

# Seeing the future

by Paul Martin, Director, Rainbow & Brown



You really should be asking me to suggest some Lotto numbers.

I've been re-reading a few old front pages from this newsletter, and I'm deeply impressed by how accurate I am at seeing into the future.

I started scribbling these columns in 2003. The first one was about my pick for 2003 World Sportsperson of the Year. I chose Lance Armstrong. Oops! Not, as it turned out, a great start to my career as a columnist.

But I struck back in 2006, when I wrote that Helen Clark, then known to me as 'She Who Must Be Obeyed', was merely marking time as our Prime Minister. Her real objective, I confidently predicted 10 years ago, was to be Secretary-General of the UN.

When she left us a couple of years later, she quickly went on to become the boss of the UN Development Programme. That's the No 3 slot at the UN, a fairly serious business card to be passing around. And by all accounts she has done a pretty decent job doing whatever it is that they do there. Development, presumably. And now she's a contender for UN Secretary General, when Ban Ki-moon retires later this year. Her ultimate goal is in sight at last.

In the latest polls she's not the favourite, in fact the bookies have her at fairly longish odds now, but I reckon She-Who-Must still has a shot at getting the No 1 jersey. She's a left-leaning public sector careerist from a small country that nobody's got a grudge against and that most people couldn't locate on a map. That's always a propitious start, if you want to be Secretary-General of the UN.

Her first name's the only potential drawback. 'Helen' is an insufficiently exotic moniker to be taken seriously at the UN, given the tradition of Boutroses, Dags, Bans, U's, Kofis and Trygves who have held the job before her. I really think she should start calling herself She-Who-Must Clark, but she's never taken my advice before about anything, so probably will remain Helen.

Anyway, I am today announcing my official endorsement of Helen Clark for the top job at the

UN. Two reasons. First, and in spite of our many philosophical differences in the past, I think she'd do a good job. And second, it's about time we had a woman as Secretary-General. I think she'd demonstrate a bit more spinal steel than any of the blokes in the job so far, who have all specialised in the smack-with-a-wet-bus-ticket approach when dealing with despotic and corrupt national leaders. If Helen sharply grasps some renegade head of state by his constitutional amendments, she's going to get his attention. And hold it for as long as necessary, too.

I have long believed that the world would be a better place if we had more women as national leaders. Or perhaps I mean fewer blokes, but the one would seem an inevitable consequence of the other anyway.

In my lifetime there have been nearly 100 women heads of government. I was just browsing the list of countries involved and was struck by the fact that not one of them invaded another country while the leader was a woman. A few of them were involved in wars and squabbles of various intensities, but in no case (at least none that I could recall) was the aggressor country being led by a woman.

There are 22 nations with a woman as leader of government right now. And I was browsing that list, too. None of those leaders executes or persecutes people for disagreeing with them. And with just a couple of exceptions, all of them run countries that the most desperate people of the world are trying to get into, rather than out of.

Guys, I don't think this is a co-incidence. And I saw it coming, too.

The Lotto numbers to watch are 3, 11, 16, 19, 28 & 33. Bonus number 21.



## IN THIS ISSUE:

- **2,4-D Granules**  
In stock September  
Advance order special!
- **Boost Spring Pasture**  
Gibber growth promoter  
Now just \$5.77/ha
- **Organosilicone Wetter**  
When to use it & why  
Plus a special offer!
- **NEW! Sumagrow**  
bio-soil enhancer.
- **FULL PRODUCT LIST:**  
Sizes & Prices

# 2,4-D Granules : Almost Back in Stock!

## ADVANCE ORDER NOW.

Readers with infinite patience will recall that our very popular 2,4-D Granules has been out of stock for quite a while now, due to an issue with the overseas manufacturer. It wasn't a product problem; the manufacturer went belly-up!

It's taken all this time to identify another manufacturer capable of making the granular form of 2,4-D properly to our specification, and then getting the new manufacturer approved by the NZ authorities.

But we are there at last! The first consignment has been approved and is now on the way to us. We'll be shipping orders to customers by mid-September.

We're taking advance orders right now. By ordering early, you guarantee that your product will be among the first shipped in September.

And to give you a bonus for thinking ahead, we are offering a 10% discount on 2,4-D Granules orders placed before the end of August.

Of course, we won't be billing you for your product until after it's been shipped.

### Here's a review of the benefits of 2,4-D Granules:

- Concentrated. It's 800g/kg, which is stronger than any of the liquid 2,4-D products.
- It's Amine not Ester. That means it's not volatile (doesn't drift off site), it doesn't have the pungent odour of ester, and the made-up tank mix lasts longer than esters.
- Convenient Handling. It's packed in a carton of 5 x 2kg foil bags, making handling, measuring & dispensing easier, and simplifying packaging disposal.
- Minimal Clover Damage. The amine form of 2,4-D does less clover damage than ester formulations.
- Controls thistles, ragwort and many other broadleaf weeds. Most effective on seedlings and small rosettes.
- Good early spring control of weeds like dandelion, storksbill, pennyroyal, and others that germinate too late for autumn-winter spraying.
- Use at just 1-3kg/hectare, depending on target species.



**10kg Carton (contains 5 x 2kg foil bags) Regular Price :  
\$138 incl GST & delivery**

However, if you order before end of August for mid-September delivery,  
we will give you 10% off!

**So that's just \$124.20 incl GST per 10kg carton.**

# BIOLOGY NOT SYNTHETIC CHEMISTRY

Been talking to a few people lately about the high levels of nitrates in the New Zealand soil and the problems with nitrogen capping being forced on farmers in certain parts of New Zealand. The problem isn't unique to New Zealand and there has been a lot of research and development done all around the world. One of the most complete studies was carried out in USA where they have developed a product that has been used in 40 countries and over 800 trials have been conducted.

The product is called Sumagrow and is now available in NZ.

Sumagrow is a revelation in biofertilisers. It contains multiple groups of organisms (up to eight different types) which perform different functions in the soil. Sumagrow rehabilitates the soil, making the soil healthier and increases the root base. It reintroduces soil microorganisms that suffer damage due to the over use of nitrate and salts, adds trace minerals and maintains a healthy soil pH. Sumagrow does not contain any genetically modified organisms (GMO), growth hormones or chemicals. It is highly compatible with sustainable organic farming.

Sumagrow has demonstrated the ability to increase crop yields by 10% to 20% over synthetics while decreasing fertiliser usage by up to 50% in certain situations, thereby significantly increasing

profits to farmers. The product also improves water retention and dramatically reduces nitrate run-off. Additional benefits include higher nutrient content, higher dry matter production, faster and earlier germination rates, earlier maturation, improved crop taste due to higher brix levels, and higher survivability of the plant. These benefits allow for higher stock numbers per hectare. There is also anecdotal evidence from a dairy farm in the US which suggests that the fat / protein per litre of milk increases by at least 10% when cows feed on Sumagrow fertilised grass. This needs further investigation, but if confirmed, the potential benefit for dairy farmers in NZ is enormous.

Consider a typical dairy farm in the Taranaki region of around 220 hectares. The farm is fertilised every 6 months with 64 MT of NPK at a cost of \$50,000. The present annual cost of his fertiliser is \$100,000 and approximately 50MT of the fertiliser applied leaches into nearby fresh waterways (based on the 40% average advised by NZ Dairy). Compare this to using Sumagrow. The estimated annual cost of fertilising this farm with Sumagrow is \$50,000 to NZ\$60,000 - a saving of up to \$50,000PA and less nitrate run-off and at the same time getting a higher quality soil at a lower cost producing better pasture and higher yields.

Sumagrow was developed in USA and is currently sold into over 40 different countries worldwide. Over 800+ trials have been conducted in various universities and field trials around the world.

SumaGrow has demonstrated the ability to increase crop yields by 20% to 200+% while decreasing fertilizer usage up to 50% thereby significantly increasing profits for farmers. The product also reduces water (estimated 20+%). Additional benefits for crops grown with SumaGrow are higher nutrient content, faster and earlier germination rates, earlier maturation, and better ability to withstand stresses such as wind and drought. SumaGrow's proprietary biotic product is organic, sustainable, and environmentally friendly. It has worked on all crops with which it has been used, in a variety of growing conditions.

The product, in layman's terminology, is basically concentrated "Mother Nature" -- a cocktail of multiple carefully selected microorganisms. SumaGrow rehabilitates the soil, making the soil healthier, and is highly compatible with sustainable, organic farming. SumaGrow is broad spectrum (works on all crops), stimulative (increases yield), poly-microbial inoculants, with multiple, complementary functions. Perhaps, even more importantly, SumaGrow does not contain any genetically modified organisms (GMO), growth hormones, nor chemicals.

SumaGrow is innovative for three reasons. First, it contains multiple groups of organisms (up to eight compared to competitors with no more than three) within each function. Second, the product has six functions compared to competitors with no more than two functions. Third, unlike its counterparts, SumaGrow's formulation retains viability over a long period of time at ambient temperature.

SumaGrow has been in development for over six years including extensive greenhouse testing conducted at Michigan State University (MSU), on over 200+ outdoor test plots, and with multiple commercial users operating under normal growing conditions. Independent testing performed by MSU showed a 301% increase in rice yield, 400% increase in tomato yield, 127% in soybeans, 86% in peas, 258% in okra, 234% in peanuts, and over 100% in garden beans and wonder bush beans in greenhouse testing.

## Are You Interested?

*Rainbow & Brown are keen to work with some people that want to give this stuff a go. What we want is 2 or 3 interested customers who'd be willing to do some small-scale application on one or two paddocks, and observe & record the results.*

*Many of the benefits of this product will take time to become fully evident, and these have already been established & proven in large scale trials. But we're interested in getting into this market, and it would help us a lot if we had a few established Rainbow & Brown customers with some first-hand experience. We could also consider using one or more of those customers in a larger-scale trial in the future.*

*If you're interested, and prepared to do a bit of small-scale spraying, pasture comparison & measurement and possibly also soil testing, please let Rachael know at [mail@rainbowbrown.co.nz](mailto:mail@rainbowbrown.co.nz) and give her a few details about your farm, soil, etc. Then we will be in touch to discuss the product further.*

# BOOST SPRING PASTURE GROWTH

Spring is the ideal time to use Gibber growth promoter. It's economical, produces great results fast, and is a proven winner during the early season feed pinch.

## What is Gibber?

It's a natural growth promoter called gibberellic acid. It's been used for many years in horticulture, but only in recent years has its use on pasture become more common.

## How does it work?

By boosting cell expansion in grass and clover, resulting in faster growth as well as lusher and more substantial foliage. The boost is typically up to 60% *additional* dry matter production. Pasture sward is denser, with less bare spots and much better pugging resistance when grazed. Check the pictures below (and note the boot toes for scale).

## How fast does it work?

Extra growth becomes clearly evident from about 7 days after application (leave a small area untreated to see for yourself the remarkable difference). The boost effect on pasture growth then becomes more and more pronounced until it reaches its maximum effect at about 21 days after application.

## Is Gibber just for rotational grazing systems?

No, although it certainly does suit them best of all because of its 3 weeks' effective growth-boost cycle. But useful additional pasture growth can be achieved under any grazing system, and customers using less intensive grazing have still achieved very pleasing and cost-effective results. The ideal, however, is to apply Gibber within a few days of fairly hard grazing.

## What's the ideal soil temperature range?

Gibber works best when soil temp is between 6°C and 18°C. And the maximum difference between treated and untreated pasture occurs when soil temp and thus 'normal' growth rate is at its lowest ... i.e. just when you need it the most!



## How often can you apply Gibber?

Gibber is not a fertiliser, and you must have decent soil fertility to obtain and sustain the best results. In trials there was no discernible loss of growth response after three or four consecutive applications. Customers have successfully used six applications per paddock per year.

## What's the ideal application method?

Boom spray or rosette spray works best. Around 100L of water per hectare will allow uniform spray coverage.

## Cost per Hectare Lower than ever before!

Our latest price is the lowest ever, and makes the cost per hectare just \$5.77 plus GST per treatment.

## SPRING SPECIAL

A 270g pack treats 30ha and costs \$198.95 incl GST & delivery

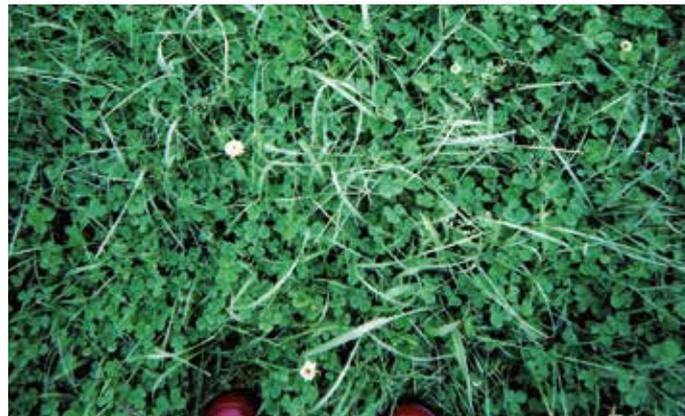
**For August & September ONLY, order:**

- Two packs for \$356.50 (save 10%)
- Three packs for \$508.30 (save 15%)

UNTREATED - AFTER 20 DAYS



TREATED - AFTER 20 DAYS



# Freight Fee on Smaller Orders

*We have to do it. No choice.*

As prices of herbicides have come down, in many cases by 50-75% in recent years, freight prices have gone UP!

That creates a nasty squeeze for us in particular, because we deliver individual orders right to you, rather than bulk supplies to a local store. So our small orders (let's say \$100 or less), are hardly worth sending any more.

They should be abandoned, or so would say an accountant. But we aren't accountants, so we have another plan. A compromise. Let's try it.

From 1st September all orders valued at \$100 + GST or less will have a delivery cost of \$5.75 including GST.

It's not enough to actually cover the freight cost, of course, but for now it keeps us in the game of serving customers both small and large.



## Organosilicone SuperWetter. What's the Difference?

*You'll have noticed that the organosilicone SuperWetter is more expensive than the standard SprayWetter. And if you're a cautious purchaser (these days who isn't?) you'll have wondered about if it's worth the extra money.*

The organosilicone wetter/penetrants, which in our case is SuperWetter and AirWet LF, have a much greater penetrating and wetting ability than 'normal' spray adjuvants such as our SprayWetter.

But that extra performance only makes a real difference to herbicide effectiveness in some particular situations. Here's when the extra cost of a SuperWetter is worth it:

- When spraying brushweeds with hard, woody stems. So that's gorse and similar targets.
- When spraying weeds that have very limited leaf area, especially if the target doesn't have true leaves at all. So that's gorse again, in particular.
- When spraying certain species that have a waxy, difficult-to-penetrate leaf surface, or are just naturally difficult to kill. If the herbicide directions for a particular weed specify an organosilicone, then you must use one.
- When spraying in less than ideal conditions; e.g. very cool weather, drought stressed weeds, roadside weeds that are dusty. SuperWetter helps overcome the negative effect on translocation of the spray due to the poor growing conditions.
- Rainbow & Brown SuperWetter is one of the very best organosilicone spray adjuvants, and it's less costly than other brands. Check the prices and compare for yourself.

**SuperWetter 2L : \$63.25**

**5L : \$138.00**

**20L : \$454.25**

Prices include GST & delivery.



## WEED FILE:

# TUBER LADDER FERN



Tuber Ladder Fern – *Nephrolepis cordifolia*

### DESCRIPTION

This species is also called tuber sword-fern, tuber fern, Chinese fern, and 'that mongrel fern', depending on where you live and how much of it you've got. If you live in Northland, you'll probably be favouring the 'mongrel fern' moniker.

It's originally a popular pot plant or a garden fern, and in cool locations it does produce a very attractive ground cover, at least to begin with.

However, the tuber ladder fern has a dark side, because it spreads via a network of rhizomes on creeping runners that spread widely from the parent plant. These runners normally have lots of potato-shaped tubers attached to the roots, and it is these tubers that create the control problem, as we will see below.

Once established outside the garden, the tuber ladder fern becomes a wildly invasive species that forms a large, dense mat of vegetation, crowding out all other species, and providing a habitat for pest animals like rats.

The plant has long, erect leaves or fronds that grow to over a metre in length. These are feather-like in appearance, with up to 50 pairs of leaflets, appearing rather like the rungs of a ladder. Hence, presumably, the name ladder fern.

These frond-like leaves nurture, on their back surfaces, small organs called sori, that are actually a cluster of spores. The spores are yet another way the species spreads so readily. It combines spores, tubers and creeping runners, which add up to a bit of a spreading nightmare.

### Habitat

Often found around run-down garden sites, but regularly found spreading to track sides, bush margins, waste areas and stream banks. It's very common in Northland, where it is subject to Pest Plant Management Strategies.



### MANUAL CONTROL

It is fairly easy to pull out by hand, as long as the invasion hasn't become too large for hand pulling to be impractical. But the entire plant, including all the tubers, must be removed, and allowed to rot down before burning or burying, or disposal at an appropriate rubbish transfer site. Do not dispose of freshly-pulled material at such sites where any plant material is recycled or composted.

### HERBICIDE CONTROL

There is only one reliable herbicide for controlling and eradicating tuber ladder fern; metsulfuron-methyl (MSF600).

### Weed Wiping

In pasture, where terrain permits, weed wiping is a very good control method, as it does no pasture damage.

- 2g MSF600 per litre of water in a towed weed wiper. Follow-up treatment by the same method will be necessary.

### Spraying

- 1g MSF600 per 10L of water, sprayed by knapsack or handgun. Spray all foliage to the point of visible dampness. Add 10ml of SuperWetter penetrant per 10L of water.

### IMPORTANT!

After spraying, you **MUST** leave the sprayed site undisturbed for 3-4 months (don't clear it, mow it or replant it), to allow the metsulfuron-methyl sufficient time to penetrate right through the plant to the tubers, where it will then prevent the formation of any new growth.

## WEED FILE: DAISY

REVISED: AUGUST 2016



Daisy – *Bellis perennis*

### DESCRIPTION

The daisy is a very familiar plant to those who are prepared to admit to having made them into daisy chains as a child, and to those who did it but won't admit it now.

It's a low growing perennial plant that grows in a rosette form. The leaves are dark green, spoon-shaped, and grow to about 60mm long by 20mm wide at the broadest point, blunt at the outer end and narrowing at the inner to form a broad stalk.

The flowers are of course the most easily recognised feature, and appear on unbranched, leafless flower stalks. There are many narrow white florets encircling the bright yellow disc floret in the centre.

The daisy often appears in clumps of several rosettes located together which, if carefully dug up, will generally prove to be connected by a system of short rhizomes.

The preferred habitat is in short grassed areas where its very low, flat physical configuration does not put it at a disadvantage due to being overhung by taller species. It prefers moist soil and does well in shaded areas.

Daisies are very common in lawns and recreational turf areas, and in most regions of New Zealand do not create a serious problem in pastures because they rarely achieve a presence sufficient to have any effect on pasture production. However, once the daisy does achieve about 30% occupation of available area pasture quality is measurably reduced, and the daisy does aggressively increase to this level of pasture invasion in Otago and Southland.

Stock generally do not eat the daisy when grazing. It is also not susceptible to the porina caterpillar, and daisies are often the last man standing in a pasture seriously affected by that pest.

### PASTURE MANAGEMENT

In longer pastures (e.g. typical dairying pasture) the height of the pasture species will minimise the presence of daisies. Shorter sheep pastures,

especially in the lower half of the South Island, are more susceptible to unacceptable invasion. However, because trials have demonstrated that pasture production does not suffer significantly until daisy presence reaches about 30% cover, there is limited justification for control spraying before that point.

### HERBICIDE CONTROL

Complete eradication of daisies in pasture with a single application of any treatment is practically impossible. However it is possible to reduce the population of daisies by more than 90%, which can give the pastures species ascendancy again. There will always be some survivors and some regrowth, probably because of the nature of the subterranean rhizome system, but subsequent treatments will progressively further reduce this 'miss' rate.

#### Spot Spraying

- GrassMate at 6m/L applied anytime. Grass friendly, but will suppress clover.
- Glyphosate 360g/L applied at 1L per 100L water, plus 100ml SprayWetter penetrant. If using Granny use 450g/100L water. This option is not grass friendly.

#### Boom Spraying

- 2,4-D is a little more effective than MCPA. Paraquat is also used at low rates.
- GrassMate applied at 2L/Ha is effective and is often used in turf situations, because it is grass-friendly but not clover friendly.
- Cobber herbicide used at 1L/Ha is effective and grass-friendly, but will severely damage clover.

**Note** that both GrassMate and Cobber can be applied with less clover damage if sprayed immediately after the pasture has been hard grazed, when the amount of clover leaf present is minimal but the daisies are still prominently present.



## WEED FILE: FOXGLOVE

REVISED: AUGUST 2016



*Digitalis purpurea*

### DESCRIPTION

Foxglove is an erect plant growing to over 2 metres in height. It's a biennial or short lived perennial, which means each plant lives for two years, or sometimes a bit longer.

It's particularly notable for two reasons. First, for its beautiful trumpet-shaped flowers which appear in its second year on the tall, single stalk. And second, for its being quite poisonous.

The foxglove is a leafy, rosette style plant, but erect rather than widely spreading. The leaves are very large; up to 25cm long and half as wide, in a tapering pointed oval shape. They're darkish green on the upper surface, and woolly grey underneath.

Flowers are spectacular, standing clear of the leaf section of the plant on the single central stalk, on which the purple or white drooping flowers are arranged in an elegant tapering spike. Flowering occurs around October to January.

The fruit is an egg-shaped capsule (well, actually it's a lot of capsules), containing many small rectangular seeds.

The central stem of the foxglove is unbranched, hairy and very tall once flowering. The roots are fibrous.

### HABITAT

Foxglove's found most often in poor pastures, roadsides, regrowth forest and bush, waste ground and disturbed ground. It prefers acidic soils. Once pasture has been improved, foxglove will generally not persist in the paddock.

Distribution is common throughout the whole of New Zealand.

### POISONOUS

All parts of the foxglove are poisonous, and the seeds are especially toxic. Ingestion provides the main risk of poisoning, but even handling the leaves presents some toxicity risk. Effects in humans are nausea, vomiting,

diarrhoea and blurred vision, but in small children it can even be fatal.

The heart treatment drug 'digitalin' comes from the foxglove.

### LIVESTOCK

The poisonous nature of foxglove is applicable to all classes of livestock, including poultry, as well as dogs and cats. Fortunately none of them is stupid enough to willingly eat it, so the risk to animals from foxglove is normally theoretical only. However, once sprayed and starting to die off, the plant does become more palatable, while remaining just as poisonous, so stock removal from sprayed sites is essential.

### MANUAL REMOVAL

Isolated plants can be reasonably easily pulled out by hand (wear gloves!), but every part of the plant must be removed from the soil and from the site, or it will regrow. Even sprayed plants must be removed from the site once dead, because any small surviving fragments of viable plant material will regrow. Removed material must be burned or otherwise destroyed. Plants should be removed before reaching the seeding stage of growth.

### HERBICIDE CONTROL

Spraying will work best when the plant is growing actively. It's much better to spray foxglove before it sets seed, because the seed will remain viable after the plant is killed, and seeds last a long time in the soil.

- GrassMate at 250ml/100L by handgun. This is grass friendly, but will damage clover.
- Granny at 425g/100L by handgun (Glyphosate 360 use 1L/100L). Add SuperWetter at 100ml/100L water. Damaging to pasture species, especially grasses.



[www.rainbowbrown.co.nz](http://www.rainbowbrown.co.nz)

The full library of Rainbow & Brown Weed Files now includes more than 50 different titles, covering the major weed threats in New Zealand.

You can read, and also download for free, any or all of these titles at our website. Click on the 'Weed Files' tab at the top of any page.

**GRANNY** 800g/kg GLYPHOSATE AS THE MONOAMMONIUM SALT

ACVM No 7499

*Non-selective herbicide for spraying out pasture, and general weed control.*

- The stronger, smarter and most economical glyphosate option. 9kg is equal to 20L of G360.
- Water-dispersible granule, easily soluble.
- 4.5kg bag minimizes packaging disposal.
- No residual effect in soil; drill new seed in 2 days.
- Use just 425g/100L water (knapsack 65g/15L) for general spraying; 1.4-2.2kg/Ha for pasture spray-out.
- Add SprayWetter penetrant for best results.

2.25kg ...\$55.00  
4.5kg .....\$78.20  
9kg .....\$120.75

**GLYPHOSATE 360** 360g/L GLYPHOSATE AS THE ISOPROPYLAMINE SALT

ACVM No P5441

*Non-selective herbicide for spraying out pasture, and general weed control.*

- Glyphosate is the world's most popular and trusted herbicide.
- Safe to use, fast acting, non-toxic & economical.
- No residual effect in soil; drill new seed in 2 days.
- Withhold stock 2 days to allow penetration through plant.
- Use 1L/100L (hand) or 3-5L/ha (pasture).
- Add SprayWetter penetrant for best results.

5L.....\$49.45  
10L.....\$82.80  
20L.....\$124.20  
200L...\$1046.50

**MSF600 Gorse & Brush Spray** 600g/kg METSULFURON-METHYL

ACVM No P7027

*For control of gorse and other scrub weeds in pasture, waste areas and forestry.*

- The low-cost, proven choice for big and small jobs.
- Water-dispersible granule, easily soluble.
- Safe to handle, non-toxic to humans and animals.
- Gorse, blackberry, manuka, scrub, bracken, ragwort & thistles.
- For gorse use 20g/100L (hand), 500g/ha (aerial).
- Add SuperWetter penetrant for best results.

200g .....\$31.05  
500g .....\$46.00  
1kg .....\$78.20  
10kg ctn (5 x 2kg bags)  
.....\$552.00  
30kg+ - Ask for quote

**GRASSMATE** 300g/L TRICLOPYR AS THE BUTOXYETHYL ESTER plus 100g/L PICLORAM AS THE AMINE SALT in the form of an emulsifiable concentrate

ACVM No P7417

*For control of brushweeds, broadleaf and erect weeds in pasture.*

- Kills gorse, broom, blackberry, tutus, sweet briar, matagouri & lupins.
- Also controls broadleaf weeds, including ragwort, thistles, fennel, nettle and inkweed at 2L/Ha.
- Add SuperWetter penetrant year-round.
- 10-12L/ha for brush species, and 250-300ml/100L handgun (gorse rate)

2L.....\$98.90  
5L.....\$197.80  
10L.....\$356.50  
20L.....\$598.00  
100L...\$2875.00

**MCPA 750** 750g/L MCPA AS THE DIMETHYLAMINE SALT

ACVM No P8173

*For control of thistles and other broadleaf weeds in pasture and cereals.*

- Highly concentrated water soluble solution.
- Controls thistles of all species, especially in younger growth stages.
- Grass-friendly but higher concentrations damage clover.
- Economical at just 1.5-3.0 L/Ha use rates.
- Use late autumn through to summer.
- Works well with Cobber herbicide against resistant thistles.

5L ..... \$75.90  
10L ..... \$132.25  
20L ..... \$241.50  
200L . \$2277.00

## 2,4-D GRANULES 800g/kg 2,4-D dimethylamine salt as WATER SOLUBLE GRANULES



*For control of broadleaf weeds in pasture and cereals*

- Non-volatile formulation greatly reduces spray drift risk.
- Non-smelly, easy to handle, water soluble granules.
- Convenient 2kg foil bags for easy dispensing.
- Controls thistles and ragwort at seedling and rosette stages.
- \* Minimal clover damage, especially with winter spraying.
- Use 1-1.5kg/Ha in cereals, 1-3kg/Ha in pasture, depending on target species.

**10kg carton  
(5 x 2kg bags)  
.....\$138.00**

## COBBER 300g/L CLOPYRALID as the amine salt.



ACVM No P7790

*For control of hard-to-kill and multi-crown thistles in pasture.  
(Approved Handler certificate required)*

- Kills Californian, nodding, winged and variegated thistles incl large rosette and multicrown plants.
- Mix with 2,4-D or MCPA where thistles resistant to those herbicides exist.
- Use 1-2L/Ha by boom or 100-200ml/100L spot spraying. Also good for wiper application.

**2L.....\$149.50  
5L.....\$276.00  
10L.....\$529.00  
20L.....\$977.50**

## GIBBER 900 900g/kg GIBBERELIC ACID



ACVM No P8002

*Growth promoter to boost pasture production in cool weather feed shortage conditions.*

- High strength powder applied at just 9g/ha dissolved in water. (9g scoop included).
- Rapid increase of dry matter (DM) production during spring and autumn feed shortfalls; increases of 30-60% can be achieved within just 3 weeks.
- Just \$5.77/Ha, apply with any spray gear.

**45g .....\$42.55  
270g ....\$198.95**

## BUCKSHOT 20g/kg PICLORAM GRANULES



ACVM No 7717

*For direct spot application dry granule treatment of broadleaf, erect and brush weeds.*

- Controls ragwort, nodding thistle, gorse, inkweed, broom, docks, hemlock, sweet brier, woolly nightshade, tutsan, blackberry.
- Convenient and safe; apply by hand, by pogo stick applicator, or by applicator bottle.
- Carry Buckshot on the bike, tractor or ute for opportunistic spot weed control.

**5kg .....\$57.50  
10kg ....\$104.65  
20kg ....\$193.20**

## DECISION 800g/kg FLUMETSULAM IN A WATER DISPERSIBLE GRANULE



ACVM No P8368

*Control broadleaf weeds in new and established pasture, as well as for lucerne, chicory, clover and maize crops.*

- Clover-friendly control of annual & perennial buttercups in pasture.
- Good for autumn and spring application.
- Also controls chickweed, cleavers, mallow, oxeye, sorrel, spurrey, stinking mayweed and willow weed.
- 30g-65g/Ha depending on species and growth stage. Annual buttercups 50g/Ha, giant buttercups 65g/Ha.

**200g ....\$110.40  
500g ....\$235.75**

**RANGER** 750g/kg THIFENSULFURON-METHYL GRANULES

ACVM No 7668

*For control of docks and buttercups in pasture and cereal crops.*

- Selective herbicide for use in pasture, wheat barley and oats.
- Also controls oxeye daisy.
- Excellent added to Glyphosate when spraying out pasture.
- Apply by air or ground boom, and spot spray.
- Scoop and measuring cylinder included.
- Use at 20g/Ha, so 100g pack will treat 5 hectares.

100g .....\$74.75  
1kg .....\$684.25

**TRICLO** 600g/L TRICLOPYR AS THE BUTOXYETHYL ESTER

ACVM No P7189

*For control of brushweeds, broadleaf and erect weeds in pasture.*

- Grass and clover friendly.
- Blackberry, broom, gorse, lupin, tutus, fennel, sweet brier, Old Man's Beard, plus most broadleaf weeds in pasture.
- Apply in warmer months during active growing conditions.
- Add SuperWetter for gorse and all woody species.
- Brush weeds use 10L/ha or up to 300ml/100L by hand.
- Broadleaf weeds in pasture use 2L/ha or 200ml/100L.

2L.....\$95.45  
5L.....\$195.50  
10L.....\$345.00  
20L.....\$569.25

**AIRWET LF** 100% ORGANOSILICONE WETTER-PENETRANT

*Low foam formulation optimised for aerial spraying*

- Assists penetration, boosts translocation within the plant
- Reduces rain risk, normally to under an hour
- Much less foaming than typical competitive wetters, with no loss of performance
- Available in 20L jerrycans or 20L cartons (4 x 5L), and 1000L IBC tanks

20L.....\$494.50  
1000L.....Call for quote

**SUPERWETTER** 100% ORGANOSILICONE WETTER-PENETRANT

*Boost spray performance on woody & hard-to-kill species*

- Assists penetration, especially into stressed and dusty plants.
- Reduces rain risk period, normally to under an hour.
- Boosts herbicide performance by aiding in translocation.
- Use at 100ml/100L, or 500ml-2L/ha depending on species.

2L.....\$63.25  
5L.....\$138.00  
20L.....\$454.25

**SPRAYWETTER** 100% NON-IONIC SURFACTANT WETTER-PENETRANT

*Maximises herbicide performance in all situations*

- Permits faster & more thorough penetration into plant.
- Reduces rain risk period, normally to under an hour.
- Use when herbicide directions do NOT specify a SuperWetter.
- Use at 100ml/100L, or 500ml-2L/ha depending on species.

5L.....\$72.45  
10L.....\$120.75  
20L.....\$224.25

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## • Rainbow & Brown

Rainbow & Brown Ltd is a privately-owned NZ company. Our factory and office is in Rotorua. We're now in our 15th year of operation, and have been growing strongly every year. We have customers all over New Zealand, including farmers, horticulturalists, spray contractors, nurseries, commercial and private gardeners, and many other businesses. Our products are sold direct, which is why our prices are so attractive ... it is effectively the "wholesale" price, direct from the manufacturer.

## • People

The directors of Rainbow & Brown have been involved in the NZ agricultural chemicals business for over 20 years. They're actively involved in the day-to-day running and building of the business. If you phone us, your most likely contact will be Rachael, our office manager (and the real heart of the company!). If you call in to see us, you'll also meet Clinton, the factory manager.

## • Ordering

You can order anytime by phone, online at [rainbowbrown.co.nz](http://rainbowbrown.co.nz), or by fax, e-mail or by letter. If you call on the freephone number, you may at times get an answering machine. That means we're already on the phone, or doing something else. Or it may be after office hours (see below). Please just leave your name and number, and we'll soon call you back. Or if we've already got all your details, just leave your order (*with your name and phone number*) on the machine.

## • Delivery

We send your order within 24 hours. Delivery will usually take between 1 and 4 days. If it hasn't arrived after that time, *call us* immediately so we can track it down for you. Delivery of orders of 60 litres or less will normally be to your door, including rural delivery addresses. However, delivery of larger orders may be to the nearby freight depot or drop-off point we will arrange with you when you place your order.

## • Factory & Office Hours

If you want to collect your order from our Rotorua factory, you're welcome. It's at 68A Tallyho Street. Open hours are 8.30 to 4.30, Monday to Friday.

## • Payment

We send your invoice by mail, the day we send your order, so you'll know when it was shipped. Payment is due on 20th following month, and you can send a cheque or use direct payment to a/c No: 123155-0066374-00. The bank account number is also on both your invoice and your statement. We send statements out in the first week of each month.

## • Referral Rewards

Word-of-mouth is the best advertising, so if you recommend us to someone who then becomes a new Rainbow & Brown customer and mentions your name, we'll thank you with a \$10 discount off each different product in your next order. So if you order four different items, you now get a \$40 discount (previously \$10).

SMALL PRINT: The discount doesn't apply to products on special.

## • Website

Check out our website for full details and labels of all our products, plus Safety Data Sheets, and a small library of useful reference articles. You can also download from the free Weed Files library. It's at [www.rainbowbrown.co.nz](http://www.rainbowbrown.co.nz)

## • Approved Handler Certificates (EPA)

You do NOT need an Approved Handler certificate to purchase any current Rainbow & Brown product except for Cobber herbicide. To apply MSF600, GrassMate, MCPA, Ranger or Triclo in a "wide dispersive manner" (i.e. by boom spray), or apply it commercially (i.e. you're a contractor), or over water (i.e. you're a dickhead), you DO need an Approved Handler certificate to apply it, but you DO NOT need a certificate to buy it. You need an Approved Handler certificate to buy Cobber herbicide or to apply it in any circumstances.



PO Box 10049, Mail Centre, Rotorua 3046

E-mail: [mail@rainbowbrown.co.nz](mailto:mail@rainbowbrown.co.nz)

Freephone: (0508) 299 299

Fax: (07) 350 2008

[www.rainbowbrown.co.nz](http://www.rainbowbrown.co.nz)