

## **Keep Russian Wheat Aphid Off Your Crop**

### **WHAT IS THE RUSSIAN WHEAT APHID?**

The aphid originally came from Russia, and was first recorded in Kenya in 1995. It is a serious pest of wheat, barley and triticale. Farmers have reported 20-100% losses caused by aphid infestation. The pale green aphid feeds inside the rolled leaves of cereals. The Russian wheat - Ch

aphid is found in all wheat - or barley producing areas of Nakuru, East & West Mau Escarpment, Ngorengore, Eldoret, Kitale, Nyandarua, Timau and Maralal.



Above: A healthy wheat crop

Below: A damaged wheat crop

### **HOW CAN YOU TELL WHEN INFESTATION IS STARTING?**

- You can easily detect an attack by the Russian wheat aphid on the crop by scouting for damage signs.
- First noticeable sign is slight to moderate yellowing of small areas of crop within the field.
- The crop appears to be under drought stress, even if there is no drought.
- Bright purple discoloration develops with moderate to severe leaf rolling.
- The aphid causes the leaves to curl up tightly. The aphid lives inside the tightly rolled leaves. Look for aphids inside the tightly rolled new leaves of the plant.
- Plants become stunted. Later the flag leaf becomes twisted and the ear is bent.
- Dry weather favours rapid increase of the aphid.



Discoloration of infested wheat plants



An infested leaf, unrolled to show Russian wheat aphid



## **WHAT CROP PROTECTION MEASURES ARE RECOMMENDED**

### **CHEMICAL CONTROL**

- Chemical control of the aphid is the only option for many farmers because our commercial wheat varieties are susceptible to the aphid.
- Chemical control can be achieved when systemic insecticides are applied to the seed at planting, or when foliar systemic insecticides are applied. Tightly rolled leaves protect the aphid from contact insecticides which are not recommended.
- Foliar insecticides can be applied when damage signs are noticed. One spray is recommended but you can repeat if necessary.

### Chemicals applied with seed at planting

<b>Chemical</b>	<b>Rate per 100 kg of seed</b>
Gaucho 350 FS	200 ml
Carbofuran 350 ST	740 ml

These insecticides protect against the aphid for about 6 to 8 weeks. After this period a foliar spray with systemic insecticides may also be required.

### Chemical applied as foliar insecticides

<b>Chemical</b>	<b>Rate/ha + 200 litres of water</b>	<b>Rate per 20 litres sprayer</b>
Azorcord	750 ml	75 ml
Metasystox	500 ml	50 ml
Dimecron	800 ml	80 ml

### CULTURAL CONTROL

- Use the correct seed rate to ensure good plant density, as low plant densities are susceptible to heavy attack by the aphid.
- Plant as early as possible for your area.
- Use recommended fertilizer rates A well-fertilized crop that is not stressed is more tolerant to aphid attack.
- Remove volunteer plants and grasses because they act as the aphid's hosts even before the main crop has been planted.

### CAUTION

Insecticides are dangerous to humans and animals. Read and follow the manufacturer's instructions. Always wear protective clothing, gumboots, mask, plastic gloves (or Polythene bags) and a waterproof raincoat.

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