

Planning a weed control programme for new grass will help you grow healthy and persistent pasture

In new grass, many believe that if the weeds are small they won't cause any short term pasture damage. However, research shows that leaving this spray out of your pasture plan can have both short and long term effects on both clover and grass production.

Short term

Seedling weeds affect pasture composition as they vigorously compete for nutrients, moisture, light and most importantly, space. Early removal of these weeds allows for more rapid and even pasture establishment resulting in an increased amount of feed for stock.

Long term

Poor establishment of newly sown pasture results in a decrease in pasture productivity and an increase in chemical costs from the extra weed control requirements down the track.

Weed control programmes for newly sown pasture

There are two options to spray for weeds in new pasture: prior to the first grazing (best option) and after the first grazing. The stage you choose is dependent on the species and size of the target weeds and will determine the correct product(s) to use.

Pre-Grazing

The best time to spray new pasture is prior to the first grazing when it has at least 70% ground cover. This is typically 3-6 weeks after sowing and weeds will still be small.

Tribal Gold

Tribal Gold is the ultimate selective herbicide for early control of broadleaf weeds in newly sown pasture. Developed specifically for New Zealand pastoral farmers, **Tribal Gold** provides outstanding control of a wide range of broadleaf weeds.

The key benefits of Tribal Gold include:

- Control of a wide spectrum of broadleaf weeds
- Clover and grass friendly allows early weed control
- Convenient all in one pre-mix, liquid formulation that is easy to measure, mix and use
- 2 hour rainfastness



Tribal Gold contains 300g/L MCPB, 20g/L MCPA and 10g/L flumetsulam as the dimethylamine salts. Apply when clovers have at least 2 trifoliate leaves, and weeds are still seedlings. Weeds and pasture should cover at least 70% of the ground. This will typically be about 3-6 weeks after sowing.

Tribal Gold should be applied at 4–5L/ha in 100-300 litres of water. Always add **Bonza® Gold** at 500ml/100 litres water for enhanced spreading and uptake.

Why is 70% groundcover important?

Phenoxy herbicides can be absorbed from the soil by the roots of germinating grasses and clovers. When applied to new pastures during the emergence phase this soil uptake caused seedling mortality. Once the canopy of pasture and weeds reached 70% groundcover this reduced soil contact and the subsequent loss of clover and grass seedlings.

Light grazing vs. full grazing

Light grazing: a quick graze often for just a few hours to nip off the grass leaves which stimulates tillering and exposes weeds. Small clovers are usually left untouched.

Full grazing: Pasture well grazed to remove clover leaf and expose weeds.

Outstanding weed control (see label for rates)

WEEDS				
Annual buttercup	Black nightshade	Californian thistle	Chickweed	
Cleavers	Cornbind	Creeping yellow cress	Docks	
Fathen	Field pansy	Fleabane	Giant buttercup	
Hedge mustard	Henbit	Mallow	Nettles	
Oxeye daisy	Plantain	Redroot	Scotch thistle	
Shepherd's purse	Sorrel	Sow thistle	Spurrey	
Stinking mayweed	Storksbill	Thistles nodding, winged, variegated	Twin cress	
Wild radish	Wild turnip	Willow weed	Wire weed	

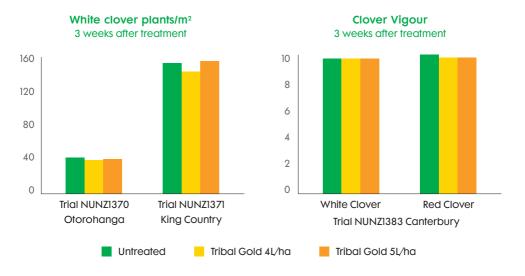
17 days after application with Tribal Gold



Left: Treated with Tribal Gold at 5L/ha. Right: Untreated

Excellent clover safety

Tribal Gold has excellent clover safety. Some temporary suppression may occur, but recovery is rapid.



For best results with Tribal Gold

- Application should occur when the weeds are actively growing (i.e. soil temperatures above 10°C and not under stress from drought or water logging).
- Ensuring complete spray coverage of the weeds will achieve maximum results.



Thistrol Plus

Thistrol Plus is a clover-friendly herbicide that will control a wide range of seedling broadleaf weeds in newly sown pastures.

Thistrol Plus is a good option where the spectrum of weeds present is not as extensive as those controlled by Tribal Gold.

Thistrol Plus can be applied to new pasture when clovers have at least two trifoliate leaves, which is approximately three to six weeks after sowing. Weeds and pasture should cover at least 70% of the ground. At this time, susceptible weeds are usually small and will be easily controlled.

Thistrol Plus has two hours rainfastness which is ideal for unpredictable autumn or spring weather conditions. Apply Thistrol Plus at 3–4L/ha when the weeds are small.





Optimum weed size for spraying with Thistrol Plus

The addition of Valdo® 800WG to Thistrol Plus will broaden the spectrum of weeds controlled. This includes two key damaging weeds in new pastures: chickweed and stinking mayweed. These weeds can completely smother seedlings and can prevent clover from establishing effectively.

For the best results with Thistrol Plus

- Identify the main weeds present in the paddock and check the label to confirm they will be effectively controlled by Thistrol Plus.
- Spray weeds when they are small between the cotyledon and three
 to four leaf stage. This is especially important for nodding, winged and
 variegated thistles. Larger weeds will not be adequately controlled.
- Apply Thistrol Plus when weeds are actively growing (when soil temperatures are around 10°C or higher). Do not apply if the weeds are under stress from heavy frosts, or in wet or drought conditions.
- Ensure the weeds are well exposed at spraying. If necessary lightly
 graze the paddock, leave for three to seven days for weeds to freshen,
 then spray.

Dictate® 480

Dictate 480 is a fast acting clover safe option for clover/ grass based pastures. Ideal in situations where crops sensitive to phenoxy herbicides (e.g. grapes) are nearby.

Apply **Dictate 480** at 3L/ha when white clovers have 1-2 trifoliate leaves. **Dictate 480** should be applied with Contact™ Xcel at 25ml/100L water. For best results with **Dictate 480** apply during warm weather. A minimum of 300L water/ha is recommended to ensure that all parts of the target weeds are thoroughly covered.



For the best results with Dictate 480

- Ensure clovers have 1–2 trifoliate leaves
- Add Contact Xcel at 25ml/100L water
- Spray during warm weather
- Use a minimum of 300L water/ha to ensure good coverage.



Valdo® 800WG

Valdo 800WG is the only safe option for new pasture that contains a grass, clover, chicory mix. Phenoxy herbicides will cause serious damage to chicory. Valdo 800WG should be applied with Bonza Gold to ensure good coverage and uptake.

Apply **Valdo 800WG** at 65g/ha when the weeds are small and after clovers have at least 2 trifolate leaves. Chicory should have at least 2-4 leaves.



For the best results with Valdo 800WG

- Ensure clovers have a minimum of two trifoliate leaves
- Add Bonza® Gold at 500ml/100L water to enhance weed control
- Do not graze pasture for 14 days after Valdo 800WG application

Post Grazing

Baton® 800WSG

After the first full grazing, weeds tend to be larger and more difficult to control. Baton 800WSG is a selective phenoxy herbicide that provides excellent weed control in new pasture. Baton 800WSG's water soluble granule formulation is low odour, non-volatile and is less damaging to valuable clovers than other 2,4-D formulations.



Weeds controlled in pasture (see label for rates)

WEEDS				
Apple of Peru	Bathurst bur	Black nightshade	Bur medick	
Californian thistle	Catsear	Charlock	Cresses	
Dandelion	Docks	Fathen	Hedge mustard	
Hemlock	Mustards	Nettles	Nodding thistle	
Parsley dropwort	Pennyroyal	Plantains	Ragwort	
Redroot	Scotch thistle	Shepherd's purse	Storksbill	
Thornapple	Variegated thistle	Vetch	Wild carrot	
Wild radish	Wild turnip	Willow weed	Winged thistle	

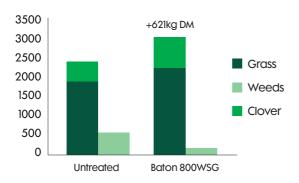
If red clover has been sown, use a maximum of lkg/ha of **Baton 800WSG** to minimise damage. Higher rates reduce red clover plant numbers. Add **Valdo 800WG** to **Baton 800WSG** for chickweed control.

For nodding thistles, **Baton 800WSG** applied at 1.5kg/ha will only control seedlings and very small rosettes (up to 7cm diameter). Typically, nodding thistles will reach this size within six to eight weeks after germination. Larger thistles may be controlled with higher rates of **Baton 800WSG** (2–3kg/ha), but clover mortalities will occur.

Improved pasture composition

A trial comparing the dry matter (DM) yield and composition of sprayed and unsprayed newly sown pasture indicated that while total yield (kg DM/ha) is often similar between pastures, the big benefit is improved pasture composition. A large increase in the valuable feed components of autumn sown pasture (ie grass and clover) was measured when **Baton 800WSG** was applied after the first full graze.

Baton 800WSG increased yield of grass and clover (and controlled the weeds) Trial No. NUNZ0410: Trial sprayed after first full grazing.



Trial results showed:

- Clover DM increased by 66%
- Grass DM increased by 23%
- Weed DM decreased by 80%

The extra DM, or feed, has an economic value to the farmer, therefore return on the investment from the herbicide versus supplementary feed can be calculated. The value of grass changes seasonally. For the purpose of the exercise, the extra pasture grown (621kg DM) has been valued at 12c/kg DM. To buy in feed to substitute for the extra 621kg DM grown it could cost between 18–40c/kg DM or \$112 - \$248 thus making controlling weeds a much more economic option.

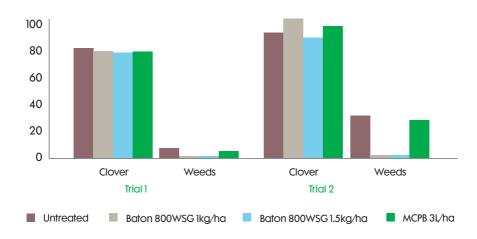


Effect of Baton 800WSG on white clover

Provided new pasture is fully grazed to remove clover leaf prior to spraying recommended rates of **Baton 800WSG**, minimal white clover damage should occur. Results from replicated field trials (see graph) show similar numbers of white clover plants in **Baton 800WSG** treated plots and untreated plots 3-4 months after herbicide application.

White clover growth was initially reduced, but production cuts at 4-6 months after herbicide application showed the clover suffered no long-term effects. In fact, due to reduced competition from weeds, clover production was actually enhanced relative to the untreated areas.

White clover plants/m² and weeds/m² 3-4 months after herbicide application



The addition of **Valdo 800WG** to **Baton 800WSG** will broaden the spectrum of weeds controlled. Adding adjuvants and oils to **Baton 800WSG** can increase the level of clover damage.

On-farm experience indicates that in general, **Baton 800WSG**, **Valdo 800WG** + **Bonza Gold** tank mixes have had little long term effect on clovers and that leaving chickweed or other weeds uncontrolled will potentially have a greater effect on pasture establishment and production.

For the best results with Baton 800WG

- Apply Baton 800WSG at 1–1.5kg/ha 3-7 days after the first full grazing.
 Grazing both exposes the weeds and removes much of the clover leaf, thus reducing the herbicide uptake by the clover and minimising damage.
- Ensure complete coverage of the foliage. Phenoxy herbicides are absorbed through the foliage and translocated to the growing points.
 Within reason, higher water rates give better results.
- There is no prescribed withholding period after spraying, but it is recommended that grazing be delayed for about 14 days as early grazing may reduce the level of weed control.



Finally

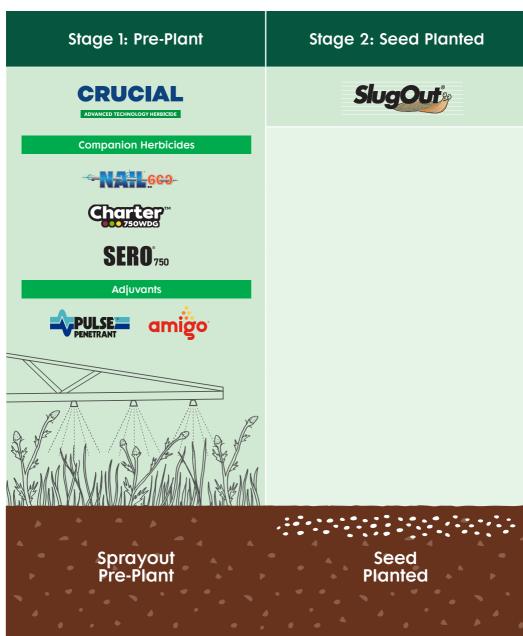
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New pasture crop cycle



Stage 3: Pre-Grazing

Stage 4: Post-Grazing









DICTATE 480









Small Seedlings (clover 1-2 trifoliate leaves)

Post Grazing

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