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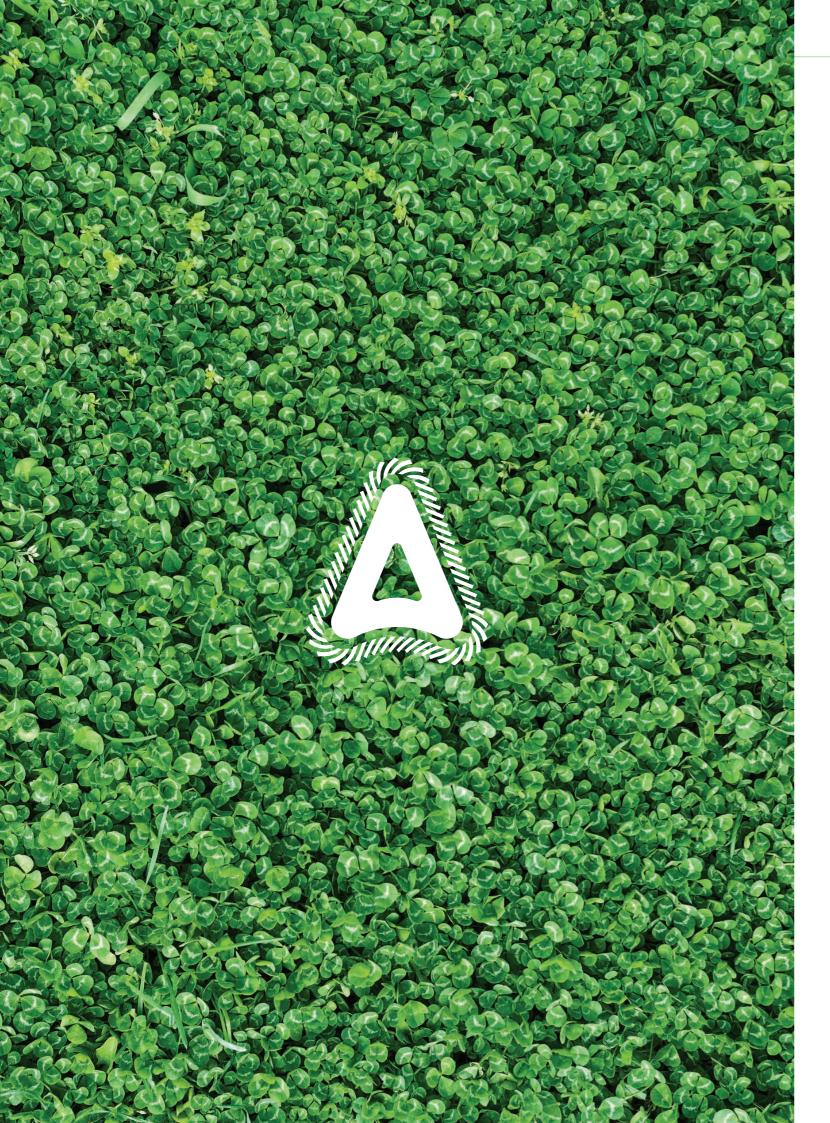
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For Customer Enquiries: 1800 4 ADAMA





# A powerful systemic, multi-active broadleaf herbicide with excellent turf safety characteristics.

#### What is Quali-Pro Crest<sup>®</sup> Herbicide

Quali-Pro Crest<sup>®</sup> is a broadleaf herbicide formulation containing 100 g/L of the active ingredient fluroxypyr and 2.5 g/L florasulam in a unique Suspo-Emulsion formulation. Crest<sup>®</sup> Herbicide is registered for the control of key broadleaf weeds including White Clover, Bindii, Bathurst Burr, Noogoora Burr, Marshmallows, Pigweed and Sowthistle in most turf management situations.

#### Key features and benefits

- Excellent activity across a wide range of broadleaf weeds species. Registered for 8 key weed species
- Registered for tough broadleaf weeds such as Pigweed, Marshmallow, Smallflower Mallow, Bathurst Burr and Noogoora Burr
- Safe across a wide range of warm season and cool season turf species
- Very safe on all key warm season turf grasses including Couch, Hybrid Couch, Kikuyu, Buffalo and Queensland Blue Couch
- Unique Suspo-Emulsion (SE) Formulation
- Schedule 5 Chemistry. Safer to use than many other broadleaf herbicide options
- Non-phenoxy based herbicide and non-EC formulation.



#### Mode of action

#### HERBICIDE GROUP

Crest<sup>®</sup> Herbicide contains 2 active ingredients. The first active ingredient is Fluroxpyr, a Group I herbicide. Fluroxypyr induces auxin-type responses in susceptible annual and perennial broadleaf weeds (auxin being a type of plant hormone). Once absorbed into the plant, it accumulates in growing tissues to higher concentrations than the native auxin does, and degrades more slowly. Plant growth is disrupted by the regulation of cellular growth process following binding of fluroxypyr to plant auxin receptor sites. Fluroxypyr also interferes with the plant's ability to metabolise nitrogen and produces enzymes. When a plant's strict growth regulation is disrupted in this fashion, plant growth becomes disorganised, disrupting key metabolic process and results in plant death.

The 2nd active ingredient in Crest® herbicide is Florasulam, a Group B herbicide. Florasulam is a selective triazolopyrimidine sulfonanilide post emergent herbicide. This herbicide mode of action is via inhibition of acetolactate synthase (ALS) in plants. ALS is found in the chloroplast where it catalyses branch chained amino acid synthesis. Inhibition of ALS results in inhibition of plant cell division, decreased plant growth and ultimately, plant death.

#### Quali-Pro Crest<sup>®</sup> Herbicide -Registered for use on a very broad range of turf species

Field trials conducted by Wetsgate Research in 2018 at Cobbitty Research Station has Established that Crest<sup>®</sup> Herbicide was safe for use on a range of turfgrass species including;

#### Warm season species

| <b>Common Couch (Cynodon dactylon):</b><br>Grand Prix Couch<br>Legend Couch<br>Wintergreen<br>Windsor Green<br>Oztuff | <b>Buffalo (Stenotaphrum secundatum)</b><br>Sir Walter<br>Palmetto<br>Shademaster |  |
|---|---|--|
| <b>Hybrid Couch (C. dactylon x C.tranvaalensis):</b><br>Santa Ana   | Queensland Blue Couch (Digitaria didactyla)                                       |  |
| Kikuyu (Pennisetum clandestinum)  | <b>Zoysia (Zoysia spp.):</b><br>Zeon / Sir Grange                                 |  |

#### Cool season species

| Creeping Bentgrass (Agrostis stolonifera): |           | Browntop Bentgrass (Agrostis capillaris) |  |
|--|-----------|--|--|
|  | Mackenzie |  |  |
|  | Penncross |  |  |
| Perennial Ryegrass (Lolium perenne)        |           | Tall Fescue (Festuca arundnacea)         |  |

Ref: Westgate Research: WR-Herbicidephyto-Turf-2018-ADM364

#### Quali-Pro Crest<sup>®</sup> Herbicide application rates

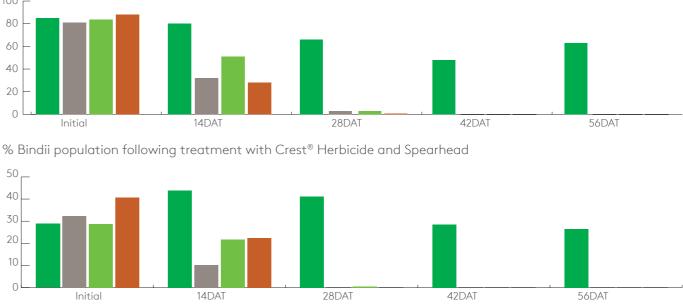
| WEED  | WEED STAGE                                | STATE      | RATE/ha  | CRITICAL COMMENTS  |
|---|---|------------|----------|--|
| White clover<br>(Medicago repens),<br>Bindii<br>(Soliva sessilis)               | Any age                                   | All States | 1 - 2 L# | <ul> <li>#Add Uptake<sup>†</sup> Spraying Oil or equivalent<br/>formulation at 500 mL/100 L (0.5% v/v)</li> <li>Apply to weeds after emergence from autumn<br/>to early spring. Use the higher rates during<br/>cooler months of the year or if weed pressure<br/>is high.</li> <li>Complete control may take 4 to 6 weeks<br/>depending on weed growth stage at<br/>application and also soil and air temperature.<br/>Weed death will generally take longer when an<br/>application is made during winter<br/>(May to August).</li> <li>A repeat application may be needed in<br/>4 to 6 weeks if lower rates are used in high<br/>weed pressure situations or during extended<br/>germination periods due to environmental<br/>conditions.</li> </ul> |
| Bathurst Burr<br>(Xanthium spinosum),<br>Noogoora Burr<br>(Xanthium strumarium) | 2 to 8 leaf<br>stage, up to<br>20 cm tall |            | 1.5 L#   |  |
| Marshmallow or<br>Smallflower Mallow<br>(Malva parviflora)                      | Up to 8 leaf or<br>20 cm                  | -          | 2 L#     |  |
| Pigweed<br>(Portulaca oleracea)   | Up to 10 cm<br>diameter                   | _          | 1 L#     |  |
|   | 10-30 cm<br>diameter                      |            | 1.5 L#   |  |
| Sowthistle<br>(Sonchus oleraceus)   | 2 to 5 leaf up to<br>10 cm diameter       |            | 2 L#     |  |

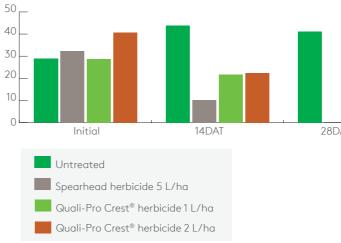
## Maximising performance with Quali-Pro Crest<sup>®</sup> Herbicide

- Transient discolouration may occur in turf situations when the high rate (2 L/ha) of Crest<sup>®</sup> Herbicide has been used up to 21 days following treatment. This product is not recommended to be used in Creeping bentgrass golf or bowling green situations.
- Crest<sup>®</sup> Herbicide is a suspo-emulsion formulation which may show some separation on storage. Roll, shake or invert the container several times to ensure that Crest® Herbicide has completed resuspended before measuring to mix.
- Do not apply to turf or weeds which may be stressed due to prolonged periods of extreme cold, sustained high temperature within 48 hours of application, moisture stress (waterlogging or drought), nutritional stress, root disease or previous herbicide treatments, as turf damage or reduced levels of control may result.
- Do not apply if rain is likely to occur within three hours or if heavy rainfall that is likely to produce runoff is forecast within 48 hours.
- Do not apply with spray droplets smaller than a COARSE spray droplet size. Use only when wind speed is more than 3 kilometres per hour or less than 15 km/h, as measured by an anemometer at the application site.
- Crest<sup>®</sup> Herbicide is compatible with the following broadleaf herbicides: Cutlass<sup>®</sup> 500 (Dicamba), Bronco<sup>®</sup> MA-X (Bromoxynil & MCPA), Bronco<sup>®</sup> 400 (Bromoxynil), Zulu<sup>®</sup> XT (2,4-D).
- To improve performance always use an adjuvant. The following adjuvants have been proven in field trials to be successful with Crest<sup>®</sup> Herbicide: Uptake<sup>†</sup> Spraying Oil, Hotwire<sup>®</sup> Spraying Oil or Enhance<sup>†</sup> Spray Adjuvant (500 mL/100 L water).

### Field trial performance with Quali-Pro Crest<sup>®</sup> Herbicide

% White Clover population following treatment with Crest® Herbicide and Spearhead 100 -





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#### Weeds controlled with Quali-Pro Crest<sup>®</sup> Herbicide



Bindii (Soliva sessillis)





Bathurst Burr (Xanthium spinosum)



Noogoora Burr (Xanthium strumarium)



Marshmallow (Malva paviflora)



Pigweed (Portulaca oleracea)



Sowthistle (Sonchus oleraceus)



Small Flower Mallow (Malva spp.)



White Clover (Trifolium repens)

