



ADAMA



Ticks all the right boxes



Fixes **problematic weeds**.



Fixes **programme deficiencies**.



Fixes **overall crop productivity**.



Trifix[®]
HERBICIDE

Product Guide



HERBICIDE

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Introducing Trifix® Herbicide



A New Post-Emergence Herbicide for Fodder Beet

Trifix® Herbicide is a post-emergence herbicide containing **500 g/kg triflurosulfuron-methyl** in a **water dispersible granule (WG)** formulation for the control and suppression of key broadleaf weeds in fodder beet. It is a **Group 2 (ALS inhibitor)** herbicide designed to be used as a tank-mix partner with established fodder beet herbicide programmes.

Why Trifix®?

Growers continue to face challenges from weed species that are difficult to manage with conventional fodder beet herbicides alone. Trifix® broadens the weed spectrum, improves overall control and provides an additional mode of action for integrated weed management programmes.

Key Features

- New active ingredient for improved weed management in all fodder beet crops
- Broad-spectrum broadleaf weed activity
- Excellent crop selectivity
- Compatible with major post-emergence fodder beet herbicides
- Low use rate of only 30 g/ha
- Short re-cropping intervals
- Valuable resistance management tool
- Proven performance in international sugar beet and fodder beet systems

Product Summary

Feature	Description
Active Ingredient	500 g/kg triflurosulfuron-methyl
Herbicide Group	Group 2 (ALS Inhibitor)
Formulation	Water Dispersible Granule (WG)
Crop	Fodder Beet (all varieties)
Application Rate	30 g/ha
Number of Applications	2 sequential applications
Withholding Period	56 days grazing restriction

Delivering Improved Weed Control



Control Where Existing Programmes Need Support

Trifix® Herbicide has been developed to strengthen existing post-emergence herbicide programmes by targeting weeds that are poorly controlled or not listed on many conventional fodder beet herbicide labels.

Closing Weed Control Gaps

Many of the weeds controlled or suppressed by Trifix® are either poorly controlled or not listed on conventional post-emergence fodder beet labels. When added to existing programmes, Trifix® provides growers with broader spectrum weed management and cleaner paddocks.

Weeds	Trifix®	Beetrix*	Rifle® EC or Betanal* Forte	Betanal* Quattro	Goltix® Gold	Ethosat® or Norton*
Mayweed (<i>Anthemis cotula</i>)	Control	Sus	-	-	Sus	-
Nettle, Stinging (<i>Urtica urens</i>)	Control	Sus	Sus seedling	-	Sus	-
Shepherd's purse (<i>Capsella bursa-pastoris</i>)	Control	Sus	Sus seedling	Sus	Sus	Inter
Wild turnip (<i>Brassica rapa</i>)	Control	-	-	-	-	-
Dock, Broadleaf (<i>Rumex obtusifolia</i>)	Supp Seedling	-	-	-	Sus seedling	-
Field pansy (<i>Viola arvensis</i>)	Supp	Supp	-	Sus	Mod sus	-
Kale (volunteer) (<i>Brassica oleracea ssp sabellica</i>)	Supp	-	-	-	-	-
Mallow, Small flowered (<i>Malva parviflora</i>)	Supp	Supp	-	-	-	-
Nightshade, Black (<i>Solanum nigrum</i>)	Supp	Sus	Sus up to 4TL	Sus	Mod sus	Inter
Nightshade, Hairy (<i>Solanum sarrachoides</i>)	Supp	Sus	-	-	-	-
Plantain (<i>Plantago spp.</i>)	Supp	-	-	-	-	-
Spurrey (<i>Spergula arvensis</i>)	Supp	-	Sus seedling	Sus	Sus	Sus
Stagger weed (<i>Stachys arvensis</i>)	Supp	-	-	-	-	-
Velvetleaf (<i>Abutilon theophrasti</i>)	Supp	-	-	-	-	-
Willow weed (<i>Persicaria maculosa</i>)	Supp	Sus	Sus up to 4TL	Sus	-	Inter
Wireweed (<i>Polygonum aviculare</i>)	Supp	Supp	Res	-	Mod sus	Inter
Chickweed (<i>Stellaria media</i>)	No Control	-	Sus seedling	-	Sus	Sus
Cress, Twin (<i>Lepidium didymum</i>)	No Control	Supp	Sus seedling	-	Sus	-
Fathen (<i>Chenopodium album</i>)	No Control	Sus	Sus seedling	Sus	Sus	Inter
Redroot (<i>Amaranthus powellii</i>)	No Control	Sus	Sus seedling	Sus	Sus	Sus
Speedwell, Scrambling (<i>Veronica persica</i>)	No Control	Sus	-	-	Sus	Inter
Thistle, Californian (<i>Cirsium arvense</i>)	No Control	-	-	-	Non-sus	-
Thistle, Scotch (<i>Cirsium vulgare</i>)	No Control	-	-	-	Sus seedling	-
White clover (<i>Trifolium repens</i>)	No Control	-	-	-	Sus	-

Sus = Susceptible weed
Mod sus = Moderately susceptible weed

Supp = Suppressed weed
Inter = Intermediate susceptible weed

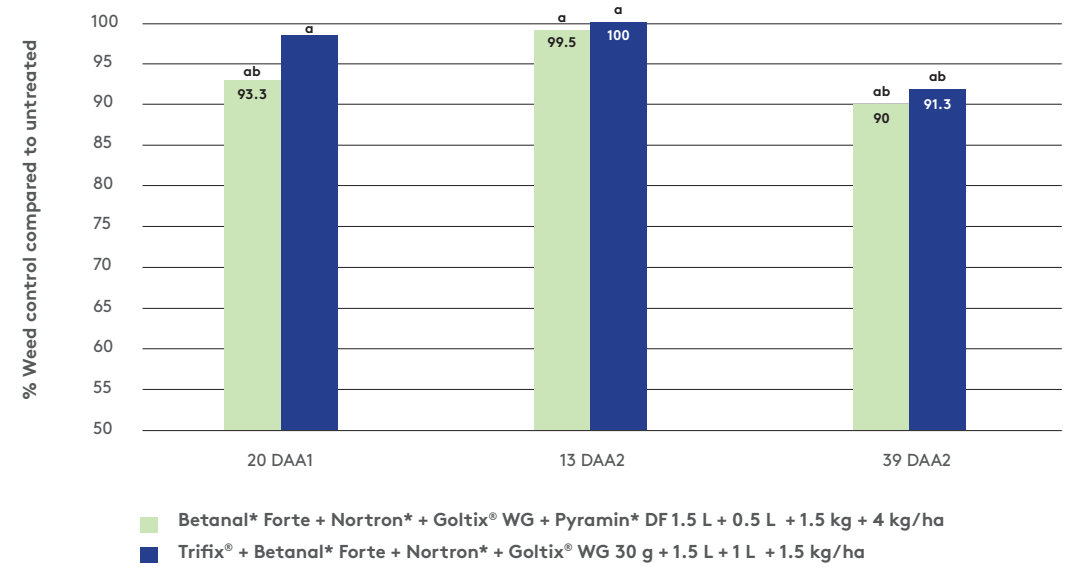
Res = Resistant weed
Non sus = Non-susceptible weed

Trial Results

For best results on the broadest spectrum of weeds, use two sequential applications of Trifix® (30 g/ha) tank mixed with label rate combinations of Rifle® EC, Betanal* Forte, Goltix® Gold, Betanal* Quattro, Ethosat®, Nortron and/or Beetrax*.



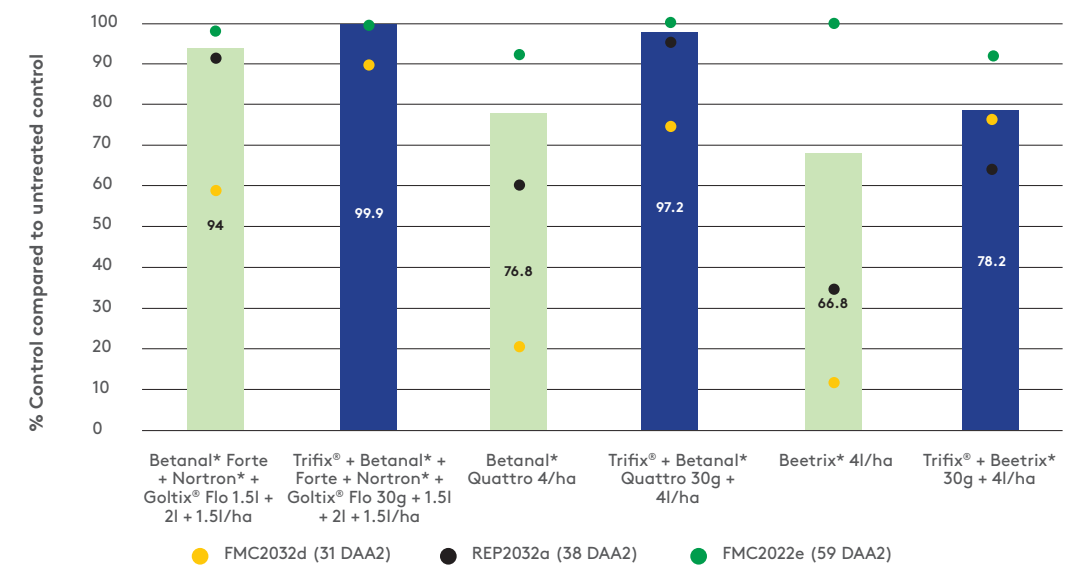
Efficacy on Wild turnip



The inclusion of 30 g/ha Trifix® Herbicide delivered a high level of control of Wild turnip, equivalent to the current leading standard program. As a result, the arrival of Trifix® in New Zealand has the potential to remove 7L - 9L/ha of chloridazon from a grower's weed control programme.



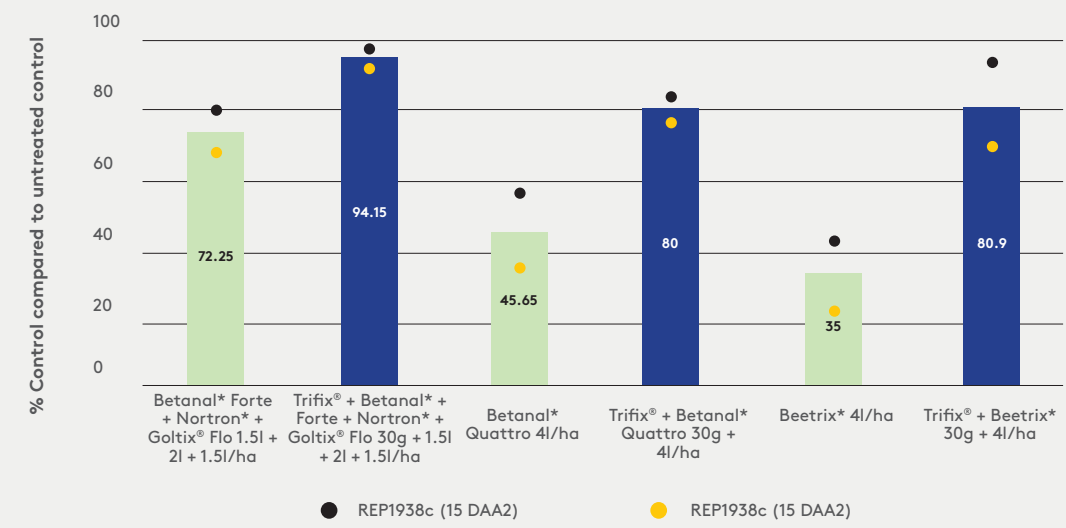
Efficacy on Mayweed



The addition of Trifix® Herbicide increased the level of control achieved of Mayweed in all of the three post-emergent herbicide programmes evaluated.



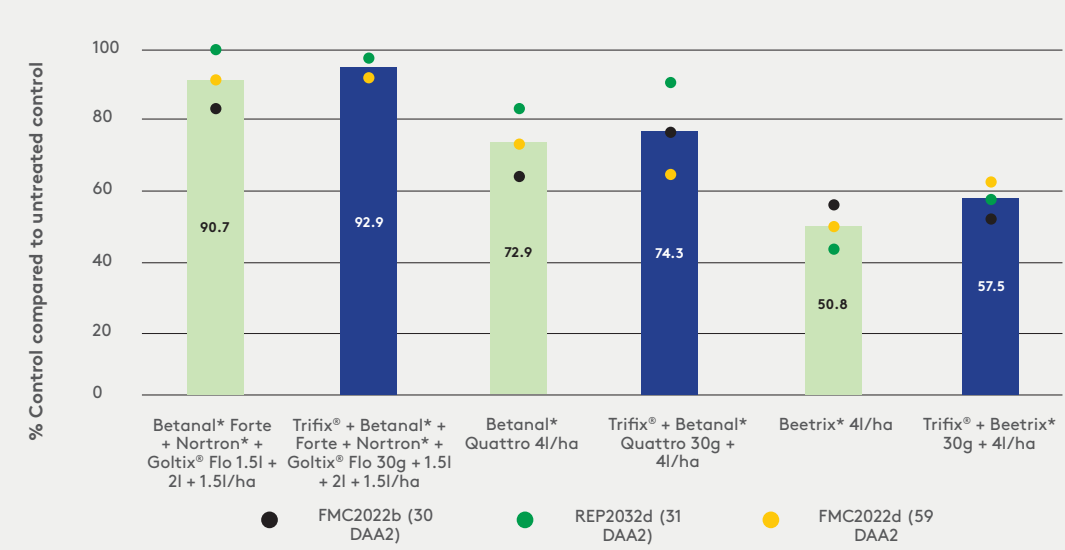
Efficacy on Mallow



In these two replicated field trials, when Trifix® was added to the tank-mix it improved the control of Mallow well above the current post-emergent herbicide programmes.



Efficacy on Wireweed



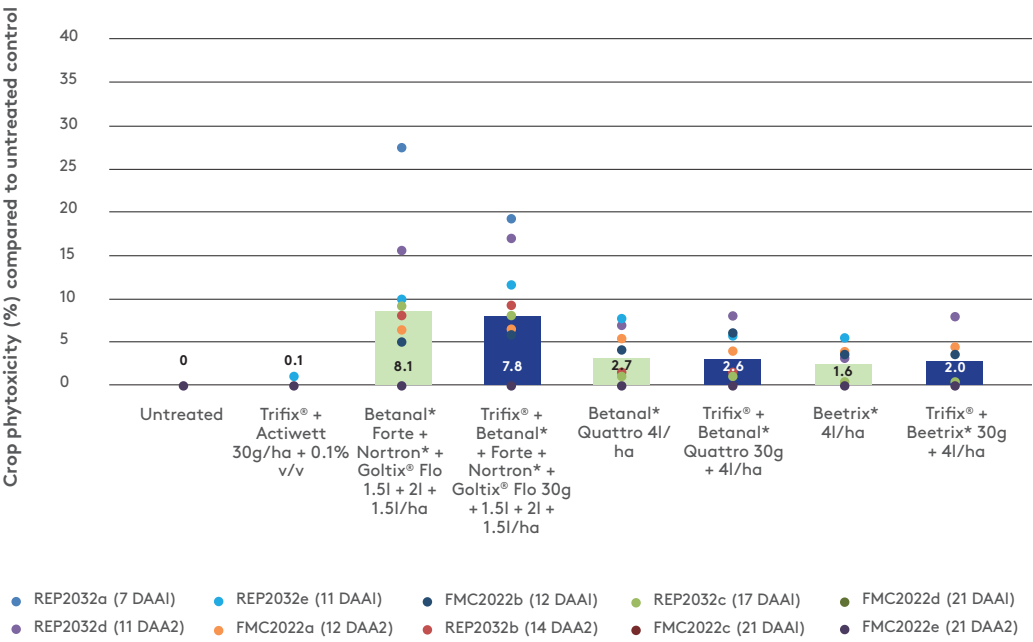
In these trials, the addition of Trifix® Herbicide provided a slight improvement in control over the current post-emergent programs. With wireweed, like with all weeds, the age of plant at time of application does influence level of control achieved. Large plants will be less affected than smaller plants and may only have their growth suppressed.

Crop Safety

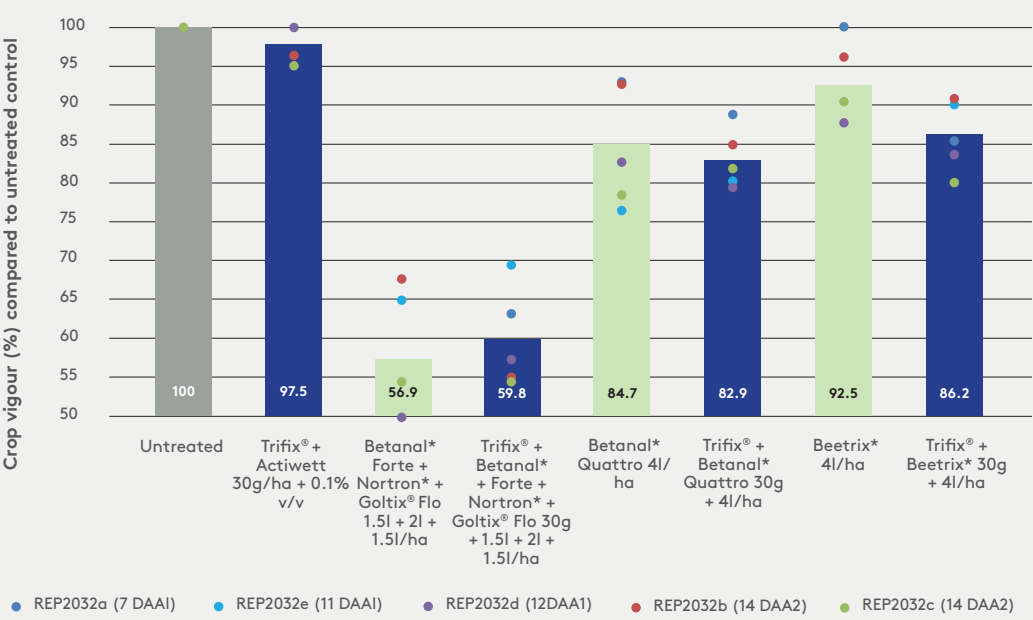
AN INNOVATIVE NEW HERBICIDE FOR ALL FODDER BEET CROPS, WITHOUT EXCEPTION!



Crop phytotoxicity



Crop vigour



These trials confirm that Trifix® provides a high level of crop safety, not exacerbating the current impact that that current conventional post-emergent fodder beet herbicide programmes have on either the level of crop phyto or crop vigour observed.



Application Guidelines

Application Timing

Trifix® Herbicide can be safely applied to fodder beet from the cotyledon stage through to crop canopy closure.

Following the post-emergence application of Trifix®, susceptible weeds turn yellow within 7-21 days, followed by death of the growing point. Conditions that promote the activity of Trifix® Herbicide are warm temperatures (15–25oC) and adequate soil moisture before, during and immediately after application.

Avoid applying Trifix® Herbicide if low or high temperatures are expected. Refer to the product label for more detail. Treatment should be applied early in the morning or in the evening (but avoid inversion conditions) so that a period of moderate temperatures follow the application.

Maximum performance is achieved when:

- ✓ Weeds are actively growing
- ✓ Weeds are between cotyledon and 2 true leaf stage
- ✓ Adequate soil moisture is present
- ✓ Temperatures are favourable for active growth

Trifix® has little to no soil activity, therefore spray coverage of emerged weeds is essential for successful weed control.

Rainfall within 6 hours of application may reduce weed control. Avoid application when heavy rainfall is forecast.

Application Rate

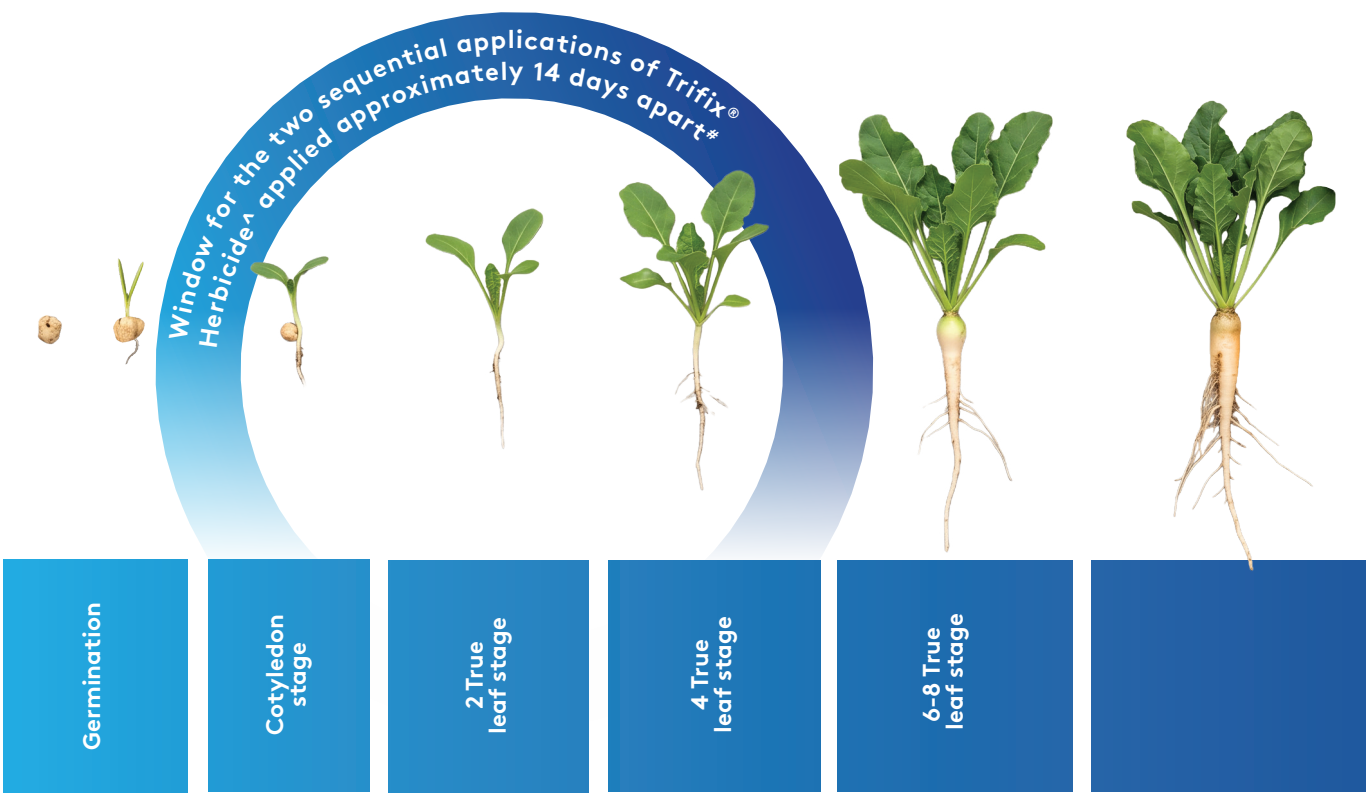
Apply Trifix® Herbicide at 30 g/ha. For best results on the broadest spectrum of weeds, use two sequential applications of Trifix® tank mixed with label rate combinations of Rifle® EC, Betanal* Forte, Goltix® Gold, Betanal* Quattro, Ethosat®, Nortron and/or Beatrix*. Always follow the label directions of the tank-mix partner and observe the most restrictive label requirements.

For best performance, apply as **two sequential applications** in a tank-mix with a partner herbicide **approximately 14 days apart** as part of a broader weed management programme.

When applying Trifix® Herbicide in a tank-mix with another herbicide, always follow the surfactant recommendation of the other herbicide. When applying Trifix® alone, always add a non-ionic surfactant (1000 gai/L) at 0.1% v/v (i.e. 100 mL/100 litres water) such as Actiwett* or equivalent.

Spray Recommendations

Apply with a minimum water volume of 200 L/ha targeting a MEDIUM spray quality through a well maintained, properly calibrated sprayer aiming to achieve complete spray coverage of target weeds. Refer to tank mix partner labels for spray volume requirements.



Trifix Herbicide should always be applied with label rate combinations of Rifle® EC, Betanal Forte, Goltix® Gold, Betanal* Quattro, Ethosat®, Norton* and/or Beatrix*.

Plant Back / Re-Cropping Recommendations

Crop Failure

Subject to partner product restrictions, in the event of crop failure sow only Spring Wheat, Spring Barley or Fodder Beet within one month of the last Trifix® application.

Crop Rotation

Wheat, Barley, Ryegrass, Maize, Forage brassicas and Chicory may be sown 1 month after the last application of Trifix®, and white clovers may be sown 3 months after the last application of Trifix®.

For all other crops it is recommended to conduct a pot bioassay to ascertain crop sensitivity and safe plantback intervals to remaining triflurosulfuron-methyl residues in the soil.

When Trifix® has been applied in a tank-mix, observe the plant-back recommendations of other herbicides and follow the most restrictive label.

Grazing Restrictions

Grazing: DO NOT graze or feed treated fodder beet or crop residues to livestock for 56 days following the last application of Trifix®.

Where Trifix® is tank mixed with other herbicides, always follow the most restrictive withholding period specified on the partner product label.



Resistance Management

Trifix® belongs to the Group 2 herbicide family (ALS inhibitors). Like all Group 2 herbicides, resistance can develop if products are repeatedly used without diversification.

Resistance Management Recommendations

Do:

- ✓ Always use Trifix® as part of a tank mixture
- ✓ Rotate herbicide modes of action
- ✓ Use multiple effective mechanisms within a programme
- ✓ Incorporate cultural and mechanical weed control practices
- ✓ Monitor paddocks following application
- ✓ Control weeds before they set seed





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BEFORE MIXING AND APPLYING
READ THE LABEL AND BOOKLET

For more information
contact your local ADAMA
Commercial Manager or
visit www.adama.com



ALWAYS READ AND FOLLOW LABEL DIRECTIONS.

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