<u>Preliminary interim guide for the use of agricultural chemicals to control</u> <u>infestations suspected to be Fall Army Worm</u>

Please take note that chemicals are not registered in maize for Fall Army Worm. Therefore all application of chemicals must be carried out in consultation with chemical representatives.

VERY IMPORTANT: PESTICIDES WILL ONLY CONTROL THE LARVAE SUCCESSFUL BEFORE THEY SEEK THE COVER OF EARS!! IT IS FUTILE TO TRY AND APPLY PESTICIDES ONCE THE LARVAE ARE INSIDE EARS.

ALSO TAKE NOTE THAT NO PESTICIDES ARE REGISTERED FOR THE FALL ARMY WORM IN MAIZE. IT IS BEST TO TRY THOSE PRODUCTS THAT ARE REGISTERED IN MAIZE FOR OTHER LEPIDOPTERA PESTS.

Indoxacarb has been tested and proved to be successful. Products available from DuPont and Villa Crop Protection. DuPont's registered for maize.

Lufenuron does seem to work but is not registered in maize. Products available from Villa Crop Protection, Meridian Agrochemical Company and Syngenta.

Chlorantraniliprole seems to be very effective BUT take note that this is a diamide and resistance development is a serious issue. It needs to applied with great caution and only in the number of applications as instructed by labels. AMPLIGO is registered on maize against stemborers, Products available from Syngenta and DuPont.

Emamectin benzoate is also a product that has been tested with success. Not registered in maize. Product available from Syngenta.

Spinosad has also been tested with some success but none registered in maize. Products available from Dow AgroScience and Efekto.

Spinetoram also showed potential but not registered in maize. Product available from Dow AgroScience.

Chlorpyrifos is registered on maize for Lepidoptera but it needs to be established whether the insect is susceptible or resistant to it. Many companies supply: Adama, Arysta LifeScience, Avima, Villa Crop Protection, CropChem, Dow AgroScience and Nulandis (Plaaskem).

Thiodicarb is a carbamate and the suspicion is that the insect is resistant to carbamates; it thus requires a quick test to see if it is effective. Product is available from Bayer CropScience and is registered on maize.

Methomyl is registered for maize but it is also a carbamate with the potential to be ineffective due to resistance. Products available from Arysta LifeScience, Villa Crop Protection, Adama, Nulandis (Plaaskem), Cipla AgriCare, DuPont and Bitrad.

Benfuracarb is registered on maize (also in combination with pyrethroids) but also faces the resistance development problem. Products available from Villa Crop Protection, Meridian Agrochemical Company and Dow AgroScience.

Spray applications of *Bacillus thuringiensis* var. *kurstakii* is a potential biological remedy but it depends which strain is successful against the larvae and the size of larvae when applications are

made. None registered in maize. Products available from Valent BioSciences (Philagro), Villa Crop Protection, Becker Underwood, Agro-Organics and Plant Health Products.

It is suggested that insecticide applications be made during early development stages of larvae. Farmers should, however, only apply insecticides once infestations of larvae are noticed inside plant whorls.

Although this pest attacks mostly maize, it may occasionally attack cotton, wheat and groundnut. It is therefore also important to scout these crops for damage and the presence of this invasive species.

Farmers can interrogate the CropLife SA database on insecticides at <u>http://www.croplife.co.za/images/croplife/initiatives/InsecticidesAugust2016.pdf</u> for trade names of products or also scout on the Agri Intel Database <u>www.agri-intel.com</u> (need to apply for password but it is very quick). Both website are available at no cost to all users.

If one strictly follows the spirit of Act 36/1947 then use those products that are registered for maize as we know how to use it and we know how to manage the residues by abiding by pre-harvest intervals.