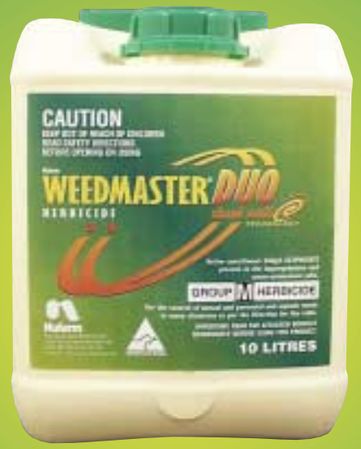





Better weed control

Faster brownout



Improved compatibility

Aquatically approved

dual salt TECHNOLOGY®

Nufarm

For more information visit our website www.nufarm.com.au or contact your nearest Nufarm state office.

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Experience the Power of...

Nufarm

WEEDMASTER® DUO

HERBICIDE

dual salt TECHNOLOGY®





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Weedmaster® Duo

Glyphosate is the world's most widely used herbicide. It is effective against almost all weed species and is of low toxicity to humans. In Australia, glyphosate has been used since the mid 1970s for control of annual, perennial, brush and woody weeds, and unwanted trees in a wide range of situations.

Now Nufarm introduces **Weedmaster Duo** - a revolutionary development in glyphosate technology designed to improve the performance of 360 g/L formulations.

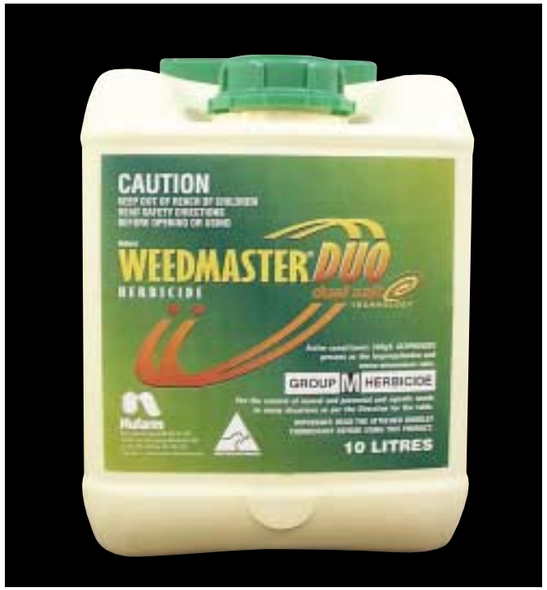
Unlike other 360 g/L glyphosate products formulated using single salts, **Weedmaster Duo** uses **Dual Salt Technology**® to improve the performance of glyphosate.

Weedmaster Duo is available in a range of pack sizes: 1 L, 5 L, 10 L, 20 L and 110 L Envirodrum.

AUSTRALIAN MADE®

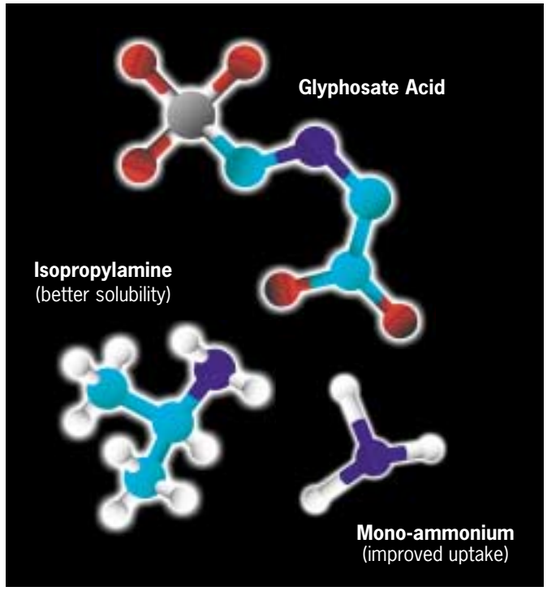
Weedmaster Duo is a complying product of the Australian Made campaign.

Weedmaster Duo makes weed control with glyphosate even more powerful



Dual Salt Technology®

Weedmaster Duo contains 360 g/L glyphosate as the isopropylamine and mono-ammonium salts



To be effective, glyphosate must be delivered to the site of action within the target plant. The process of passing glyphosate through the cuticle into the plant sap transport system can be accelerated by adding ammonium ions to the glyphosate.

Dual Salt Technology, developed and patented by Nufarm in Australia, uses two bases to form the soluble glyphosate salt - isopropylamine and mono-ammonium. The effects of the isopropylamine on solubility and that of the ammonia in increasing uptake, combine to create a more effective product with excellent cuticle penetration and translocation.

dual salt TECHNOLOGY®

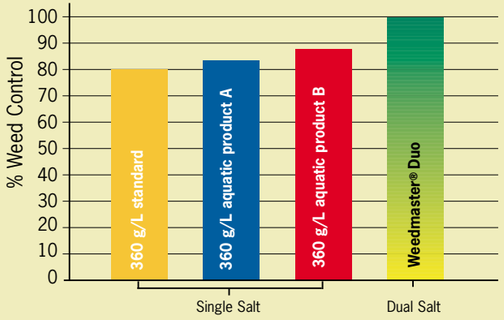
Better weed control

Independent trials show that Weedmaster Duo with Dual Salt Technology can deliver rapid uptake and fast burndown in a range of situations.



Weedmaster Duo provided up to 20% better weed control in a pre-plant fallow situation. This means you can start planting sooner, and have a clean start for the next crop.

Fallow Weed Control
Various 360 g/L glyphosate formulations at 900 mL/Ha 15 days after treatment

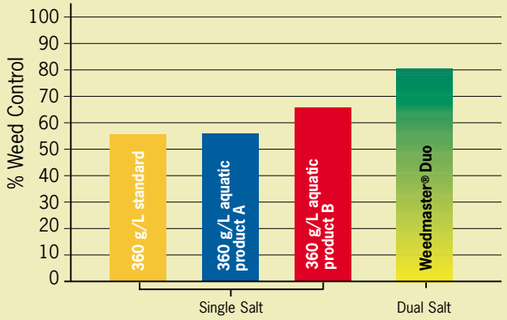


Source: Agrisearch replicated field trial - 2000



Weedmaster Duo provides superior weed control in vineyards and orchards. In an orchard situation, **Weedmaster Duo** provided up to 40% better weed control over the whole plot.

Orchard Weed Control
Various 360 g/L glyphosate formulations at 2.0 L/Ha 10 days after treatment



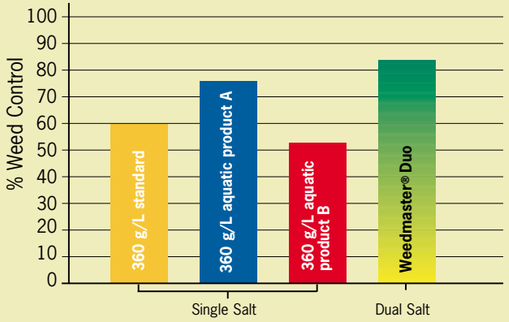
Source: SERV-AG BFS field trial Atherton - 2000



Photo: Crop Protection QLD DPI

Weedmaster Duo has demonstrated superior efficacy on hard to control weeds such as flannel weed. **Weedmaster Duo** provided significantly better (up to 56%) weed control than other glyphosates.

Flannel Weed (orchard)
Various 360 g/L glyphosate formulations at 3.0 L/Ha 10 days after treatment

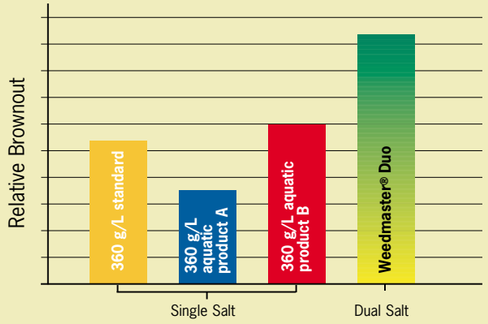


Source: SERV-AG BFS field trial Atherton - 2000



Weedmaster Duo provided up to 34% better weed control when spayingout sugar cane ratoon.

Sugar Cane Ratoon Sprayout
Various 360 g/L glyphosate formulations at 27 days after treatment



Source: SERV-AG BFS field trial Atherton - 2001

Fast reliable broad spectrum weed control

Weedmaster Duo penetrates plants quickly providing a better visual result. Its rapid uptake and fast burndown of weeds conserves moisture faster and allows quicker re-entry to block for planting etc. **Weedmaster Duo** is ideal for control of an extensive range of unwanted grasses, broadleafs, aquatic weeds, brush and woody weed species - right down to the roots.

Improved tank mix compatibility

Weedmaster Duo has excellent compatibility with a broad range of other knockdown and residual herbicides. This allows control for extended periods - all from one pass spraying. **Weedmaster Duo** is also compatible with certain insecticides if required.

Aquatically approved

Weedmaster Duo has full aquatic registration making it suitable to use around waterways. It presents no risk to aquatic fauna and amphibians (frogs etc). The public, councils and governments can be assured of environmental compliance. **Weedmaster Duo** eliminates any need to use different formulations on other jobs because performance has not been compromised by the built-in 'aquatically approved' surfactant.

More choices in more situations

Weedmaster Duo can make your environment safer and more productive in situations such as fallows, sugar cane ratoon sprayout, firebreaks, parks and gardens, around buildings, in wetlands, along drains, rivers and creeks, channels, forests, pastures, roadsides, railways and under tree and vine crops. **Weedmaster Duo** is the ideal choice wherever weeds may grow.

Easy to use

Weedmaster Duo is available in a range of pack sizes. The 10 L pack is easy to handle, pour and measure, and is compliant with OH & S regulations.

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WEEDMASTER® DUO

HERBICIDE

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Application with a range of equipment

Weedmaster Duo can be applied using several methods including knapsacks, boomsprayers, handguns, gas guns, stem injectors, controlled droplet applicators and weed wipers. Flexibility with application means there is a method to suit almost every situation.

Environmental impact

Weedmaster Duo binds tightly to soil and will not leach through the soil, so it can be applied safely over root zones of trees. It is broken down into naturally occurring compounds (like carbon dioxide) by micro organisms in the soil. **Weedmaster Duo** will not drift as a 'vapour' onto other vegetation (when spraying always use application techniques that prevent 'physical' spray drift of droplets).

Spray operator safety

Weedmaster Duo has very low toxicity to humans and animals. It's designed to stop certain amino acids (essential for plant growth) from forming. Because these particular amino acids are unique to plants, **Weedmaster Duo** presents minimal hazard to spray operators.

Unique 'dual salt' formulation

Weedmaster Duo has better solubility and increased uptake compared to other 'single salt' glyphosate products. It uses two salts (including ammonium ions) to create a more effective product with excellent penetration and translocation.

Australian Made®

Weedmaster Duo has been specially developed by Nufarm to suit Australian conditions. It carries the green and gold trade mark, so you can be certain it's Australian. When you use **Weedmaster Duo**, you're looking after Australia.

Aquatically approved surfactant

Surfactants reduce the surface tension of spray droplets. They help chemicals adhere to and enter the target surface, but some surfactants perform better than others.

The built-in surfactant in **Weedmaster Duo** is specifically designed to influence activity through every stage from application to plant dessication.

Furthermore, the built-in surfactant is environmentally acceptable and approved for use in aquatic situations (on the banks of rivers or other areas where water may pond or flow). This makes **Weedmaster Duo** ideal to use when controlling weeds in situations where aquatic fauna and amphibians exist.

The **Dual Salt Technology** in **Weedmaster Duo**, together with the aquatically approved built-in surfactant ensures optimum glyphosate activity, without compromising efficacy.

The aquatically approved built-in surfactant doesn't compromise efficacy







Better tank mix compatibility

Mixing other pesticides with glyphosate allows one-pass spraying

Tank mix Partner	Examples of Use Situations	Reason for Tank Mix
Surpass® 300 Estercide® 800	Fallows	To control more broadleaf weeds
Amitrole T	Forestry,Grapevines, Orchards, Aquatic areas	To broaden the weed spectrum including grass and broadleaf weeds
Diuron see note	Industrial areas	To include residual control
Goal® CT	Forestry, Orchards	To broaden the weed spectrum and include residual control
Kamba® 500	Fallows	To control more broadleaf weeds
Nu-trazine™ see note	Roadsides, Industrial areas	To include residual control
Rifle® 330	Grapevines, Orchards, Certain Vegetable crops	To include residual control
Simazine see note	Forestry, Grapevines, Firebreaks, Municipal areas.	To include residual control

Glyphosate products are frequently sprayed in conjunction with other pesticides. This can greatly reduce the cost of application, and may sometimes be necessary to achieve the optimum application timing. However, incompatibility between glyphosate and the second pesticide can be an issue. Incompatibility can arise from one of two quite different sources - physical effects within the spray tank and biological effects (antagonism from interactions between herbicides).

The aquatically approved built-in surfactant also contains properties that improve tank mix compatibility. The table shows a range of 'common use' products **Weedmaster Duo** can be mixed with to control more weeds or to provide residual control.

These surfactant properties maximise physical compatibility and minimise antagonism when compared to other glyphosate 360 g/L products.

Note: All formulations of these herbicides require constant agitation.

Growers' success stories

Gow's Produce is a 120 ha farm near **Stanthorpe,** owned and operated by the Gow family who farm approximately 40 ha of tomatoes and capsicums each year for the fresh market. Cameron and Stewart Gow used Weedmaster Duo on their fallow country, headlands and fringe areas to control problem nutgrass and couch.

"We applied Weedmaster Duo at 9 litres per hectare targeting couch. We could see visual signs of effect on the couch after 5 days from application and the brown out is one of the quickest results we have had from any glyphosate product.

The thing we like about Weedmaster Duo, is that it does not leave any green tinge in the couch after brown out."

Cameron Gow

Robert Shoyer's Home Hill district cane farm produces approximately 12,000 tonnes of cane annually. He has a range of problem weeds including guinea grass, forage sorghum, nutgrass, summer grass, pigweed and cane regrowth. With a narrow soybean planting window, Mr Shoyer needed a glyphosate product that worked quickly and effectively and opted to use Weedmaster Duo.

"Some of the grasses showed a brownout within two days and we had a complete brownout within seven. We then ploughed the block out and planted soybeans. The quick brownout allowed us to prepare the country for planting quickly and conserve as much moisture as possible."

Robert Shoyer

Rocky Point canegrower **Barry Brooking** manages a cane farm for Heck and Sons, a family operated sugar cane milling and farming company producing 700 hectares of cane for supply to the mill.

Mr Brooking has previously used a variety of glyphosate formulations for control of phragmites, nutgrass and ratoon cane to prepare for fallow. He is impressed with the performance of Weedmaster Duo.

"After applying Weedmaster Duo, I was surprised that the visual signs after spraying were much faster than usual. The nutgrass and phragmites were showing effect, three days after application.

Phragmites are very hard to kill and often require two sprays for a complete kill. Timing is critical and if the weather and ground conditions are right, I'll usually spray and probably do a follow up spray a few months later. We're hoping that we can get away with one spray using Weedmaster Duo."

Barry Brooking

Pinnacle district cane grower **Phil Baylis** grows 54 hectares of cane for supply to Marion mill and has been farming in the Pinnacle area, west of Mackay, for the past 30 years.

Mr Baylis has used a variety of glyphosate formulations in the past and was impressed with the comparative effectiveness of Weedmaster Duo. He used Weedmaster Duo to control nutgrass growing in the paddock and along headlands.

"I sprayed primarily to control nutgrass which had really got a go-on with the amount of rain we've had.

I started to see a brownout in the nutgrass within two to three days.

We need a product that has a fast and effective knockdown as we don't follow with interrow cultivation.

It certainly did the job I wanted it to do and I'll continue to use Weedmaster Duo, particularly as it's such good value."

Phil Baylis









Use situations

In fallows before sowing crops.
Sugar cane ratoon regrowth.
Tree and vine crops.
Channels and drains.
Along streams and around lakes/dams.
Grazing land and other farm situations.
Forests, hills and coastal areas.
Recreational areas and national parks.
Roadsides and industrial areas.







