



**Grassmanship™**  
GOOD GRASS MATTERS

# 2023

## IRELAND



**Nufarm**

Grow a better tomorrow



**10% WEEDS = 10% LESS GRASS = ↑ € COST**

MORE INFORMATION ON **PAGE 4**



**Grassmanship™**  
GOOD GRASS MATTERS

GRASSMANSHIP IS A PROGRAMME FEATURING A PORTFOLIO OF PRODUCTS THAT OPTIMISE GRASS PRODUCTION TO GIVE FARMERS MORE DM/HA.

MORE INFORMATION ON **PAGE 11**

**EVERY €1**

SPENT ON WEED CONTROL CAN DELIVER

**UP TO €17 VALUE**

MORE INFORMATION

ON **PAGE 5**



**TIMING IS EVERYTHING**

Herbicides applied too early or too late will not work as effectively, if at all.

MORE INFORMATION  
ON **PAGES 5 & 6**

# GRASSLAND WEED CONTROL

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Whilst weed control in arable crops is normal practice, in grassland it is less common. Survey data suggests that little more than 5% of UK and Ireland grassland has a herbicide application in any given year, and few grassland farmers treat more than 10% of their pasture in any season.

Weed control is a key element of productive grassland farming and it is important that herbicide applications are effective, made safely and with care for the environment.

## FIVE KEY REASONS TO CONTROL BROADLEAVED WEEDS IN GRASSLAND

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# 1

### Maximise Grass Yield

As a general rule, 1% ground cover of grassland weeds, such as Thistles and Docks, will reduce grassland productivity by 1%. If weed infestation is 10% or higher then severe yield losses will occur year on year unless a weed control programme is implemented.

# 2

### Make Better Quality Silage

Weed infestations affect silage quality, particularly Docks and Thistles.

# 3

### Better Grassland Utilisation

Grazing animals tend to avoid patches of weeds, especially thistles. As a result ungrazed grass around weeds reduces pasture utilisation.

# 4

### Healthier Stock

Weeds pose a threat to livestock health. Injurious weeds such as Ragwort can result in illness and even death, particularly in cattle. Thistles can act as 'hypodermic needles' spreading diseases such as Orf in grazing sheep and lambs.

# 5

### Extend Pasture Life

Broadleaved weeds allow less productive grasses to invade, particularly after cutting. This results in the reduction of desirable grass species and earlier renewal of the pasture is required.

# What is weed control worth?

## Controlling weeds from a 15% infestation level...

The extra profit potential is **€283/ha\***

The payback (€ returned for € spent) for turning extra grass silage energy into milk is **12:1\*\***

The payback for turning extra grazed grass energy into milk is **16:1**

The payback for using the extra grazed grass energy to replace concentrate is **7:1\*\*\***

\*Based on Teagasc valuation of €185 per tonne of utilised grass dry matter.

\*\*Payback assuming milk value of €0.32/litre and \*\*\*concentrate feed value of €300/t



## Achieving ROI is linked to correct timing of application

### DOCKS



### THISTLE



### NETTLES



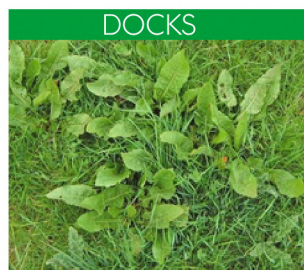
# WHEN SHOULD HERBICIDES BE APPLIED?



Generally, herbicides should be applied when weeds are healthy and actively growing, from seedling stage to just before flowering. Weed growth stage varies by species so check the label.

Spray docks when they are actively growing in the summer months when they are free of disease, pest attack and drought. The key to success is to apply the herbicide to the docks when they are big enough and growing.

The herbicide needs to be taken into actively growing leaves and transported around the plant; once stem extension starts, leaf growth is insufficient for the herbicide to work effectively. If stem and seeds are present, top the weeds and spray the regrowth a few weeks later.



## Effect of herbicide applied at 'just right' timing or 'too late' on docks



'Adapted from Teagasc Research, Ireland.'

# GRASSLAND AND PRODUCTIVITY

**1**  
TONNE (UTILISED)  
**GRASS**  
DRY MATTER

**= SAME ENERGY**

**1**  
TONNE BARLEY  
FRESH  
WEIGHT

AND GRASS HAS A HIGHER  
**PROTEIN LEVEL**

Yield from grassland leys declines over time due to less productive ‘weed grasses’ invading the sward, an increase in broadleaved weeds, flooding, poaching and so on. Introducing new improved grass species to these paddocks, through an on-going pasture renewal programme, markedly improves their productivity and consequently total farm productivity and profitability.

Reseeding can potentially almost double dry matter yields. The aim must be to produce at least 12 - 14t DM/Ha and use at least 80% of it. When considering reseeding, look at the age of the sward and the percentage of sown species remaining. New varieties on average have been increasing yield by approximately 1% per annum.



# THE VALUE OF RESEEDING

Reseeding with appropriate management could bring up to a 20:1 return on the investment over five years. This comes from the extra milk output potential that increased dry matter yield and energy result from carefully planned and executed reseeds. Reseeding enables us to capture the benefits of modern grass varieties - yield and quality, and sorting out issues such as weediness, soil compaction and soil fertility. A key element to maximising this benefit is controlling weeds throughout the reseeding process.



## WEED CONTROL IN ESTABLISHED GRASSLAND



In established and permanent grassland the six most common weeds in order of importance are Docks, Thistles, Nettles, Chickweed, Buttercup and Ragwort.

Rushes can also be an issue. Thrust will effectively control five of these weeds, adding fluroxypyr will control the sixth, Chickweed.

Where Buttercups or Soft Rush are a particular problem Lupo provides the solution.

## ACCESSING GRASSLAND VIRTUAL LEARNING



Nufarm has a variety of virtual learning webinars available.

Visit:

[nufarm.com/ie/tools-and-advice/virtual-learning/](https://nufarm.com/ie/tools-and-advice/virtual-learning/)

Or view on YouTube:  
**Nufarm UK**

# WATER STEWARDSHIP

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Phenoxy herbicides are key tools in the control of grassland weeds. The level of a pesticide in drinking water should not exceed 0.1 parts per billion. These minute levels can be detected in water samples, so it is important to adopt effective Stewardship and observe the Best Practice Guidelines below.

## Best Practice Guidelines

- Use approved products, applied by trained operators with current qualifications •
- Spray when weather and soil conditions are suitable
- Don't spray if heavy rain is forecast
- Don't spray if there is a risk of drift
- Fill AWAY from drains and water courses
- Respect buffer zones and areas between water courses and treated area



# WHAT IS GRASSMANSHIP?

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Grassmanship is a programme featuring a portfolio of products that optimise grass production to give farmers a clear cost benefit through increased grass DM yield/ha.



Lupo

Thrust™

**KYLEO®**

**DEPITONE ULTRA**

## 2,4-D + MCPA

For perennial and annual broadleaved weed control in established grassland.

### Why Use?

- Flexible, robust product that can be used on established grassland.
- MCPA provides effective control of Thistles, Buttercups and Soft Rush.
- 2,4-D's main strength is Docks and Ragwort.
- No issues about chemical residues or contamination of manure.

### BEST USE

Apply in a period of active growth before the grass reaches 25cm high in the spring or up to 25cm after cutting.

In dense crops, use a higher volume of water. Weeds yellowing, under stress or damaged will be less well controlled. Avoid grassland under stress especially drought, water logging, disease or insect attack. Topping Soft Rush in late spring prior to seed formation weakens the plant, which then has to regrow. If the regrowth is treated when the Soft Rush is about 15cm tall better control will be achieved. Good field drainage and management of acidity will also help eradicate this weed.

### Notes

Established clovers or other legumes present in the sward will be severely checked, but will eventually recover. Livestock must be kept out of treated areas for at least two weeks and until poisonous weed such as Ragwort have died and become unpalatable.

### Label Information

|                                 |                                                                                                                                                                 |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Grassland Application rate      | 4.0 L/Ha                                                                                                                                                        |
| Maximum number of applications: | One per year                                                                                                                                                    |
| Timing of application:          | In late Summer or Spring - see weed tables.<br>Established clovers or other legumes present in the sward will be severely checked, but will eventually recover. |
|                                 | April to September                                                                                                                                              |
| Water volume:                   | 200 - 400 L/Ha                                                                                                                                                  |

For control of Docks, Thistles and Ragwort in established grassland.

**2,4-D +  
dicamba**

## Why Use?

- The top option for the control of Ragwort.
- Flexible, robust product that can be used on established grassland.
- The combination of the two actives give very effective control of the key grassland weeds.
- A highly cost effective treatment which can be used to control perennial and annual broadleaved weeds and as part of a Ragwort eradication programme.

## BEST USE

Apply in a period of active growth before grass reaches 25cm high in the spring or up to 25cm after cutting. In dense crops, use a higher volume of water. Weeds yellowing, under stress or damaged will be less well controlled. Avoid grassland under stress especially drought, water logging, disease or insect attack. It is often better to treat young Ragwort in September before being frost hardened.

## Further Advice on Ragwort Control

Ragwort must be no more advanced than the rosette stage. Ragwort is poisonous but also unpalatable to grazing animals whilst still growing. Once sprayed or mown it loses its bitter taste so it is very important animals are not returned to the field until the plant has fully decayed or become unpalatable.

This may take many weeks. Surviving Ragwort should be dug up. Eliminating Ragwort from a field may take several years as Ragwort seeds can germinate for many years.

## Label Information

|                                           |                                                                                                                                           |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Maximum Application Rate:</b>          | 3.5 L/Ha                                                                                                                                  |
| <b>Maximum Total Dose:</b>                | Grassland 3.5 L/Ha (7.0 L/Ha amenity)                                                                                                     |
| <b>Time Of Application:</b>               | April to September                                                                                                                        |
| <b>Min Interval Between Applications:</b> | Six weeks (amenity grassland)                                                                                                             |
| <b>Water Volumes:</b>                     | Tractor mounted sprayer or quad bike mounted sprayer<br>100 - 400 L/Ha. For use in knapsack sprayer the minimum water volume is 200 L/Ha. |

# KYLEO®

## 2,4-D + Glyphosate

Kyleo is the unique solution combining 2,4-D and glyphosate for total weed control. With a new state of the art surfactant to maximise control of grass weeds and broadleaved weeds.

### Why Use?

- Improved and faster control of docks, thistles, nettles and clovers.
- Quicker and more effective than conventional tank mixture with a lower dose of glyphosate/Ha.
- Rainfast in one hour and reliable in difficult conditions.
- Tallow-amine free adjuvant technology.

### BEST USE

Annual grasses and broad-leaved weeds should have at least 5cm of leaf, or two expended true leaves, respectively. Treat either before grazing/mowing when growth is 30-60cm, not dense and lacking mature seeds, or re-growth after grazing/mowing. Treat couch grass when it has formed three to four leaves and is actively growing. For grassland renewal, treatment and re-sowing in July and August have proved effective.



Kyleo



Glyphosate and Adjuvant

### Label Information

|                                    |                                                                                                   |
|------------------------------------|---------------------------------------------------------------------------------------------------|
| Maximum Application Rate:          | 5.0 L/Ha                                                                                          |
| Maximum Total Dose:                | 5.0 L/Ha                                                                                          |
| Time Of Application:               | Annual grasses and broadleaved weeds should have at least 5cm of leaf or two expended true leaves |
| Min Interval Between Applications: | n/a                                                                                               |
| Water Volumes:                     | 200 L/Ha                                                                                          |

| Replanting      | Delay if Ploughed | Delay if Direct Drill |
|-----------------|-------------------|-----------------------|
| Intervals Grass | 7 Days            | 28 Days               |
| Grass + Clover  | 14 Days           | 28 Days               |

# DEPITONE ULTRA



Contains 600 g/l (55 % w/w) 2,4-D formulated as a reduced volatility ester (2-EHE) giving enhanced control of key weeds in agricultural and amenity grassland and managed amenity turf.

2,4-D

## Why Use?

- Excellent control of Buttercup, Plantain, Daisy, Dandelion, Docks, Nettles and Thistle species.
- Also woody weeds (Spot treatment trial on Bramble and Dog Rose)
- Convenient pack size of 5 litres treats 2.5 ha (approx. 6 acres)
- Advantages of ester formulation:  
Better efficacy in cold conditions  
Faster acting, lower use rates, more rainfast, improved compatibility and mixing, not affected by hard water.

## BEST USE

Established Grassland:  
All grass must be at least 6 months old, with 1 application per year and 2 weeks grazing interval.

Recommended rates are 2.0 l/ha in permanent & rotational grassland  
OR  
2.0 l/ha in amenity grassland & managed amenity turf

Apply in 200 – 500 litres of water to actively growing weeds



## Label Information

|                           |                                                                                                           |
|---------------------------|-----------------------------------------------------------------------------------------------------------|
| Maximum Application Rate: | 2.0 L/Ha                                                                                                  |
| Maximum Total Dose:       | 2.0 L/Ha                                                                                                  |
| Time Of Application:      | In established grass determined by growth stage of the weeds. Apply to grass at least least 6 months old. |
| Min Interval Between:     | n/a                                                                                                       |
| Applications:             | 200 - 500 L/Ha                                                                                            |

# WEED CHART

|                     | Thrust  | Lupo    | Kyleo | Depitone Ultra |
|---------------------|---------|---------|-------|----------------|
| Buttercup, Bulbous* | √ √ (√) | √ √     | √ √   |                |
| Buttercup, Creeping |         | √ √     | √ √   | √√√            |
| Charlock            |         | √√      | √ √   |                |
| Chickweed           |         |         | √ √   |                |
| Dandelion           |         |         | √ √   | √ √            |
| Daisy               |         |         | √ √   | √ √            |
| Docks               | √ √ (√) | √ √ (√) | √ √   | √ √            |
| Fat Hen             |         |         | √ √   |                |
| Horsetail           | √ (√)   |         | √ √   | √              |
| Knotgrass           | √       |         | √ √   |                |
| Mayweed, Species    |         |         | √ √   |                |
| Nettle, Perennial   | √ √     | √ √     | √ √   | √ √            |
| Ragwort             | √ √     | √ √     | √ √   | √              |
| Rush, Soft          | (√) √   | √ √ (√) | √ √   |                |
| Shepherd's Purse    | (√)     |         | √ √   |                |
| Volunteer Oilseed   |         |         | √ √   |                |
| Rape Wild Radish    |         |         | √ √   |                |
| Thistle             | √ √ √   | √ √ (√) | √ √   | √ √            |

√ √ √ Susceptible, √ √ Acceptable control can be achieved in ideal conditions, some regrowth may occur. Seedlings usually controlled. √ Some suppression of weeds. (√) is a half mark. The list of susceptibilities is for guidance only based on a whole range of UK sources and does not constitute a recommendation. Different species of weed are controlled at different optimum size and timings.

# PRODUCT APPROVAL TABLE

| Product        |                                                                                   | Actives                          | Established Grass                                                                 |
|----------------|-----------------------------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------------|
| Depitone Ultra |  | 600g/l 2,4-D                     |  |
| Kyleo          |                                                                                   | 240g/l glyphosate + 160g/l 2,4-D |  |
| Thrust         |  | 344g/l 2,4-D + 120g/l dicamba    |  |
| Lupo           |  | 345g/l 2,4-D + 345g/l MCPA       |  |



Can be applied using hand held equipment

Some of our products have approvals for use through hand held equipment. To safely and legally use this authorisation, the user must be PA1 (Safe use of Pesticides Module) and PA6 (Hand-held or Knapsack Sprayer Module) qualified.



# Nufarm

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Nufarm is an established manufacturer with over 100 years' experience. In the UK and Ireland, our focus has historically been in cereals but learning from our New Zealand farmers, we see an opportunity in the UK and Ireland to improve grassland production and deliver real value at the farm level. Active around the globe, we are uniquely positioned to share best practices, optimise product formulations and take new solutions to market with our distributor partners. We are currently investing in additional portfolio technologies and look forward to integrating them into our portfolio to deliver an even more robust solution to grassland farmers in the UK and Ireland.



## Further Information

For more information please visit [www.nufarm.com/ie](http://www.nufarm.com/ie)  
or email [technical.queries@nufarm.com](mailto:technical.queries@nufarm.com)

Details of application rates and timings are given in Nufarm labels and product literature; both of which can be accessed from our website [www.nufarm.com/ie](http://www.nufarm.com/ie)  
Alternatively, ring the Nufarm helpline on +44 1274 694714, Monday to Friday 9.00 - 17.00.

Use plant protection products safely. Always read the label and product information before use. For label and safety information, refer to the Nufarm website [www.nufarm.com/ie](http://www.nufarm.com/ie)



Grassland IPM

Select the best agronomy solution for the target:



**DOCKS**

THRUST  
2.5L/ha  
+ Fluroxypyr  
1.0L/ha



**THISTLES**

LUPO  
4.0L/ha



**MIXED  
PERENNIAL  
WEEDS**

THRUST 2.5L/ha  
+ fluroxypyr  
1.0L/ha



**BUTTERCUP**

DEPITONE ULTRA  
2.0L/ha



**SOFT RUSH**

WEEDWIPER  
APPLICATION OF  
GLYPHOSATE 540  
1 part in 5  
water



**KNAPSACK**

THRUST 90 ml in 10  
litres water



**WEEDS IN  
NEW CLOVER  
LEYS**

CLOVERMAX\*  
7.0 L/ha



**GRASSLAND  
DESTRUCTION**

KYLEO  
5.0L/ha

\*Subject to emergency use approval

# Grassland Weed Control Decision Chart

## TYPE OF GRASSLAND

### Knapsack

### Sward for Destruction

### Established (> 1 yr.old)

Thrust 90ml in 10 litres water

**Kyleo 5.0 l/ha**  
Plough and reseed grass after 7 days or clover after 14 days.  
Direct drill after 1 month

**Thrust 2.5 l/ha + fluroxypyr 1.0 l/ha**  
OR  
**Lupo 2.5 l/ha + fluroxypyr 1.25 l/ha**  
OR  
**Depitone Ultra 2.0 l/ha (> 6months)**

For Docks, Thistles, Nettles and Ragwort.  
1 pack gives 55 x 10 litre fills

|                                                                                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |
| Docks                                                                            | Thistles                                                                          | Nettles                                                                           | Buttercup                                                                         | Dandelion                                                                         | Soft Rush                                                                         | Ragwort                                                                            |
| Thrust 2.5 l/ha + fluroxypyr 1.0 l/ha                                            | Lupo 4.0 l/ha or Thrust 3.5 l/ha                                                  | Thrust 2.5 l/ha + fluroxypyr 1.0 l/ha                                             | Lupo 4.0 l/ha or Depitone Ultra 2.0 l/ha                                          | Lupo 2.5 l/ha + fluroxypyr 1.0 l/ha                                               | Weed wiper with glyphosate                                                        | Thrust 3.5 l/ha or Lupo 4.0 l/ha or Depitone Ultra 2.0 l/ha                        |
| Rosette stage, spring or late summer                                             | Plants up to 50cm high, or regrowth post cutting                                  | 30cm high pre flower or regrowth                                                  | Treat autumn and spring pre flower                                                | Up to 20cm diameter                                                               | Treat regrowth at 15cm tall post topping                                          | Rosette in autumn and spring                                                       |

Weeds must be actively growing at application.

Water volume = 200 l/ha    Grazing interval = 2 weeks    Cutting interval = 3 weeks

Ragwort must have completely died and become unpalatable before re-introducing stock.

Always read the product label.

**Keep pesticides out of drinking water**

Maintain a minimum five metre distance from streams and drains when filling or spraying

Kyleo contains: glyphosate + 2,4-D

Lupo contains: MCPA and 2,4- D

Depitone Ultra contains: 2,4-D

Thrust contains: dicamba + 2,4-D

Fluroxypyr contains: 200 g/l fluroxypyr

Kyleo, Thrust, Lupo and Depitone Ultra are trademarks of Nufarm UK Ltd.

To find out more visit: [www.nufarm.com/ie](http://www.nufarm.com/ie)