

### **Adria Crop Protection Solutions**

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**Do NOT** apply Merito in mixture with:

- Herbicides containing amine salts e.g. MCPA and 2,4-D amine.
- Other herbicides containing an ALS inhibitor such as iodosulfuron or mesosulfuron-methyl, and other grass weed control herbicides.
- Plant growth regulators.
- Fungicides and insecticides, including organo-phosphate insecticides.

ADJUVANTS: Always add a spreader-sticker at the recommended label rates with Merito.

**RAINFASTNESS:** Merito is rainfast after 6 hours. CROP SAFETY: Merito can be used on most soil types. On lighter soils, some crop vigour effects might be observed. These are usually transient and will not affect crop yield.

SOIL RESIDUES: Following on from the harvest of a crop sprayed with Merito, the following crops may be planted:

In the Autumn following harvest: winter wheat and barley, winter oats, winter triticale, winter rye, oilseed rape, grass, winter beans, brassica plants as transplants.

In the Spring following harvest: spring wheat, spring barley, spring oats, triticale, rye, spring oilseed rape, sugar beet, potatoes, grass, clover, beans, peas, maize, linseed, brassica plants as transplants, carrots, parsnips.

**CROP FAILURE:** After applying Merito, and in the event of crop failure, spring wheat may be planted after ploughing to a depth of at least 15 cm. At least 6 weeks must elapse between treatment and re-drilling where there is moist soil and warm soil temperatures.

### WITHHOLDING PERIODS:

It is an offence for users of this product to cause residues exceeding the relevant MRL in the Food Notice: Maximum Residues Levels for Agricultural Compounds.

- Grain, cereal silage and hay: DO NOT apply after the 1st node stage of the crop.
- Green Feed: DO NOT cut crops or allow livestock to graze treated cereals for 6 weeks after application.

Where Merito is tank mixed with another product, observe the longest of the two harvest withholding periods.

Registered to and distributed by: Adria New Zealand Limited. P.O. Box 535 Kumeu, Auckland 0841, NEW ZEALAND. Ph: +64-9-412-9817; <u>www.adria.nz.</u> Merito is a Registered Trademark and is Registered pursuant to the ACVM Act 1997, Approval No. P10258. Approved under the HSNO Act 1996, HSR101586.

# **Merito**<sup>®</sup>

A selective post-emergence herbicide for the control of rip gut brome and other grass weeds and broadleaf weeds in cereal rye, triticale and wheat (except durum varieties).

Active Ingredient: 30g/litre Pyroxsulam Chemical Group: GROUP 2 HERBICIDE Formulation: Oil dispersible liquid (OD) Pack Size: 10L

# **About Merito®**

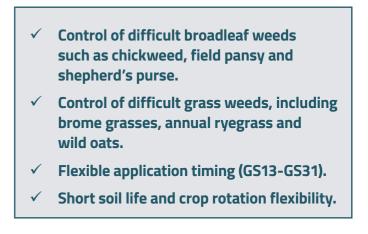
Merito<sup>®</sup> is a post-emergence herbicide for the control of a range of difficult-to-control broadleaf weeds and grass weeds in cereal rye, triticale and wheat (except durum varieties). Merito<sup>®</sup> controls a range of broadleaf weeds including chickweed, field pansy and shepherd's purse, as well as brome grasses, annual ryegrass and wild oats. Merito<sup>®</sup> is also a useful resistance management tool for the control of certain broadleaf and grass weeds, with an alternative modeof-action to other grass weed herbicides and broadleaf herbicides such as diflufenican.

Merito<sup>®</sup> is systemic and is absorbed through leaves and shoots, as well as roots. Following application, weeds cease growing and become yellow before dying. Under slow growth conditions, symptoms may persist for several weeks prior to weed death.

Merito<sup>®</sup> has a short soil life and only weeds that have emerged at the time of application will be controlled.











### STRATEGIES FOR PREVENTION & MANAGEMENT OF RESISTANT GRASS WEEDS (AND BROADLEAF WEEDS): **INTEGRATED WEED MANAGMENT STRATEGIES:**

- DO NOT apply any other ALS inhibitor herbicide per crop per season for grass weed control.
- DO NOT apply more than 2 applications of ALS inhibitors for control of broadleaf weeds per crop per season.
- **DO NOT** apply more than 1.0 L/ha of Merito per crop per season.
- DO NOT rely solely on Merito or other Group 2 herbicides for weed control. Always use an Integrated Weed Management program with herbicides that have other modes-of-action (non-group 2 herbicides), together with non-chemical methods of control.

### Integrated Weed Management techniques for herbicides:

- Apply a broad spectrum, post-emergent herbicide (e.g. glyphosate) to control any autumn germinating weeds seedling – especially grass weed seedlings, both before and after the crop.
- Use mixtures of herbicides at full label rates.
- Apply herbicides at optimum timings and environmental conditions.
- A recommended programme includes a pre-emergence herbicide followed by Merito (alone or in mixture with a broadleaf herbicide with an alternative mode-of-action). This is best applied within 4 weeks of the pre-emergence treatment.
- Where grass weeds are uncontrolled within small areas of a crop (e.g. along fence lines or where crop competition is low), sacrifice this area (e.g. by spraying with glyphosate or mowing) to prevent the grass weeds setting seed.
- Keep fence lines free of weeds by spraying broad spectrum (non-group 2) herbicides (e.g. glyphosate) to minimise seed burden at the edge of paddocks.

### Non-chemical (cultural) Integrated Weed Management techniques:

- Rotating wheat with other crops (where herbicides with alternative modes-of action can be used).
- Burning stubble where weed density has been high to destroy seed.
- Thorough cultivation (and use of glyphosate) to destroy seedling weeds prior to drilling.
- Use higher sowing rates to increase crop competition with weeds and minimise seed formation.
- Where weed pressure has been high, sow the headland with spring wheat. (Most brome grasses germinate in autumn/winter and can be controlled by cultivation or glyphosate prior to spring planting).
- If grass weed densities are low, hand pulling individual, scattered plants will prevent their spread and increase from seeding.
- Whenever possible, prevent weeds from seeding.

### DIRECTIONS FOR USE:

CROPS AND SITUATIONS: For application to cereal rye, triticale and winter or spring wheat (excluding durum varieties) only from 3 leaf up to 1st node stage of the crop.

Merito Herbicide is a selective foliar herbicide for early post-emergence control of brome grass and other grass weeds, as well as some broadleaf weeds in cereal rye, triticale and wheat. DO NOT apply to barley, durum wheat or oats.

### Always apply Merito to small, actively growing, seedling weeds. Weeds emerging after application will not be controlled.

**DO NOT** apply to crops or weeds which may be stressed due to prolonged periods of extreme cold, moisture stress (water-logging or drought) or previous herbicide treatment, as crop damage or reduced levels of control may result.

**DO NOT** spray if rain is likely to occur within 6 hours.

- **DO NOT** apply later than the 1st node stage of the crop.
- **DO NOT** apply 7 days before or after rolling or harrowing.
- **DO NOT** apply 7 days before or after applying a plant growth regulator.
- **DO NOT** apply 14 days before or after an organophosphate insecticide.

### Avoid overlaps when spraying.

DO NOT apply more than 1.0 L/ha of Merito per crop per season for control of any weed.

Table 1: Grass weeds

Weed	Rate/ha	Weed stage	Critical Comments
Ripgut brome grass Annual ryegrass Wild oats	500mL	1-3 leaf stage (pre-tillering)	Grass weeds may only be suppressed where densities are high (e.g. greater than 50 plants/m2) and crop competition is low.
			<b>Brome grasses:</b> If there are surviving plants from the first spray, apply a second spray of 500 mL/ha at the first sign of regrowth (no more than 2 months after the first spray).

### Table 2: Broadleaf weeds

Weed	Rate/ha	Weed stage	Critical Comments
Chickweed	500mL	Early lateral formation	Tank mixing with an appropriate herbicide may be advantageous where broadleaf weed densities are very high (e.g. greater than 50 plant/m2) and for control of other weeds. Apply a non-ALS herbicide for later germinations of these weeds. <b>Cleavers</b> : Add Solstar herbicide for maximum control.
Cleavers (suppression)		Early lateral formation	
Field pansy		Up to 5-leaf	
Shepherds purse		Up to 3-leaf	
White clover		Up to 2 shoots	

## NOTE: ALWAYS add a spreader-sticker at label rates with Merito.

Mixing: Merito is an oil-based formulation which may show signs of separation during storage. Invert and shake the container several times to ensure that Merito has completely dispersed before measuring. If agitation of the spray mix is limited, thoroughly premix Merito in a bucket before adding to the spray tank. Once diluted, Merito will remain in dispersion. Half fill the spray tank with water and begin agitation. Add the required amount of Merito to the spray tank. Agitate until thoroughly dispersed. Add wettable powders, water dispersible granules or suspension concentrates. Continue agitation until thoroughly mixed. Add emulsifiable concentrates. Agitate until thoroughly mixed. Add remainder of water to the spray tank and then add a spreader-sticker. Continue agitation. The Merito spray mix should be used within 8 hours.

**SPRAY EQUIPMENT:** Merito can be applied using conventional ground spraying equipment. Ensure thorough coverage.

**Ground boom spraying:** Spray Merito in 100 – 200 L/ha water applied as a medium quality spray as defined by the British Crop Protection Council (BCPC) system or the American Society of Agricultural Engineers (ASABE S-572). Nozzles that deliver a coarse spray droplet are not recommended and may reduce efficacy.

**Note:** In order to select the appropriate nozzles for the required spray quality and to operate the equipment to minimise spray drift, this product must be applied in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS8409).

**COMPATIBILITY:** Where appropriate, Merito can be tank mixed with certain broadleaf herbicides. Merito is compatible with bromoxynil, ioxynil, mecoprop, diflufenican, clopyralid and fluroxypyr. Merito can be tankmixed with sulfonyl urea herbicides (for broadleaf weed control) where previous experience has shown they are compatible and are tolerated by the crop.

