RAPTOR® WG Herbicide

A guide to weed control in Lucerne – At a glance

- RAPTOR is an early post emergence herbicide, used for the selective control of grasses and broadleaf weeds in both seedling and established Lucerne and other pasture situations.

- The active ingredient in RAPTOR is imazamox, which belongs to Group B.

- The formulation is 700g/kg WG (water dispersible granule), making RAPTOR highly concentrated and so used at low rates per hectare.

### Key Features

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<th>Benefits</th>
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<td>RAPTOR is excellent on barley grass which, along with Erodium, are two of the most damaging seed heads to stock and can seriously downgrade your lucerne hay. If barley grass has become an increasing issue in lucerne particularly after extended use of paraquat mixtures, RAPTOR gives another chemical group a chance to work on this troublesome weed.</td>
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<td>RAPTOR can be used in seedling lucerne and is useful on a range of weeds that occur just after sowing. Wireweed and wild radish are often a problem in new lucerne. RAPTOR gives good suppression of wireweed and good control of wild radish while allowing the young lucerne to grow away.</td>
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<td>If clover is also present in established Lucerne, it has previously been difficult to control difficult weeds, like Erodium and Marshmallow, without harming clover. RAPTOR does not desiccate lucerne and so the competitive capacity of the lucerne stand itself is utilised as well as the extra production gained from lucerne which does not have to ‘recover’ from the desiccation process which occur with paraquat mixtures.</td>
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<td>One pass weed control with RAPTOR can be enhanced in lucerne by the addition of either Dominex or Imidan 150 for the control of a range of pasture insects.</td>
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<td>Low application rate means the number of containers required is reduced. Safe to transport and store, RAPTOR is a non-dangerous good.</td>
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### Key weeds controlled or suppressed

#### Grass Weeds

- Barley grass
- Silvergrass
- Brome grass
- Volunteer wheat
- Wild oats

#### Broadleaf Weeds

- Volunteer triticale
- Volunteer barley
- Volunteer oats
- Storksbill - Erodium spp
- Shepherd’s purse
- Wireweed
- Wild radish
- Deadnettle
- Turnip weed
- Wild turnip
- Threehorn bedstraw
- Indian hedge mustard
- Volunteer lupins

### Weeds under consideration

Continuing trial and demonstration work and farmer usage shows that RAPTOR may have useful control of the following additional weeds:

- Guildford grass, Onion grass [Romulea rosea], Winter grass [Poa annua], Fog grass [Holcus lanatus], Toadrush [Juncus bufonius]

- Denseflower Fumitory [Fumaria densiflora], Marshmallow [Malva parviflora], Paterson’s curse [Echium plantagineum], Chickweed [suppression].
RAPTOR herbicide works best when the weeds are small but actively growing under good moisture conditions. Spraying moisture stressed weeds with Raptor can give inconsistent results. Grazing following spraying can help control. Do not graze for 7 days after spraying.

Weed control
The main method of weed control is through leaf absorption of RAPTOR after application, with some limited soil uptake and residual activity. RAPTOR is quickly transported to the growing points where it interferes with the activity of a key plant enzyme involved in protein synthesis and cell growth. Once this happens the affected weed stops growing and ceases competing for water and nutrients, even if it does not appear to die straight away. It is important to note that not all weed populations will be completely controlled. Some populations will be significantly reduced and surviving plants will be severely retarded, known as suppression of weeds. These plants will not compete with good lucerne growth.

Possible effects on performance
Like most herbicides, level of control will vary significantly depending on:

- Factors such as climatic conditions following application, pasture and weed vigour, and weed seed depth.
- Adequate depth of soil moisture present (0-5cm) to keep the chemical active.
- Good pasture competition will assist in effective weed control.

Recommended rates
Two rates:
- Most weeds – 45g/ha plus Hasten® or Kwicken® at 500mL/100L of water.
- For silvergrass control plus other weeds – 50g/ha plus Boost® at 2L/100L of water, plus Hasten® or Kwicken® at 500mL/100L of water.

Rainfastness
RAPTOR is rainfast within 2 hours after application.

Application timing
RAPTOR has a wide application-timing window. It can be applied to new lucerne after the full emergence of the 3rd trifoliate leaf, but before the commencement of flowering. For best results (weed control and productivity), early application timing is recommended to enable the desirable pasture species to dominate before flowering. This will lead to the increased carrying capacity, cleaner lucerne and better productivity and profitability of lucerne hay.

Weed treatment size
- Broadleaf weeds – apply to actively growing broadleaf weeds in the cotyledon up to the 3 leaf stage.
- Grass weeds – apply up to the 2 tiller stage. Best results are achieved when applied to weeds in the 2-4 leaf stage.
- Do not wait until lucerne canopy closure.

Recommended application
(for ground application only)
- Apply with boom equipment.
- Best results are obtained with a minimum of 50L of water, using flat fan nozzles.
- In dense lucerne and weed situations, for example due to the slender nature of silvergrass foliage, higher water rates are strongly recommended (eg 80-100L/ha.)
- Since RAPTOR is a foliar absorbed herbicide, thorough coverage and wetting of weeds is essential for satisfactory results.

Compatibility
For control of your key pasture pests including red legged earth mite and pasture cockchafer, RAPTOR is compatible with Dominex® Duo Insecticide and Imidan®.

Other compatible insecticides include: Saboteur® and omethoate.