



**AgNotes**

# **BARON<sup>®</sup> 400 WP**

**Selective Herbicide**

*Selective Weed Control in Onions and Vegetable Brassicas*



Updated  
List of Weeds  
controlled in  
Onions

## BARON® BENEFITS

- Persistent weed control
- Good control of many tough weeds including Wireweed, Nightshade, Fumitory and others
- Suppression of Wild Radish
- Excellent crop safety

### For Transplanted Brassicas this means:

- Simply transplant, apply and water
- Cost savings, with no hand weeding likely

### For Seeded Onions this means:

- Persistent mid-season weed control through multiple low rate applications
- Reduced spring/summer weed emergence and reduced weed pressure at harvest

## Active Ingredient

BARON 400 WP contains 400 g/kg oxyfluorfen (Group G Herbicide) in a formulation that behaves differently to EC formulations of oxyfluorfen.

## Mode of action and general instructions

BARON has very little contact activity on emerged weeds and for best results should be applied to a weed-free soil which has fine tilth. BARON forms a film on the soil surface that provides an effective barrier to a wide range of emerging weeds.

BARON will remain effective for a number of weeks depending on the rate used, time of year, soil moisture, and other factors. BARON is insoluble in water and leaching into the soil profile is therefore minimal. The principal means of breakdown is by sunlight, hence BARON will

last longer during dull, cloudy, wet conditions (winter), and have a relatively short life in bright, sunny weather (summer).

As a general rule, BARON should be used at low rates in winter and higher rates in summer, however this will be influenced by a range of factors that are explained in detail on the product label.

Rainfall or irrigation is required within 7 days to achieve good residual control.

BARON must be applied alone, with NO surfactants or other products added.

## Soil disturbance

For optimum residual weed control, the area treated with BARON should be left undisturbed during the time period for which weed control is desired. It may be necessary to spot treat with knockdown herbicides or use follow-up applications of approved herbicides for escape weeds and perennial grasses.

## Soil type and crop safety

The rate of BARON applied will depend on a range of factors including soil type, and guidelines are included on the following page.

BARON should NOT be used on sandy soils or new varieties until small-scale tests prove that the product will not cause crop damage.

Some leaf spotting can occur due to the activity of the spray, or from rain splashes from the soil following application, and the extent of damage may vary between varieties.

The size and age of transplanted seedlings may also affect the selectivity of BARON, with younger seedlings potentially more susceptible. Conduct small scale crop safety tests prior to treating large numbers of plants.

The selectivity of BARON to transplanted seedlings may also be affected by applications of adjuvants (eg. wetting agents, oils, etc) to the leaves up to 10 days before or after the application of BARON.



## **BARON for Brassicas (Cabbages, Cauliflower and Broccoli only)**

BARON should be applied to weed-free soil immediately after transplanting. If more than 3 days have elapsed since transplanting, BARON must NOT be applied. If weeds are present in the area to be planted, they should be sprayed with a knockdown herbicide prior to transplanting.

BARON should be applied at 0.5 - 1.0 kg/ha, and ONLY ONCE per brassica crop. The low rate should be used under cold, wet conditions (winter) or on light to medium soils, and the higher rate in warmer weather (summer) on heavier soils.

Various factors may affect the selectivity of BARON, including the size and age of transplanted seedlings, and younger seedlings are potentially more susceptible. Growers should conduct small scale crop safety tests prior to treating large numbers of plants.

BARON should NOT be applied in tank mix with any other products as serious crop damage may occur.



**Untreated plot with wild radish      Treated plot (BARON)**

*Trial conducted in brassicas with BARON*

## **BARON for Onions**

BARON can be applied to onions from the 2 - 3 true leaf stage onwards. Up to 4 applications may be required to maintain a weed-free crop, however this will vary based on prevailing conditions. The first application should be made at the 2 - 3 true leaf stage and at the rate of 150 g/ha, with repeat applications of 150 - 300 g/ha at 4 - 6 week intervals as required. The higher rate should NOT be used until onions have at least 3 true leaves.

BARON should be used at the low rate on light soils. DO NOT use more than 1.2 kg/ha per crop.

Emerged weeds should be controlled with approved herbicides prior to the application of BARON.

BARON should NOT be applied in tank mix with any other products as serious crop damage may occur.

## **BARON and Follow Crops**

BARON is a residual herbicide, and growers should carefully consider options for crops following those to which the product has been, or will be, applied; follow crops can be damaged by oxyfluorfen, and should not be sown or transplanted into previously treated soil without prior testing.

While the presence of newly germinated weed species which are highly susceptible to oxyfluorfen will provide an indication that soil residues are low, simple pot or field tests will more reliably indicate whether it is safe to plant particular follow crops.

Such tests involve planting approximately 20 seeds or seedlings of the intended follow crop into soil taken from the treated paddock and monitoring subsequent growth. If the follow crop is to be grown from seed, then seed should be used in the tests; if seedlings are to be grown, then seedlings should be used in the tests. After 10 to 14 days, any damage from residual oxyfluorfen should be evident.

The tests should include an untreated sample of the same soil; this means testing soil not previously sprayed with BARON, such as that found near a fence line in the sprayed paddock, or in an adjacent paddock.

Whether the tests are conducted in pots or in the actual paddock to be cropped, the soil should be sampled from the intended planting zone.

The sensitivity of follow crops to oxyfluorfen varies, however the testing process outlined here should be used regardless of which crop or variety is chosen.

Breakdown of oxyfluorfen is aided by sunlight and moisture. The surface of treated soil will contain the highest concentration of oxyfluorfen as the product is relatively immobile in all but very sandy soils. Cultivation may reduce herbicidal activity by disturbing the treated soil surface and mixing this with untreated soil from deeper in the profile.

