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**MEDIA STATEMENT**

**Biowatch SA response to the Fall Armyworm outbreak**

**2 March 2017**

## **Armyworm outbreak – a symptom of the failing industrial agriculture system**

The Fall Armyworm *Spodoptera frugiperda*, is an invasive and devastating crop pest. Indigenous to central and southern America, it made its first appearance in Africa, in Nigeria in January 2016. It then rapidly spread across southern Africa, appearing in Zambia in December 2016. In South Africa, it is now widely distributed in Limpopo and Mpumalanga, and has been found in pockets in Northwest, Gauteng, Free State, the Northern Cape and KZN provinces. It is suspected that this hungry pest came into the region with grain imported to supplement local stocks, which were insufficient due to the recent drought.

It is ironic that the drought conditions necessitating imports are the very conditions that tend to precipitate Armyworm invasions. In a recent interview, Zimbabwe's Plant Protection Research Institute head, Dr Godfrey Chikwenhere, notes that outbreaks of Armyworm are commonly preceded by periods of extended drought, such as has been experienced in the SADC region in the past two years, and this is the likely reason for the current outbreak.

Droughts in Southern Africa typically coincide with the El Niño – a naturally occurring warming of the eastern Pacific Ocean. Climate scientists are increasingly agreeing that the latest drought and tropical storms like Dineo have been exacerbated by climate change. Paradoxically, the primary, and mostly unacknowledged, cause of climate changing emissions is global industrial agriculture. Please see the Biowatch **Fact Sheet: Drought Crisis** at <http://www.biowatch.org.za/list.php?type=Fact%20Sheets> for a detailed discussion on these connections.

Unlike its African counterpart *Spodoptera exempta*, the Fall Armyworm does not only feed on cereal crops. While the Fall Armyworm favours maize, it also eats many other important crops such as sorghum, cotton, sunflower, groundnuts, soybean and many vegetables. Besides the leaves, it consumes the growing tips and reproductive parts of these plant.

The Fall Armyworm is also difficult to control. The adult moth can fly very long distances, for example, every year the moths fly into Canada from Mexico and the southern USA. Because female moths can lay as many as 2000 eggs, the best time to destroy the worms is shortly after the eggs hatch, and before the growing caterpillars can burrow into leaf whorls, stems and cobs of maize plants where they can't easily be seen.

The Department of Agriculture, Forestry and Fisheries (DAFF) is recommending the rapid deployment of chemical pesticides as the only way to control the worm, and is scrambling to register pesticides for this use. However, even DAFF and CropLife SA caution farmers about the Fall Armyworm's ability to quickly develop resistance to pesticides and therefore recommend strict adherence to pesticide application guidelines, as well as using pesticides with a different action to control following generations of the caterpillar. CropLife has warned that "certain strains of [live] *Bacillus thuringiensis* may not be effective"; and that Fall Armyworms are totally resistant to pyrethroids, and may also be resistant to other chemical pesticides such as carbamates and organophosphates.

Notwithstanding these contradictions, DAFF and the agribusiness sector praise farmers who have planted Bt maize, a variety that has been genetically modified (GM) using the genes of the *Bacillus thuringiensis* bacteria to produce a pesticide in the crop. Despite having previously argued that their GM plants only kill target insect pests such as the maize stalk borer, Monsanto now claims that its “YieldGard products have been developed to provide protection against caterpillar pests” and “have been shown to provide protection against damage by Fall Armyworm in South Africa and other countries such as the US and Brazil.” However, several scientific papers have found that the Fall Armyworm showed resistance to several GM Bt toxins as long ago as 2011 in countries including Puerto Rico, Brazil and the USA.

Biowatch SA Director, Rose Williams, stated: “If the caterpillars chewing their way across South Africa are offspring of Fall Armyworms from the Americas they could already have inherited pesticide resistance, including to GM Bt maize. Also, the caterpillars can easily switch to other crops that are not genetically modified, so any premature or exaggerated claims made by the seed industry need to be thoroughly investigated!”

Biowatch Advocacy, Research and Policy Coordinator, Vanessa Black commented: “The invasion of Fall Armyworms is a symptom of the failing global industrial agriculture system; one that is out of balance and extremely vulnerable. Its chemical-intensive quick-fix approaches are not sustainable, and instead of providing real solutions, are in fact the cause of the problems facing sustainable food production: exacerbating drought conditions; large-scale mono-crops that attract pests, damage to soil health that weakens plants, a lack of predator insects and birds to eat the caterpillars, etc.”

Biowatch’s Agroecology Manager, Lawrence Mkhalihi’s strong message is: “In a balanced agroecological farming system crop and predator diversity minimise the damage from pest outbreaks. It’s time for a rapid transition to agroecological farming methods as these work with nature, and help to mitigate climate change – otherwise we are likely to see ever more frequent plagues of pests, droughts, floods and consequent famine.”

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1. *The Southern Times*. 23 January 2017. Fall armyworm threatens SADC yields.  
<https://southernafrican.news/2017/01/23/fall-armyworm-threatens-sadc-yields/>