Roundup Ready maize withstands the non-selective herbicide.

Why is ROUNDUP READY® maize so unique?

The launch of Roundup Ready® maize and soybeans has introduced the South African crop farmer to a totally new strategy in the battle against weeds.

Roundup Ready® maize hybrids (recognised by the suffix "R" behind the name) are genetically improved to enable the farmer to spray the non-selective herbicide Roundup® Ready Plus (L7966) over the crop.

This herbicide was specifically developed for Roundup Ready® crops and ensures crop safety, if used correctly. It controls both grass and broad-leaf weeds, annual and perennial, systemic and non-selective.

The growth stage of the weeds determines the herbicide dosage. The time of application is based on the weeds' growth stage, their biomass and the agronomic and environmental conditions at the time of application. Control will not be satisfactory if weeds are allowed to become too big before the first application.

Do not apply the herbicide if the plants are under any kind form of agronomic stress, such as being waterlogged, or drought, cold or insect damage. Target the sensitive growth stages of all weeds in the spectrum and consider additional control measures to ensure optimal control.

Roundup® Ready Plus is rain-fast one hour after application, that is, it does not wash off. Rain or irrigation within one hour of application will reduce the efficacy of the herbicide.

Traditionally products that contain the active ingredient glyphosate damage and burn the leaf surfaces of targeted weeds. The Roundup® Ready Plus formulation, however, ensures that crop leaf surfaces are not damaged, and avoids plant stress, which can lead to a reduction in yield.

Seed suppliers, however, don't accept responsibility for any damage to Roundup Ready® crops sprayed with any glyphosate formulations other than Roundup® Ready Plus herbicide.

The eight leaf stage (V8) of the maize crop is reached when the first plants in the field have eight leaves with closed collars around the stem.

Note that, after this stage, you should use a post-directed application. In other words, applications of Roundup® Ready Plus should then only be directed at the base of the plant. Post-directed sprays can be made if row spacing allows for the passage of the spraying equipment without damage to the maize crop. Avoid contact with the reproductive parts of the maize plant.

Do not make broadcast applications if mechanical crop damage is a danger because of the passing of the spray rig. Broadcast application after the V8 stage may result in crop losses or delayed maturity.

If follow-up sprays for the control of a specific weed – eg Yellow nutsedge (*Cyperus esculentus*) – are necessary, they may not occur within 10 days of the previous application.

(Source: Pannar)

General recommendations for the use of Roundup® Ready Plus

- Roundup® Ready Plus herbicide must be applied in a maximum water volume of 125 litres/ha. Ensure an even droplet distribution on the target leaf surfaces and avoid spraying to the point of run-off from the target leaf surfaces. (At volumes of 100 to 125 litres/ha, run-off should not be a concern.)
- Ensure a minimum concentration of 1,5% Roundup® Ready Plus in the total spray volume.
- Please ensure that the spray equipment is free of rust, dust or sediment from other chemicals.
- Don't spray if the wind speed exceeds 10km/h.

Don't spray if the relative humidity is less than 40%.

- Don't apply Roundup® Ready Plus if the weeds are dormant, covered with dew or dust, are under stress, or have been damaged by frost.
- Always use good-quality, clean water. Soil particles and organic material will neutralise the glyphosate.
- Make sure that the water is slightly acidic (pH 4-6,5). Always buffer the water with a product such as Bladbuff 5® before adding the Roundup® Ready Plus herbicide.
- Adding 2% ammonium sulphate neutralises the effects of hard water.
- Use the correct spray nozzles (eg XR Teejet 11002VK) and spray pressure to ensure optimal coverage of the weeds.
- Roundup® Ready Plus is not recommended for aerial application.