MSc (University of the Free State) and PhD (University of Pretoria) degrees. He initially concentrated on the effects of herbicide tank mixtures, but soon started research on spray water quality and adjuvants.

While stationed at the Small Grain Institute, he worked for two six-month periods at the North Dakota State University, where he did research with various scientists who were regarded as leaders in the fields of adjuvants and water quality. Numerous scientific and popular publications were published in South Africa and abroad about these subjects. Brian joined Villa Crop Protection in 2004 and is part of the marketing team. He specialises in the development and marketing of adjuvants for Villa Crop Protection.



## **WHY STUDY ADJUVANTS IN THE CROP PROTECTION INDUSTRY?**

Although there is an awareness of adjuvants and spray water quality in South Africa, it remains an under-researched subject. This causes major confusion with incorrect adjuvant choices being made, resulting in an ultimate loss in pesticide efficacy. This is the reason why adjuvants sometimes still have a 'snake oil' image. It is vitally important to have a basic knowledge of pesticide requirements regarding adjuvants and water quality. This will increase insect, disease and weed control to ultimately increase crop yields.

## **HOW WILL YOU BENEFIT FROM STUDYING THIS SHORT LEARNING PROGRAMME?**

The purpose of this programme is to empower the student to have a basic knowledge of adjuvants and water quality. This will result in correct adjuvant choices and recommendations per spray water quality.

This course is divided into two parts, namely (i) water quality and (ii) adjuvants. The section about water quality underlines the important water quality factors and the adjuvants needed to rectify certain water situations. The adjuvant section deals with those adjuvants that decrease surface tension and have an influence on wetting/spreading, retention and absorption of pesticides. Practical tests will be done and real water analysis reports will be studied and discussed to give the student a pragmatic and effective approach to effective adjuvant choice.

## **SPECIFIC LEARNING OUTCOMES**

- Have a thorough understanding of spray water quality and how it affects pesticides
- Have a good understanding of adjuvant chemistry and physical properties
- Make more informed adjuvant choices to increase pesticide performance

## **WHO SHOULD ATTEND?**

Any person in the agro-chemical industry, whether in a technical, marketing or sales position would find this programme valuable. Students who aspire to be employed in the agronomy sector of agriculture and producers who practically apply agro-chemicals would also benefit from the programme.