

Magister ^{®1} CS

The Perfect Partner Brassica Herbicide

Tankmix with:

- ✓ **Frontier^{®2}** or
- ✓ **Trifluralin** or
- ✓ **Glyphosate**

Swede ✓

Kale ✓

Oil Seed Rape ✓

Forage Rape ✓



Magister^{®1} CS

**Safe on Swedes, Kind on Kale,
Friendly to Forage Rape and Easy
on Oilseed Rape**

Introduction

High quality Brassica feed crops are critical for animal feeding at 'pinch' times. But every year weed pressure robs brassica crops of yield potential and profit. Post emergent clean up herbicides are often used to knockout established weeds but crop yield potential has sometimes been reduced significantly from early weed competition. Good pre emergence weed control gives the best yield potential. However, current herbicide options need a partner as the full spectrum of problem weeds is not controlled by existing pre-emergent products.

Magister CS is novel new high technology Capsule Suspension (CS) of clomazone. This active ingredient will provide outstanding control of many problem weeds including Shepherds Purse, Chickweed, Cleavers etc and is complimentary with other Brassica herbicides. As such it is the perfect partner herbicide to control a wide range of frequently found Brassica weeds.

Mode of Action

Magister CS is a residual herbicide applied pre-emergence of crop and weeds. Magister CS has both root and shoot activity. The active ingredient clomazone acts by inhibition of the biosynthesis of photosynthetic pigments leading to bleaching symptoms on susceptible weed species. Susceptible weeds often emerge but are lacking pigmentation and plant death occurs shortly afterwards.

Formulation



The innovative Capsule Suspension formulation is a major advance on previous clomazone formulations providing volatility control without compromising efficacy. However care must still be taken when mixing/loading, applying, and at clean-out to minimise any off target effects.

Selectivity

There are 3 major species within the Brassica genus. Trials have demonstrated that Magister CS can be safely applied in 2 out of 3 Brassica species provided label directions are followed

- ✓ **Brassica napus** - Swedes, Kale, Oilseed Rape, Forage Rape
- ✓ **Brassica oleracea** - Cabbage, Cauliflower, Broccoli, Brussel Sprouts, Kolrabi, Kale/Collard greens

Use Magister CS as per label directions.

- ✗ **Brassica campestris** - Mustard, Turnips (Pasja[®], Hunter[®]) **DO NOT USE!**

Do not use Magister CS on Brassica campestris varieties unless crop safety has been proven at the specific site in small scale trials. Selectivity will vary by variety and severe damage is possible particularly under cool wet conditions on light soils

Benefits

- Achieve better weed control for Bumper Brassica yields
- Control weeds BEFORE they compete with the crop
- Ideal partner herbicide with either trifluralin (PPSI), glyphosate (Pre-sow or Pre-em) or Frontier[®] (Pre-em)
- Innovative - Novel new herbicide, rapidly becoming a European standard in Oil Seed Rape weed control (Centium[®])
- Flexible use pattern – incorporate (PPSI) or apply pre-emergence (Pre-em)

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Weed Spectrum - Magister CS

Susceptible Weeds		Moderately Susceptible*	Moderately Resistant
Chickweed	Barnyard grass	Fumitory	Mayweed
Fat hen	Cornbind	Mallows	Field Pansy
Shepherds Purse	Groundsel	Black nightshade	Docks
Henbit	Portulaca	Redroot	Oxalis
Sowthistle	Willowweed		Clovers
Twin cress	Cleavers		Emerged weeds and weeds growing from old roots
Wireweed	Speedwells		
Summer grass			

Perfect Partners

To widen the weed control spectrum Magister CS should be used in combination with one of the following;

Trifluralin Pre Plant Soil Incorporation (PPSI) – Trifluralin is a proven performer over many years but does not give good control of a number of important weeds including Shepherds Purse, Black Nightshade, Twin cress, Storksbill, Wild Turnip, Mallows etc. A tankmix of Magister CS will improve control of most of these weeds.

Glyphosate Pre-Sowing or Pre-Emergence – Magister CS may be applied with the second glyphosate application, provided there is bare earth and little trash.

FRONTIER[®] Pre-Emergence – Frontier has good efficacy on grasses and certain broadleaf weeds but less activity on others. A tankmix with Magister will give improved control of a range of difficult weeds including Fathen, Black Nightshade, Fumitory, Redroot (Amaranthus) and Willow Weed. A major benefit of a Magister CS + Frontier pre em application is the cost saving of not having to incorporate post spray.

Transitory Crop Whitening – Some whitening of crop may occur under certain conditions. Whitening is typically found on 1st and 2nd true leaves but not the cotyledons. Plants will continue to grow through these symptoms and there will be no long term effect on growth or yield provided plant growth is not stalled by cold wet conditions. Factors that increase the chance of whitening include: High rainfall, Light soils, Application close to emergence.

Do not use in late autumn/early winter when declining soil temperatures and poor growing conditions are likely post emergence.



'Whitening' post emergence



2 weeks later



4 weeks later

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Directions for Use

Crop	Brassica Species	Rate	Comments
Fodder and Seed Brassicas	Kale Rape Swedes Oilseed Rape	250 - 330 mL	Pre-plant incorporated: Apply in mixtures with trifluralin and incorporate. Use the highest rate. The duration of weed control may be less from pre-plant incorporation. Pre-emergence: Apply the lower rate in combination with a suitable partner (eg Frontier) as soon as possible following sowing of the crop and before emergence of both the crop and target weeds. When applying Magister CS care should be taken to avoid overlap of spray swaths. Transient whitening may occur on early foliage but yield will not be affected.

Growing Bumper Brassicas for Forage or Seed

Checklist to give Brassica crops the best possible start and produce high quality yields and optimal animal feed.

- Select the best cultivar for the site and season.
- Address Soil Fertility with a good Fertiliser programme (Base and Side).
- Plan effective Weed/Pasture control prior to cultivation or No Till
 - Maximise a 1 or 2 spray glyphosate program with effective tankmix partners such as Hammer[®] to control tough weeds.
- Ensure good Paddock preparation (Cultivation or No Till).
- Apply Magister CS PPSI with Trifluralin or Pre-em with Glyphosate or Frontier.
- Protect seedlings from slug feeding at emergence with Metarex[®] All Weather Slug Bait.



Getting the best out of Magister

- Use the lower rate on light soils with low organic matter, low Cation Exchange Capacity (CEC)
- Expect some 'Whitening' on lighter soils and after heavy rainfall – with adequate growing conditions plants will rapidly grow though this transitory whitening
- Always tankmix with either Trifluralin or Frontier. Magister CS may be mixed with glyphosate if small weeds are present.
- Apply to a good seedbed free of weed and stubble
- Ensure moisture activation
- Apply when good growing conditions will follow emergence and not when cold, wet poor growing conditions are likely, particularly in late autumn, early winter.

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