

# Headland Spruce

MAPP 15089

A soluble concentrate formulation containing 400 g/l (29.8% w/w) of 2,4-DB as the sodium salt for the control of broad-leaved weeds in Cereals, Grassland, Lucerne and Clover The (CoSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work

To access the Safety Data Sheet for this product, scan the QR code or use the weblink below: <http://headland-ag.co.uk/images/catalog/MSSD%20AG%20Spruce.pdf>  
Alternatively, contact your supplier.



PEEL BACK FOR DIRECTIONS FOR USE LEAFLET

## HEADLAND SPRUCE

A soluble concentrate formulation containing 400 g/l (29.8% w/w) 2,4-DB as the sodium salt

### DANGER

**Harmful if swallowed.**

**Causes serious eye damage.**

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/ eye protection/face protection.

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

IF SWALLOWED: Call a POISON Center or doctor physician if you feel unwell.

Rinse mouth.

Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

Contains 2,4-DB. May produce an allergic reaction

**To avoid risks to human health and the environment, comply with the instructions for use.**



## IMPORTANT INFORMATION

### FOR USE ONLY AS AN AGRICULTURAL HERBICIDE

Crop	Maximum Individual Dose	Maximum No. of Treatments	Latest Time of Application
Wheat, Barley and Oats (winter)	4.5 l/ha	1 per crop	Before the first node detectable
Wheat (undersown with grass, lucerne, red and white clover, sainfoin and vetch), barley (undersown with grass, lucerne, red and white clover, sainfoin and vetch) and oats (undersown with grass, lucerne, red and white clover, sainfoin and vetch)	4.5 l/ha	1 per crop	Before the first node detectable
Oats (spring)	4.25 l/ha	1 per crop	Before the first node detectable
Grassland	4.5 l/ha	1 per annum	-----
Lucerne, Red Clover and White Clover	4.5 l/ha	1 per annum	Fourth trifoliate leaf stage

**READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.**

**Approval Holder:** Nufarm UK Limited, Wyke Lane, Wyke, Bradford, West Yorkshire BD12 9EJ

Distributed by: Headland Agrochemicals Ltd., Rectors Lane, Flintshire, CH5 2DH, UK.

Tel: + 44 (0) 1244 537370 Fax: + 44 (0) 1244 532097 E-mail: [flintshire.enquiry@fmc.com](mailto:flintshire.enquiry@fmc.com) [www.headlandcropputrition.com](http://www.headlandcropputrition.com)

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## DIRECTIONS FOR USE

**IMPORTANT:** This information is approved as part of the product label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

### RESTRICTIONS

- DO NOT sow any crop into soil treated with HEADLAND SPRUCE for at least 3 months after application.
- DO NOT roll, harrow or cut crops within seven days before or after spraying.
- DO NOT graze crops within a week before or 2 weeks after spraying
- DO NOT apply during cold weather or drought.
- DO NOT apply during rain or if rain is expected.
- DO NOT spray in windy weather and avoid drift onto broad-leaved plants outside the target area. HEADLAND SPRUCE is active at low concentrations. The following crops are particularly susceptible to spray drift: beet, brassicae (eg turnips, swedes, oilseed rape) and most market garden crops including lettuce and tomatoes under glass, pears and vines.
- DO NOT use HEADLAND SPRUCE immediately before or after sowing any crop

### WEEDS CONTROLLED

HEADLAND SPRUCE is a selective herbicide for use post-emergence to control broad-leaved weeds in Cereals, Grassland, Lucerne, and Clover

HEADLAND SPRUCE applied at 4.5 l/ha will control those annual weeds as listed and will control perennial weeds as indicated.

Annual weeds will be best controlled if spraying is done while the majority of weeds are seedlings.

Perennial weeds should be sprayed during their period of maximum growth, usually when the flower buds are beginning to form. The response of perennial weeds to treatments are often variable with only the aerial parts killed, though often suppression will occur. The recovery of weeds will be reduced if the sward is growing vigorously at the time of treatment.

### Annual Weeds

Annual weeds will be best controlled if spraying is done while the majority of weeds are seedlings.

### Susceptible

Complete or almost complete control of seedlings\*

Corn Buttercup  
Fat Hen  
Field Penny-cress  
Shepherd's Purse

*Ranunculus arvensis*  
*Chenopodium album*  
*Thlaspi arvense*  
*Capella bursa pastoris*

### Moderately Susceptible

Effective control of seedlings\* but not necessarily complete control

Black Mustard  
Charlock  
Common Fumitory  
Common Orache  
Common Poppy  
Flixweed  
Knotgrass  
Pale Persicaria  
Prickly Sow Thistle  
Redshank  
Small Nettle  
Smooth Sow Thistle  
Treatle Mustard  
Wild Turnip

*Brassica nigra*  
*Sinapis arvensis*  
*Fumaria officinalis*  
*Atriplex patula*  
*Papaver rhoeas*  
*Descurainia sophia*  
*Polygonum aviculare*  
*Polygonum lapathifolium*  
*Sonchus asper*  
*Polygonum persicaria*  
*Urtica urens*  
*Sonchus oleraceus*  
*Erysimum cheiranthoides*  
*Brassica rapa*

### Moderately Resistant

Temporary suppression of seedlings\*, long term control dependant on crop competition and weather.

Black Bindweed  
Doves Foot Cranes Bill  
Groundsel  
Scarlet Pimpernel  
White Mustard

*Polygonum convolvulus*  
*Geranium molle*  
*Senecio vulgaris*  
*Anagalis arvensis*  
*Sinapis alba*

### Resistant

No useful effect

Fools parsley  
Chickweed  
Red dead nettle  
Speedwells

*Aethusa cynapium*  
*Stelaria media*  
*Lamium purpureum*  
*Veronica spp*

### Perennial Weeds

The following perennial weed species will be controlled as indicated.

Common Name	Species Name	Seedlings*	Shoots*	Long Term*
Autumn Hawkbit	<i>Leontodon autumnalis</i>	MS	MS	-
Broadleaved Dock	<i>Rumex obtusifolia</i>	S	MR	R
Bulbous Buttercup	<i>Ranunculus bulbosus</i>	S	MS	R
Common Ragwort	<i>Senecio jacobaea</i>	R	R	R
Creeping Buttercup	<i>Ranunculus repens</i>	S	S	MS
Creeping Thistle	<i>Cirsium arvense</i>	S	MS	MR
Crowfoot	<i>Ranunculus acris</i>	MS	MS	MR
Curled Dock	<i>Rumex crispus</i>	S	MS	MR
Dandelion	<i>Taraxacum officinale</i>	MR	MR	MR
Field Bindweed	<i>Convolvulus arvensis</i>	MS	MS	R
Horsetail	<i>Equisetum spp</i>	MS	MS	R
Plantain	<i>Plantago spp</i>	S	S	S
Perennial Sow Thistle	<i>Sonchus arvensis</i>	MR	MR	MR
Spear Thistle	<i>Cirsium vulgare</i>	S	MS	MS

S	Susceptible	Complete or near complete kill.
MS	Moderately Susceptible	Good control if attention is given to good timing.
MR	Moderately Resistant	Variable effect, useful control cannot be relied on.
R	Resistant	No useful effect
-	Insufficient Data	

\* 'Seedlings' are young weed plants with a maximum of two expanded true leaves.

\* 'Shoots' refers to the stage between 3 expanded true leaves and early flower bud of the weed.

\* 'Long term' refers to the sustained response expected in established weeds as a result of effects on both shoot and root.

### WEED RESISTANCE

When herbicides with the same mode of action are used repeatedly over several years in the same field, selection of resistant biotypes can take place. These can propagate and may become dominating. A weed species is considered to be resistant to a herbicide if it survives a correctly applied treatment at the recommended dose. A strategy for preventing and managing such resistance should be adopted. This should include integrating herbicides with a programme of cultural control measures. Guidelines have been produced by the Weed Resistance Action Group and copies are available from the HGCA, CPA, your distributor, crop adviser or product manufacturer.

### CROP SPECIFIC INFORMATION

#### CEREALS

HEADLAND SPRUCE may be used on all commercial varieties of Winter and Spring sown Wheat, Barley and Oats, but is not recommended for use on Rye.

HEADLAND SPRUCE may also be used on cereals undersown with Grass, Red or White Clover, or Lucerne.

Water Volume: Apply in 200 to 400 litres of water per hectare.

Use a minimum rate of 225 l/ha in dense stands of cereals, or if weed growth is dense.

Spray quality: Apply as a medium quality spray (as defined by BCPC). A spray pressure of 2-3 bar is recommended.

Timing of application: HEADLAND SPRUCE should be applied when the crop is actively growing and is at the correct growth stage.

The best results will be obtained if spraying is done while the majority of weeds are seedlings.

**Winter Wheat, Barley and Oats**

Apply HEADLAND SPRUCE at a rate of 4.5 l/ha

Apply in the spring from the leaf sheath erect stage until before the first node is detectable (BBCH growth stage 30)

Do not apply in autumn, winter, during frosty weather or if frosts are expected following application.

**Spring Wheat**

Apply HEADLAND SPRUCE at a rate of 4.5 l/ha

Apply from the five leaf stage until before the first node is detectable (BBCH growth stage 15-30).

**Spring Barley**

Apply HEADLAND SPRUCE at a rate of 4.5 l/ha

Apply from the three leaf stage until before the first node is detectable (BBCH growth stage 13-30).

**Spring Oats**

Apply HEADLAND SPRUCE at a rate of 4.25 l/ha

Apply from the three leaf stage until before the first node is detectable (BBCH growth stage 13-30).

**Undersown Cereals**

Apply HEADLAND SPRUCE to undersown cereals (except spring oats) at a rate of 4.5 l/ha.

Apply HEADLAND SPRUCE to spring oats at a rate of 4.25 l/ha.

Application should be made when the cereal crop is at the correct growth stage, as listed above AND when the undersown crop of clover, lucerne or grass is at the correct growth stage as listed in the grassland section below.

**GRASS, CLOVER AND LUCERNE**

HEADLAND SPRUCE may be used on Established Grassland (permanent pasture) and Newly Sown Grass.

HEADLAND SPRUCE may also be used on Red and White Clover, Lucerne (alfalfa) and swards containing a mixture of Grasses and Clover or Lucerne.

Water volume: Apply in 200 to 1000 litres of water per hectare.

Use a minimum of rate 225 l/ha in dense swards, or if weed growth is dense.

Spray quality: Apply as a medium quality spray (as defined by BCPC). A spray pressure of 2-3 bars is recommended.

**Established Grassland**

HEADLAND SPRUCE should be applied to established grassland at a rate of 4.5 l/ha.

A top dressing ten days before treatment is recommended to assist kill of weeds and subsequent recovery of the sward.

The time of application is best determined according to the growth stage of weeds present (See Weed Control section).

**Newly Sown Grass**

HEADLAND SPRUCE should be applied to young grass leys at a rate of 4.5 l/ha.

Spray when the grasses have at least four leaves and have begun to tiller. Where several species of grass are present the timing should be dictated by the slowest developing species. Applications before tillering may cause a temporary check to growth.

**Red and White Clover**

HEADLAND SPRUCE should be applied to red or white clover at a rate of 4.5 l/ha.

Spray once the clover has reached the first trifoliate leaf stage onwards.

Some species of red clover may receive a slight check but this will be outgrown in 6-8 weeks.

**Lucerne (Alfalfa)**

HEADLAND SPRUCE should be applied to lucerne at a rate of 4.5 l/ha.

Spray from the first trifoliate leaf until the fourth trifoliate leaf stage.

**MIXING**

Apply using a conventional ground vehicle mounted/drawn equipment. Ensure that all application equipment is clean. Add half the required volume of water and start agitation, add the required quantity of HEADLAND SPRUCE. Fill the tank to the required volume of water whilst maintaining agitation. Continuous agitation must be maintained until spraying is complete. After use, the spraying machine must be thoroughly cleaned.

Wash Equipment thoroughly with water and wetting agent or liquid detergent immediately after use.

Spray out, fill with clean water and leave overnight. Spray out again before storing or using for another product. Traces of HEADLAND SPRUCE can cause harm to susceptible crops sprayed later.

**TERMS AND CONDITIONS OF SUPPLY, SALE OR USE**

All goods supplied by Headland Agrochemicals Ltd. are high grade and we believe them to be suitable for the purpose for which we expressly supply them: but as we cannot exercise any control over their mixing, use or application which may affect the performance of the goods all conditions and warranties statutory or otherwise as to the quality or fitness for any purpose of our goods are excluded and no responsibility will be accepted by us or our Associate Companies for any damage or injury whatsoever arising from their storage, handling, re-application or use. These conditions cannot be varied by our staff, our agents or the re-sellers of the product whether or not they supervise or assist in the use of such goods.

**SAFETY PRECAUTIONS****Operator Protection**

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when handling the concentrate.

WEAR SUITABLE PROTECTIVE GLOVES during application.

However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.

IF YOU FEEL UNWELL, seek medical advice (show the label where possible).

WASH THOROUGHLY after handling.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

WASH HANDS AND EXPOSED SKIN before meals and after work.

**Environmental Protection**

KEEP LIVESTOCK OUT OF TREATED AREAS for at least two weeks following treatment and until poisonous weeds such as ragwort have died and become unpalatable.

Do not contaminate water with product or its container (do not clean application equipment near surface water /avoid contamination via drains from farmyards and roads)

**Storage and Disposal**

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

KEEP OUT OF REACH OF CHILDREN.

RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of safely.

DO NOT RE-USE CONTAINER for any purpose.

STORE AWAY FROM FROST

Headland is a registered trademark.

Spruce is a trademark

