

THISTROL GOLD

TECHGUIDE



AUSTRALIAN  
THROUGH  
& THROUGH

# PROTECT THE INVESTMENT IN YOUR CLOVER, MEDIC OR GRASS PASTURE WITH NUFARM'S THISTROL GOLD.

With an application from two trifoliolate leaves in clover and medic, Nufarm's Thistrol Gold can control broadleaf weeds effectively, while providing early gains in pasture feed quantity and quality.

For over a century, Nufarm has been working with Australian farmers to make working the land, more productive. Nufarm's Thistrol Gold helps you protect the investment in your medic, clover or grass pasture with a unique triple active ingredient combination. Controlling a wide range of broadleaf weeds early, effectively with excellent crop safety. Nufarm's Thistrol Gold locks in gains to clover, medic and grass pasture quantity and quality. While, the flexible use rates and ability to tank mix with insecticide make Nufarm's Thistrol Gold the perfect one drum pasture solution.





Nufarm's Thistrol Gold is a unique triple active ingredient combination recommended for use with Banjo adjuvant.

## MCPB (300 g/L)

Delivers a high phenoxy dose to weeds to maximise control, while maintaining pasture safety and improving pasture quality.

MCPB (like 2,4-DB) is unusual in that it has very little primary herbicidal activity itself. Instead, MCPB undergoes beta-oxidation within weeds and converts to MCPA, which is immediately toxic to the plants.

The beta-oxidation process is inefficient in legume species such as clover and medic, particularly at early growth stages. This means a robust rate can be applied to young pastures for effective weed control without compromising pasture production.

## MCPA (20 g/L)

Kick-starts the MCPB  $\beta$ -oxidation process, delivering reliability in adverse conditions, a historical challenge with straight MCPB formulations.

## FLUMETSULAM (10 g/L)

Provides a second mode of action and complimentary weed activity, delivering a wider weed spectrum and even greater reliability, without compromising safety of the overall formulation.

## +BANJO ADJUVANT (TANK-MIX AT 0.5% V/V)

Improves the reliability of MCPB in adverse conditions by increasing uptake and enhancing accumulation at the site of action; and is also essential for flumetsulam activity.



## SUB CLOVER / SEATON PARK

3 weeks after application



# NUFARM'S THISTROL GOLD WEED RATING TABLE

Best control is achieved on small, actively growing plants. Exceeding the age/size restrictions may reduce control of those weeds to suppression at best. Always use the correct rate as indicated below to ensure control of weeds.

Weed (common name)	Weed (scientific name)	Weed Growth Stage		Critical Comments	Rating	
		Up to leaf no.	Up to weed size (cm)		2.0 L/ha	4.0 L/ha
Amsinckia	<i>Amsinckia</i> spp.	10 leaf	10 cm diameter	Use 2 L/ha for control	****	*****
Ball mustard	<i>Neslia paniculate</i>	6 leaf	5 cm diameter	Use 2 L/ha for control	***	***
Buchan Weed	<i>Hirschfeldia incana</i>	8 leaf	10 cm diameter	Use 4 L/ha for control	****	*****
Caltrop	<i>Tribulus terrestris</i>	4 leaf	-	Use 4 L/ha for control	***	****
Capeweed	<i>Arctotheca calendula</i>	4 leaf	10 cm	Use 2 L/ha for control	****	****
Charlock	<i>Sinapis arvensis</i>	6 leaf	5 cm diameter	Use 2 L/ha for control	****	*****
Chickweed	<i>Stellaria media</i>	4 leaf	10 cm diameter	Use 4 L/ha for control	***	****
Common cotula	<i>Cotula australis</i>	4 leaf	10 cm diameter	Use 2 L/ha for control	****	*****
Deadnettle	<i>Lamium amplexicaule</i>	6 leaf	-	Use 4 L/ha for control	****	*****
Dock (seedlings)	<i>Rumex</i> spp.	2 leaf	5 cm diameter	Use 2 L/ha for control	****	*****
Doublegee	<i>Emex australis</i>	6 leaf	10 cm diameter	Use 4 L/ha for control	***	****
Dwarf (Stinging) nettle	<i>Urtica urens</i>	6 leaf	5 cm high	Use 4 L/ha for control	****	*****
Fat hen	<i>Chenopodium album</i>	15 leaf	20 cm high	Use 2 L/ha for control	****	*****
Hedge mustard	<i>Sisymbrium officinale</i>	8 leaf	10 cm diameter	Use 2 L/ha for control	****	*****
Indian hedge mustard	<i>Sisymbrium orientale</i>	8 leaf	10 cm diameter	Use 2 L/ha for control	****	*****
Lupins	<i>Lupinus</i> spp.	10 leaf	10 cm high	Use 2 L/ha for control	****	*****
Marshmallow	<i>Malva parviflora</i>	5-8 leaf	10 cm diameter	Use 4 L/ha for control	****	*****
Musky Storksbill	<i>Erodium moschatum</i>	12 leaf	10 cm diameter	Use 4 L/ha for control	**	****
New Zealand spinach	<i>Tetragonia tetragonoides</i>	4 leaf	5 cm diameter	Use 4 L/ha for control	***	****
Oxtongue	<i>Helminthotheca echioides</i>	4 leaf	5 cm	Use 4 L/ha for control	***	****
Paterson's curse	<i>Echium plantagineum</i>	8 leaf	10 cm diameter	Use 4 L/ha for control	***	****
Peppergrass	<i>Lepidium africanum</i>	10 leaf	15 cm diameter	Use 4 L/ha for control	***	****
Pheasant's eye	<i>Adonis microcarpa</i>	8 leaf	10 cm high	Use 2 L/ha for control	****	****
Prickly Lettuce	<i>Lactuca serriola</i>	6 leaf	5 cm	Use 2 L/ha for control	****	*****
Saffron thistle	<i>Carthamus lanatus</i>	5 leaf	5 cm diameter	Use 2 L/ha for control	****	*****
Sandrocket (Lincoln Weed)	<i>Diploaxis tenuifolia</i>	8 leaf	10 cm diameter	Use 4 L/ha for control	****	*****
Shepherd's purse	<i>Capsella bursa-pastoris</i>	8 leaf	10 cm diameter	Use 2 L/ha for control	****	*****
Sorrel (seedling)	<i>Rumex acetosella</i>	3 leaf	5 cm diameter	Use 2 L/ha for control	****	****
Sow thistle	<i>Sonchus oleraceus</i>	6 leaf	10 cm diameter	Use 2 L/ha for control	****	*****
Spear Thistle	<i>Cirsium vulgare</i>	Rosette	12 cm diameter	Use 4 L/ha for control	***	****
Stagger Weed	<i>Stachys arvensis</i>	6 leaf	-	Use 4 L/ha for control	***	****
Stemless Thistle	<i>Onopordum acaulon</i>	3 leaf	3 cm diameter	Use 4 L/ha for control	***	****
Three-horned bedstraw	<i>Galium tricornutum</i>	6 whorls	10 cm high	Use 2 L/ha for control	****	*****
Turnip Weed	<i>Rapistrum rugosum</i>	12 leaf	10 cm diameter	Use 2 L/ha for control	****	*****
Volunteer canola	<i>Brassica napus</i>	8 leaf	10 cm diameter	Use 2 L/ha for control	*****	*****
Ward's weed	<i>Carrichtera annua</i>	8 leaf	10 cm diameter	Use 2 L/ha for control	****	****
White ball mustard	<i>Calepina irregularis</i>	8 leaf	10 cm diameter	Use 2 L/ha for control	***	****
Wild radish	<i>Raphanus raphanistrum</i>	6 leaf	5 cm diameter	Use 4 L/ha for control	***	*****
Wild turnip	<i>Rapistrum rugosum</i>	10 leaf	10 cm diameter	Use 2 L/ha for control	****	*****
Wireweed	<i>Polygonum aviculare</i>	6 leaf	5 cm	Use 2 L/ha for control	****	*****

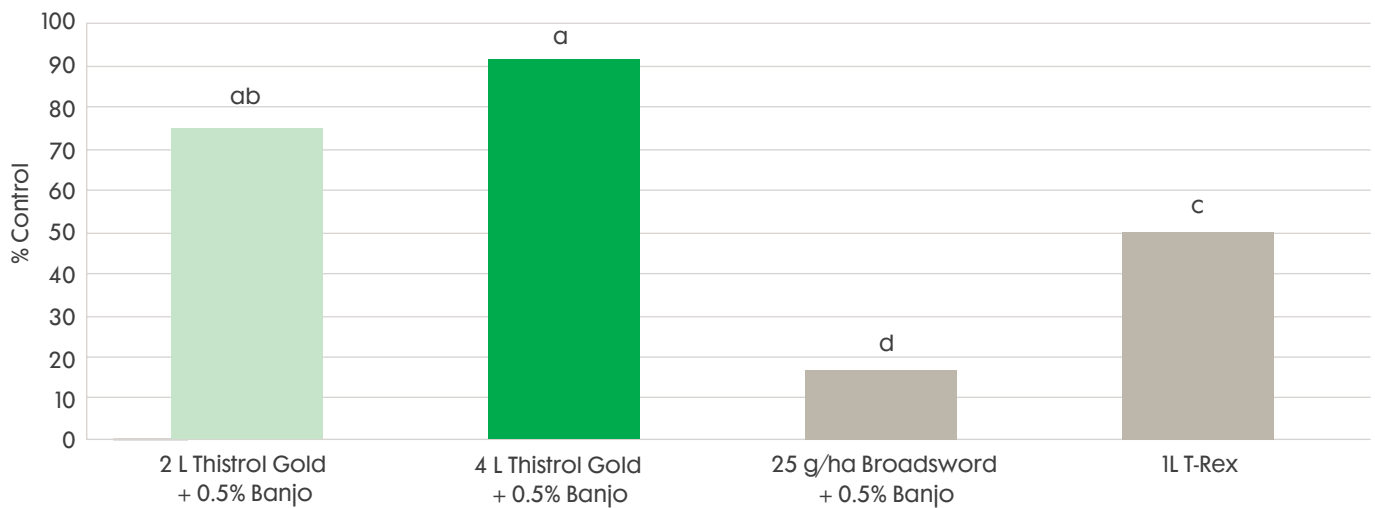
*	No activity	****	Good control
**	Weak suppression	*****	Excellent control
***	Strong suppression		

# WEED CONTROL

Nufarm's Thistrol Gold has a very broad range of activity, trial data has shown its superior efficacy when compared to several different standard treatments.

## STEMLESS THISTLE

### % CONTROL 6WAA EUDUNDA, SA

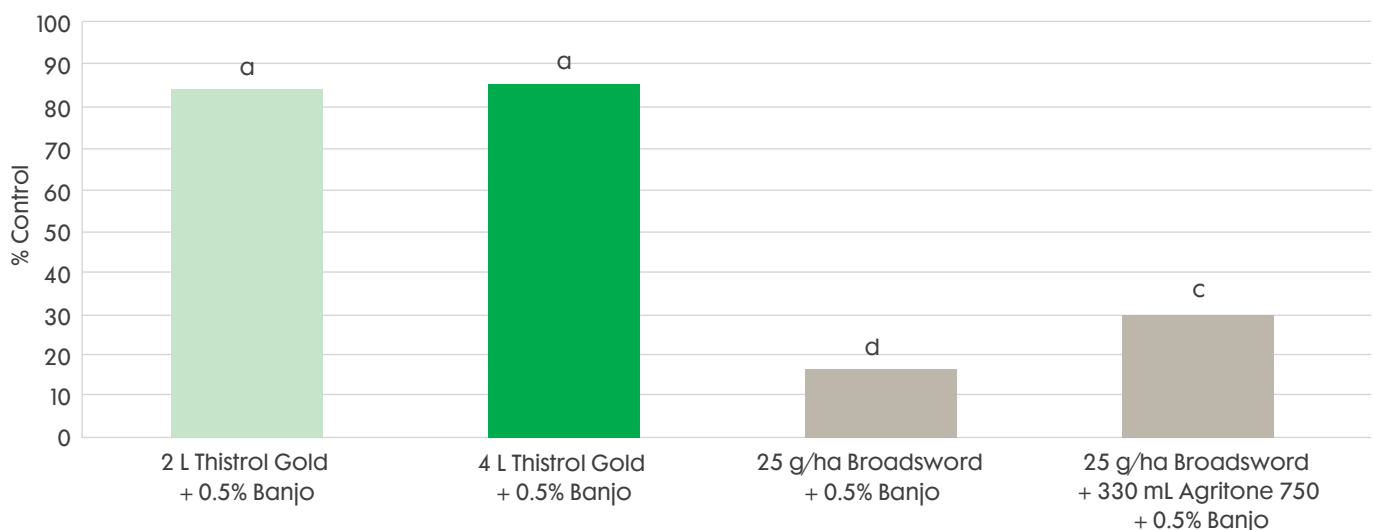


Trial Reference: NUSA-19-21100001-H10

Good control of Stemless Thistle can be expected when targeting seedlings with 4.0 L/ha Nufarm's Thistrol Gold. Nufarm's Thistrol Gold applied on larger sized Stemless Thistle will suppress growth for most of the season and reduce its competition with pasture species.

## SPEAR THISTLE

### % CONTROL 6WAA AVALON, VIC



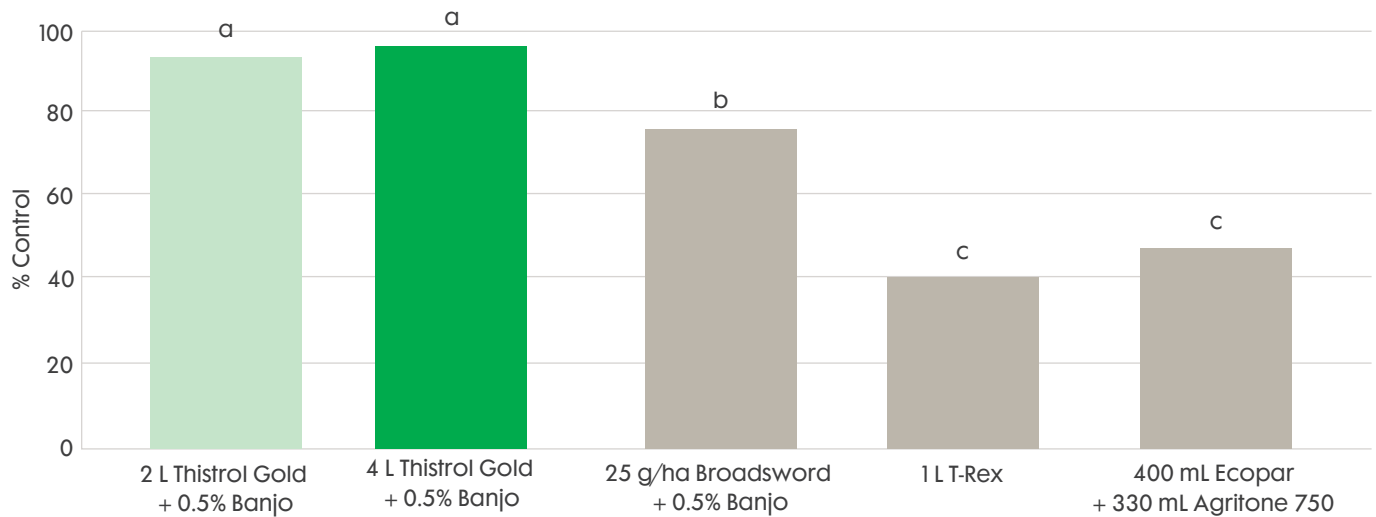
Trial Reference: NUVC-18-21099001-H08

Applications of Nufarm's Thistrol Gold on Spear Thistle should be made prior to the rosette growth stage.

# WEED CONTROL

## SORREL

### % CONTROL 6WAA MOSQUITO HILL, SA

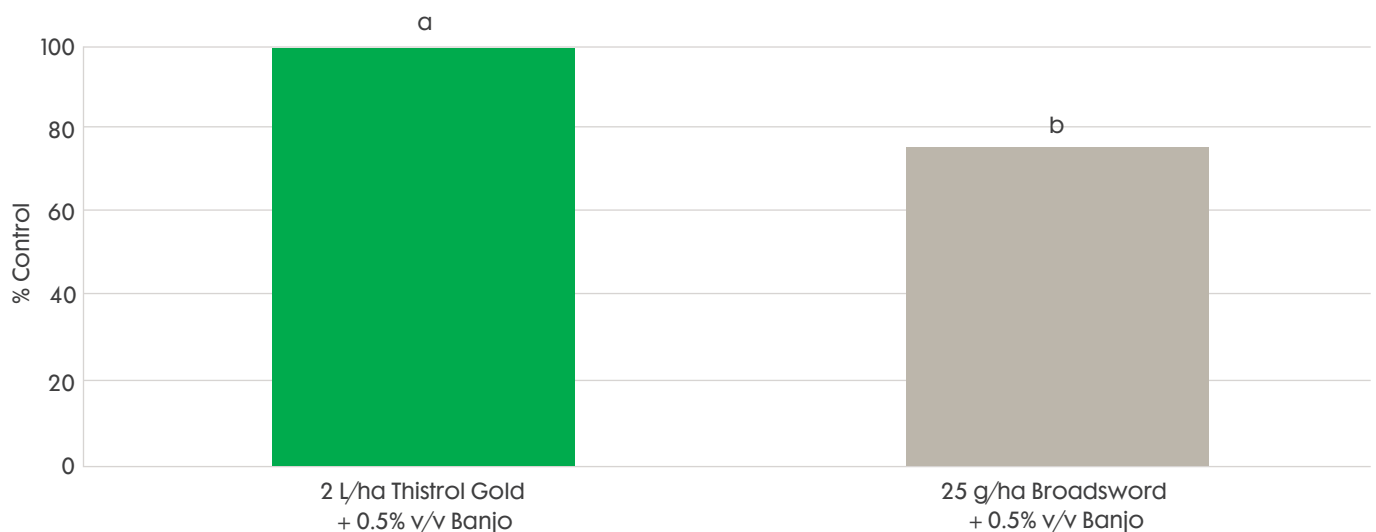


Trial Reference: NUSA-19-21100001-H11

An excellent level of control can be achieved when targeting seedlings of Sorrel. Nufarm's Thistrol Gold applied to perennial Sorrel can suppress growth for most of the season and be smothered by a competitive crop.

## CAPEWEED

### % CONTROL @ 56DAA ECHUCA, VIC

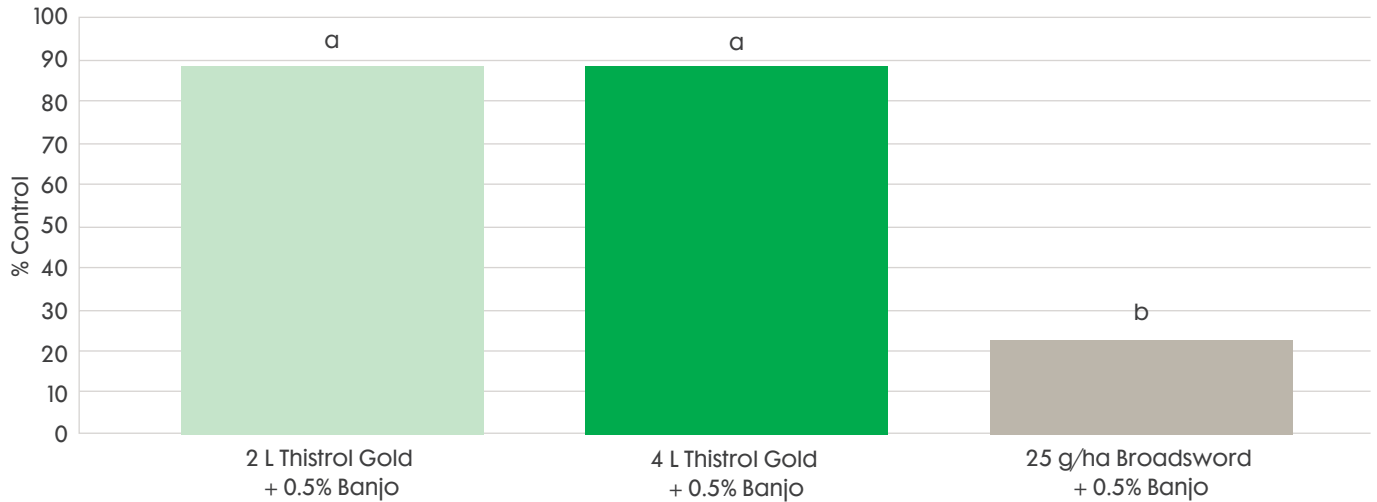


Trial Reference: NUVG-17-21099001-H06

Nufarm's Thistrol Gold applied at 2 L/ha will offer excellent control of Capeweed up to 4-leaf and strong suppression of larger Capeweed. Periods of extreme cold can reduce efficacy of Nufarm's Thistrol Gold on Capeweed.

# WIREEWEED

## % CONTROL 6WAA NARACOORTE, SA

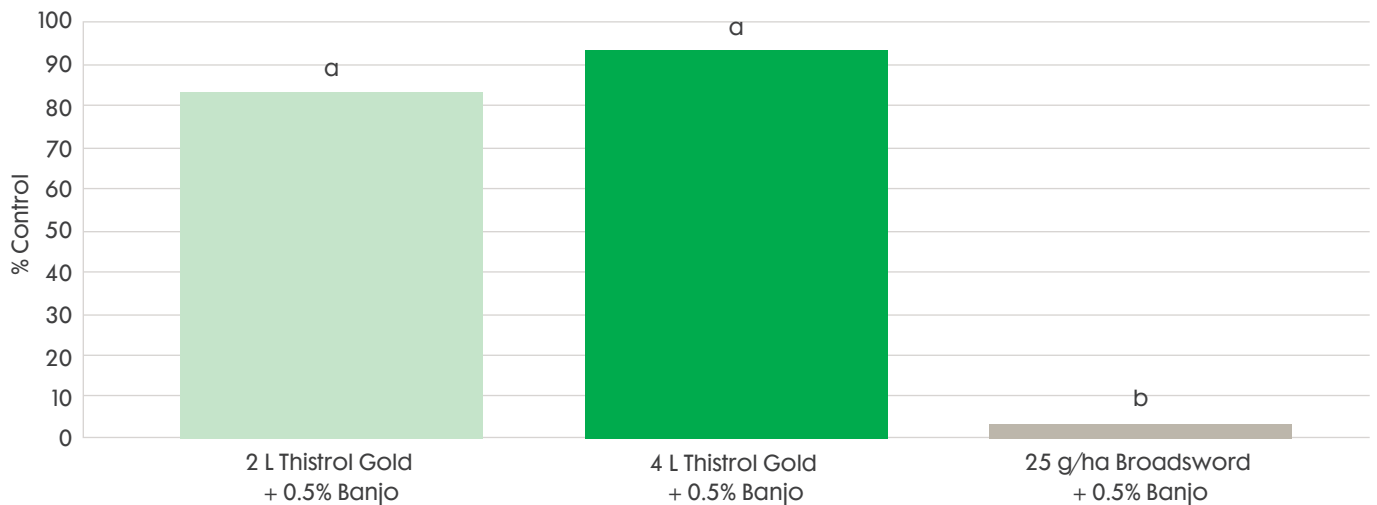


Trial Reference: NUSA-19-21100001-H09

Nufarm's Thistrol Gold applied at 2 L/ha provides excellent control of Wireweed up to 6-leaf. Higher rates may be need for larger sized Wireweed.

# STINGING / DWARF NETTLE

## % CONTROL 6WAA NARACOORTE, SA



Trial Reference: NUSA-19-21100001-H09



# PASTURE SAFETY AND INCREASED PRODUCTION

Nufarm's Thistrol Gold has a very broad range of activity, trial data has shown its superior efficacy when compared to several different standard treatments.

## CLOVER

- **The following clover species have been assessed for crop safety.** Arrowleaf clover, Balansa clover, Persian clover, Rose clover, Strawberry clover, Subterranean clover and White clover.
- Nufarm's Thistrol Gold can cause transient crop effects (leaf spotting and biomass reduction). Recovery is expected with good growing conditions.

## MEDIC

- **The following Medic species have been assessed for crop safety.** Barrel medic, Snail medic, Spineless burr medic and Strand medic.
- **DO NOT** apply more than 2 L/ha to medic crops.
- Nufarm's Thistrol Gold can cause transient crop effects (leaf spotting and biomass reduction). Medic crops should be treated early and delays in application could result in crops having insufficient time to recover from the temporary pause in growth with the use of this product. Medic crops are also sensitive to environmental stress which can compound stress and biomass recovery caused by Nufarm's Thistrol Gold.

## GRASSES

- **The following grass species have been assessed for crop safety.** Italian ryegrass, Perennial ryegrass, Cocksfoot, Tall fescue and Phalaris. Barley and Oats are sensitive, severe transient stem shortening and crop discolouration may occur. Application prior to Z21 to Wheat, Barley or Oats is likely to cause biomass reduction.



# INCREASED PRODUCTION

In 2019 a trial was established in a Caliph Barrel Medic pasture. This pasture had significant weed pressure from Wild Radish, Sowthistle, Prickly Lettuce, Wireweed and Tares. Pasture cuts were taken and any surviving weeds from treatments were excluded. This allowed the true value of the pasture to be calculated.

- Nufarm's Thistrol Gold treatments had the highest pasture dry matter
- Nufarm's Thistrol Gold treatments had the least amount of weeds present
- Medic density was greater in Nufarm's Thistrol Gold treatment area due to less weed competition
- Nufarm's Thistrol Gold provided \$250 /ha more pasture value compared to untreated
- Nufarm's Thistrol Gold provided over 22% higher Crude Protein over untreated

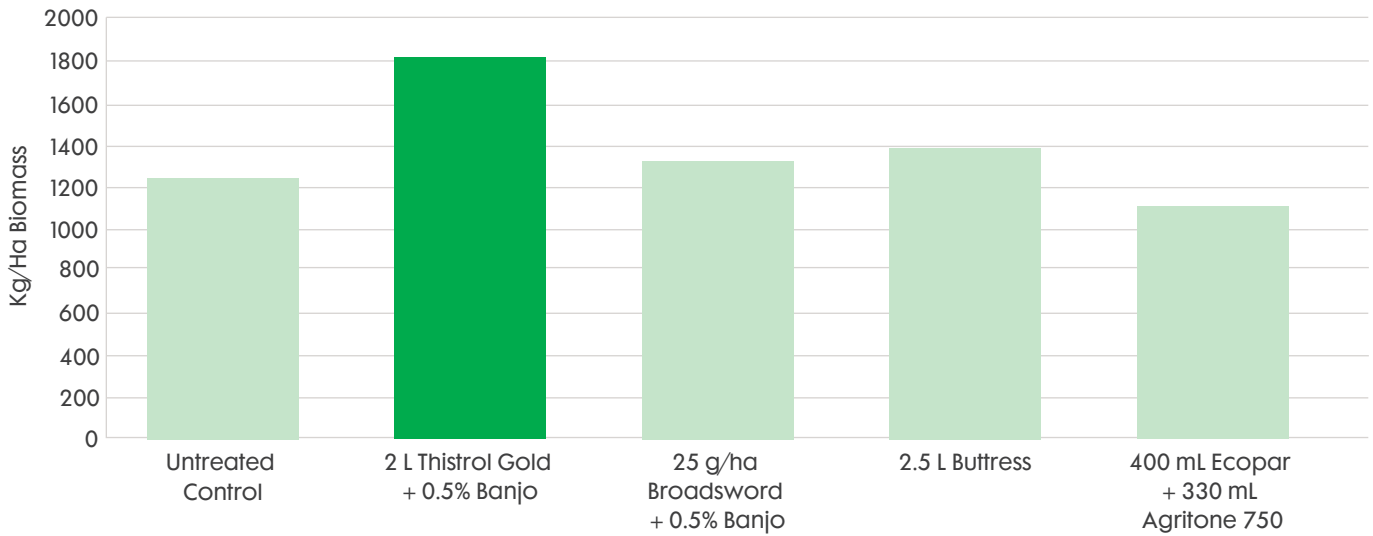
Treatments	Medic Fresh Weight		Calculated Dry Matter		\$ / Tonne	Dry matter Gross value	Dollars more than untreated
Untreated Control	4963	kg/ha	1241	kg/ha	\$ 450.00	\$558.28	-
2 L Thistrol Gold + 0.5% Banjo	7250	kg/ha	1813	kg/ha		\$257.34	
25 g Broadsword + 0.5% Banjo	5313	kg/ha	1328	kg/ha		\$39.38	
2.5 L Buttfress	5538	kg/ha	1384	kg/ha		\$64.69	

Total dry matter excluding weed species

# INCREASED PRODUCTION

## DRY MATTER

(KG/H)

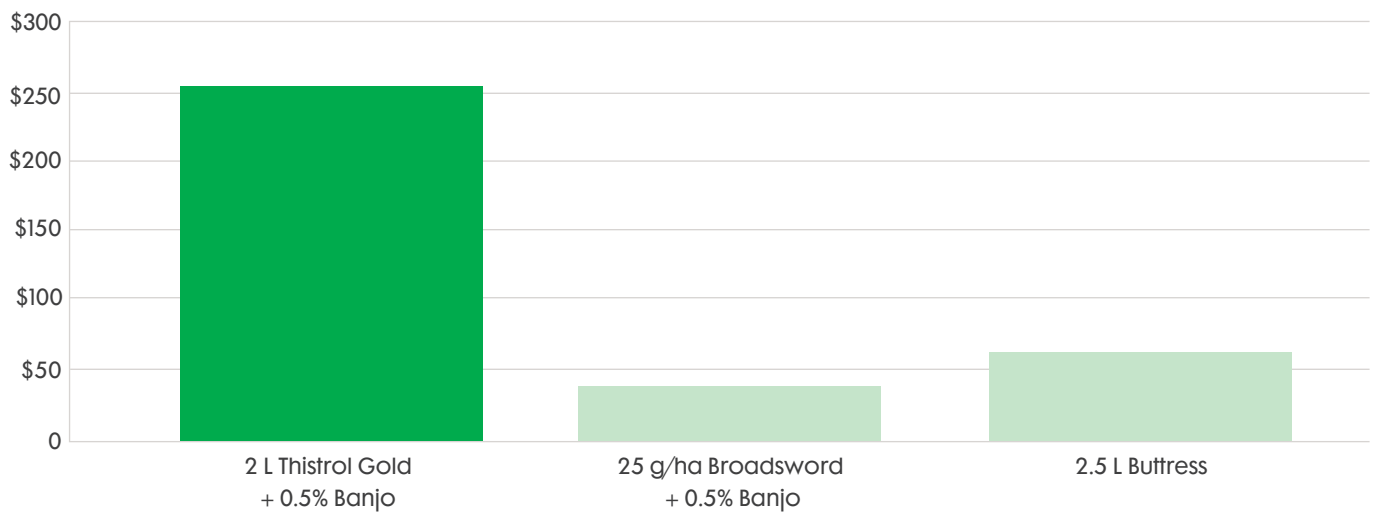


Trial Reference: NUSA-19-21099001-H07

Total value gained above untreated control (dry matter valued at \$469/T)

## DRY MATTER

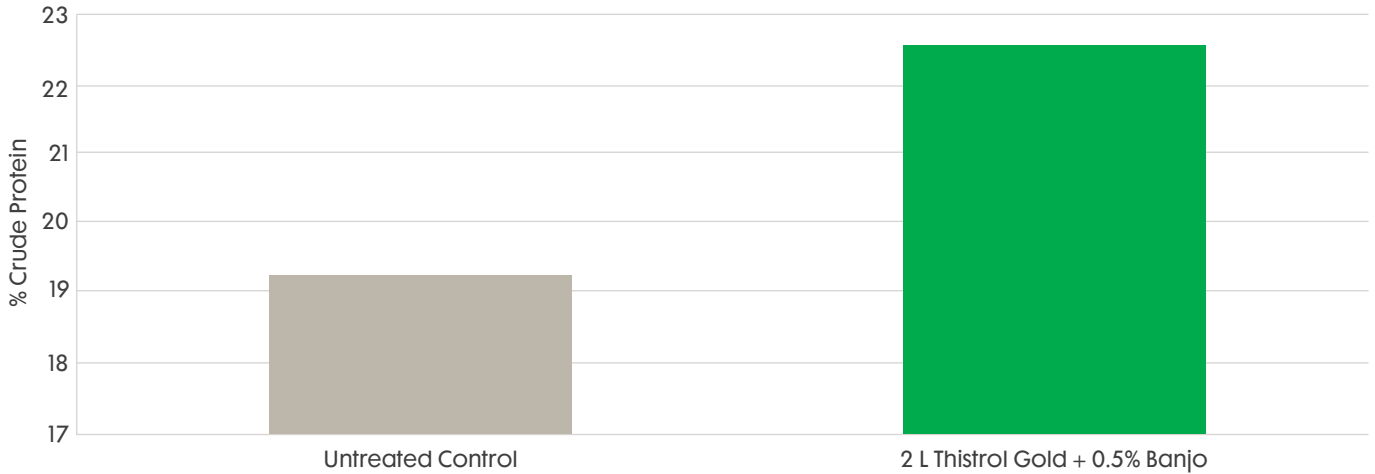
VALUE ABOVE UNTREATED



Trial Reference: NUSA-19-21099001-H07

# CRUDE PROTEIN

## AVERAGE 2 TRIALS - KAPUNDA & REEVES PLAINS



Trial Reference: NUSA-20-21100001-H16

### LOOKING FOR PASTURE WEED CONTROL THAT IS EFFECTIVE AND SOFT ON CLOVER AND MEDIC?

Nufarm's Thistrol Gold gives you excellent efficacy without compromising pasture growth, with an early use pattern in clover and medic from two trifoliolate leaf.

It really is pasture weed control with gold medal performance.



# CRITICAL INFORMATION

<b>Product type and formulation</b>	Soluble Liquid (SL)
<b>Active ingredients</b>	300 g/L MCPB (present as the dimethylamine salt), 20 g/L MCPA (present as the dimethylamine salt) and 10 g/L Flumetsulam.
<b>Registered use</b>	A soluble liquid formulation for the post emergent control of certain broadleaf weeds in clovers and grass pastures.
<b>Use rate</b>	Use from 2 L/ha to 4 L/ha applied with Banjo adjuvant at 0.5% v/v
<b>Rainfast period</b>	6 hours
<b>Preferred water volume</b>	Minimum spray volume 80 L/ha for optimum results. Aerial application min 30L of water per hectare - the use of the higher volumes is preferred due to more reliable results.
<b>Grazing withholding period</b>	7 days
<b>Plant back period</b>	The actives found in Thistrol Gold are broken down in the soil by microbial activity. Warm, moist soil conditions favour highest microbial activity and quickest residue breakdown. Plantback period varies according to rate and crop. Refer to label for specific details.
<b>Product pack sizes available</b>	20 L



For the latest information scan the QR code with your smartphone camera app.

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For more information, contact your local Nufarm Business Development Manager

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