



# Agronomy Solutions

Spring Cereals



Grow a better tomorrow



**Welcome to Nufarm's Agronomy Solutions.**

**Nufarm UK are bringing a variety of useful tools and helpful advice about our Agronomy Solutions to agronomists and growers.**

This Spring cereals technical booklet aims to offer a range of solutions to this season's agronomic challenges.

It is aimed specifically for spring cereal broad leaved weed control in 2020. Further Agronomy Solutions are available which follow the harvest calendar, from first drilling of crops all the way to post harvest treatments.

Nufarm has an exciting pipeline of products and these will be added to our Agronomy Solutions when available.

To support the Agronomy Solutions, Nufarm will also be bringing the Spraywise program to the UK for 2020.

Keep an eye out for videos and various content with BASIS and NRoSO points available.

*Application information such as rates and timing given in this booklet relates to the listed main crop. Additional crops listed may have different application information. Please check product labels.*

# Agronomy Solutions: Spring Cereals



## INDEX

Spring barley	4
Spring oats	6
Spring wheat	7
Undersown spring cereals	9
Summary	10

*Best control will be achieved at 2-4 leaf stage. Weeds larger than 6 leaf may not be adequately controlled.*

*While this booklet is designed to simplify herbicide options in a range of crops it is assumed that all cultural methods of control have been explored prior to using a Plant Protection Product. Seed rates, crop variety competitiveness and mechanical weeding are all examples of cultural methods that should be considered.*

Use plant protection products safely. Always read the label and product information before use.

# Agronomy Solutions: Spring Barley



## CHALLENGE Broad leaved weeds

### Nufarm Solutions

---

#### Option 1

70 g/ha \*\*Pelican Delta + 0.4 l/ha Tomahawk 2 + 1 l/ha Duplosan KV

**Main Crop:** Spring barley  
**Additional Crops:** Winter wheat, Winter barley  
**Timing (BBCH):** Up to 39  
**Buffer Zone:** 7m  
**Weed Spectrum:**

Brassicae	*Chickweed	Fat hen	Fumitory
Knotgrass	Mayweeds	Pansy	Speedwell

\*Will control ALS resistant populations

\*\*The advisory maximum seasonal dose of DFF in spring cereals is 100g/ha

#### Key Benefits

Excellent fumitory control and ALS resistant Chickweed solution.

#### Option 2

25 g/ha Paramount Max + 0.4 l/ha Tomahawk 2

**Main Crop:** Spring barley  
**Additional Crops:** Winter wheat, Winter barley, Winter triticale, Winter rye, Winter oats, Spring oats  
**Timing (BBCH):** Up to 39  
**Buffer Zone:** LERAP B  
**Weed Spectrum:**

Bindweeds	*Chickweed	Coltsfoot	Fool's parsley
Groundsel	Pansy	Poppy	Shepherd's purse
			Speedwell

\*Will control ALS resistant populations

#### Key Benefits

Broad spectrum "non DFF" based solution with the addition of Groundsel control.

# Agronomy Solutions: Spring Barley



**CHALLENGE** Broad leaved weeds

## Nufarm Solutions

---

### Option 3

50 g/ha \*\***Pelican Delta** + 0.3 l/ha **Pixxaro**

**Main Crop:** Spring barley

**Additional Crops:** Winter barley, Winter wheat

**Timing (BBCH):** Up to 39

**Buffer Zone:** 7m

**Weed Spectrum:**

Brassicae	*Chickweed	Fat hen	Fumitory
Knotgrass	Mayweeds	Pansy	Speedwell

\*Will control ALS resistant populations

\*\*The advisory maximum seasonal dose of DFF in spring cereals is 100g/ha

### Key Benefits

Good fumitory control with flexible application timing.



# Agronomy Solutions: Spring Oats



## **CHALLENGE** Broad leaved weeds

### Nufarm Solutions

---

#### Option 1

20 g/ha **Paramount Max** + 1 l/ha **Duplosan KV**

**Main Crop:** Spring oats

**Additional Crops:** Winter oats, Winter wheat, Spring wheat, Winter barley, Spring barley

**Timing (BBCH):** Up to 31 (spring crops)

**Buffer Zone:** LERAP B

**Weed Spectrum:**

Brassicae	*Chickweed	Corn marigold	Fat hen
	Knotgrass	Mayweeds	Speedwell

\*Will control ALS resistant populations

#### Key Benefits

Cost effective broad spectrum control.

#### Option 2

20 g/ha **Paramount Max** + 1 l/ha **Duplosan KV** + 0.4 l/ha **Tomahawk 2**

**Main Crop:** Spring oats

**Additional Crops:** Winter oats, Winter wheat, Spring wheat, Winter barley, Spring barley

**Timing (BBCH):** Up to 31 (spring crops)

**Buffer Zone:** LERAP B

**Weed Spectrum:**

Brassicae	*Chickweed	Corn Marigold	Fat Hen
Fumitory	Knotgrass	Mayweeds	Speedwell

\*Will control ALS resistant populations

#### Key Benefits

Cost effective broad spectrum solution with added Fumitory control.

# Agronomy Solutions: Spring Wheat



## CHALLENGE Broad leaved weeds

### Nufarm Solutions

---

#### Option 1

##### 1.5 l/ha Duplosan Super + 20 g/ha Accurate

**Main Crop:** Spring wheat

**Additional Crops:** Winter wheat, Spring barley, Winter barley, Winter oats, Spring oats

**Timing (BBCH):** Up to 32

**Buffer Zone:** LERAP B

**Weed Spectrum:**

Brassicae	*Chickweed	Fat hen	Fumitory
Knotgrass	Mayweeds	Pansy	Speedwell

\*Will control ALS resistant populations

#### Key Benefits

Broad spectrum broad leaved weed control with the added benefit of ALS resistant Chickweed control.

#### Option 2

##### 20 g/ha Paramount Max + 1.5 l/ha Easel

**Main Crop:** Spring wheat

**Additional Crops:** Spring barley, Winter wheat, Winter barley, Winter oats, Spring oats

**Timing (BBCH):** Up to 31 (39 for Winter wheat)

**Buffer Zone:** LERAP B

**Weed Spectrum:**

Coltsfoot	Fat hen	Fool's parsley	Groundsel
Pansy	*Poppy	Shepherd's purse	Speedwell

\*Will control ALS resistant populations

#### Key Benefits

ALS resistant Poppy control.

# Agronomy Solutions: Spring Wheat



## CHALLENGE Broad leaved weeds

### Nufarm Solutions

#### Option 3

20 g/ha **Accurate** + 0.5 l/ha **Tomahawk 2**

- Main Crop:** Spring wheat
- Additional Crops:** Winter wheat, Winter barley, Spring barley, Winter oats, Spring oats
- Timing (BBCH):** Up to 39
- Buffer Zone:** LERAP B
- Weed Spectrum:**

Bindweeds	*Chickweed	Coltsfoot	Fool's parsley
Groundsel	Pansy	Poppy	Shepherd's purse
			Speedwell

\*Will control ALS resistant populations

#### Key Benefits

A cost effective solution with growth stage application flexibility.





# Agronomy Solutions: Undersown Spring Cereals



## CHALLENGE Broad leaved weeds

### Nufarm Solutions

---

The under sowing of spring cereals is an increasingly popular practise to give an established grass crop soon after cereal harvest. Herbicide options for weed control in undersown cereals are very limited, hence Nufarm have produced some Agronomy Solutions to meet this challenge:

#### Option 1

##### 0.75 l/ha Depitox + 0.75 l/ha Tomahawk 2

**Main Crop:** Spring barley  
(undersown grass)

**Additional Crops:** Spring rye, Spring wheat

**Timing (BBCH):** Up to 31 (spring crops)

**Buffer Zone:** LERAP B

#### Weed Spectrum:

Black bindweed	Fat hen	Charlock	Forget-me-not
Chickweed	Hempnettle	Cleavers	

#### Key Benefits

An effective mix for Spring barley undersown with grass and will control competitive weeds such as Charlock, Chickweed and Fat hen. Apply from GS 15 of the barley and before GS 31.

#### Option 2

##### 1.4 l/ha Agritox + 2.5 l/ha Clovermaster

**Main Crop:** Spring barley  
(undersown Red clover/grass)

**Additional Crops:** Spring wheat, Spring rye

**Timing (BBCH):** Up to 31 (spring crops)

**Buffer Zone:** N/A

#### Weed Spectrum:

Brassicae	Fat hen	Charlock	Shepherd's purse	Polygonums
-----------	---------	----------	------------------	------------

#### Key Benefits

An effective mix for Spring barley undersown with Red clover + grass and controls Fat hen, Charlock and Shepherd's purse. Apply from 2 trifoliate leaf of Red clover. Some clover damage will occur but this is normally outgrown.

# Agronomy Solutions: Undersown Spring Cereals



## **CHALLENGE** Broad leaved weeds

### Nufarm Solutions

---

#### Option 3

#### 1.5 l/ha **Agritox** + 0.75 l/ha **Tomahawk 2**

**Main Crop:** Spring oats  
(undersown grass)

**Additional Crops:** Spring wheat, Spring barley, Spring rye

**Timing (BBCH):** Up to 31 (spring crops)

**Buffer Zone:** LERAP B

#### Weed Spectrum:

Black bindweed	Fat hen	Charlock	Forget-me-not
Chickweed	Hempnettle	Cleavers	Shepherd's purse

#### Key Benefits

A wide spectrum mix for use in Spring oats undersown with grass. Key weeds such as Chickweed, Fat hen and Charlock will be controlled. Apply when the undersown grass has started to tiller.

<b>Brand Name</b>	<b>Active Ingredient</b>	<b>Formulation</b>	<b>MAPP Number</b>
Accurate	200g metsulfuron-methyl	Water Dispersible Granule	MAPP 19237
Agritox	500g MCPA	Soluble Concentrate	MAPP 14894
CloverMaster	400g 2,4-DB	Soluble Concentrate	MAPP 18251
Depitox	500g 2,4-D	Soluble Concentrate	MAPP 17597
Duplosan KV	600g mecopropp	Soluble Concentrate	MAPP 18374
Duplosan Super	310g dichlorprop-P + 160g MCPA + 130g mecopropp	Soluble Concentrate	MAPP 18231
Easel	750g MCPA	Soluble Concentrate	MAPP 15548
Hi Load Mircam	80g dicamba + 600g mecopropp	Soluble Concentrate	MAPP 11930
Lector	50g florasulam	Suspension Concentrate	MAPP 18728
Lector Delta	500g diflufenican + 50g florasulam	Suspension Concentrate	MAPP 19055
Paramount Max	200g florasulam + 600g tribenuron-methyl	Water Dispersible Granule	MAPP 18751
Pelican Delta	600g diflufenican + 60g metsulfuron-methyl	Water Dispersible Granule	MAPP 18513
Pixxaro*	12g Arylex + 280g fluroxypyr	Emulsifiable Concentrate	MAPP 17545
Tomahawk 2	200g fluroxypyr	Emulsifiable Concentrate	MAPP 17468

\* Pixxaro™ is a trade mark of Corveya Agriscience. Pixxaro™ is produced and marketed by Corveya Agriscience.



**Nufarm**

**Nufarm UK Ltd**

**Wyke Lane, Wyke, Bradford, West Yorkshire BD12 9EJ**

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/uk](http://www.nufarm.com/uk).

Alternatively, ring the Nufarm helpline on 01274 694714, Monday to Friday 9.00 - 17.00 or contact your agronomist.

Some brand names used in this guide are trademarks of other manufacturers, in which proprietary rights may exist.

Use plant protection products safely.  
Always read the label and product information before use.