





**Bayer Amenity** 

A foliar applied translocated herbicide for the control of annual and perennial grass and broad-leaved weeds before sowing or planting of all crops.

For the control of emerged weeds in grassland, orchards, industrial and amenity situations, in forestry and in aquatic areas.

Degraded by micro-organisms/ microbes in the soil.

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

This product contains a soluble concentrate containing 360 g/L glyphosate, present as 441 g/L (35% ww) of the potassium salt of glyphosate.

# MAPP Number 21187

PROTECT FROM FROST

### **Bayer CropScience Ltd**

230 Cambridge Science Park, Milton Road, Cambridge, CB4 0WB, UK.

Telephone: 01223 226500; https://cropscience.bayer.co.uk/

For 24-hour emergency information contact Bayer CropScience Ltd.

Telephone: 0330 678 3382 (24 hr)

National Poisons Information Centre UK: 0344 892 0111 (medical professionals only)

National Poisons Information Centre Dublin: +353 1 809 2166

**GROUP** 

9

**HERBICIDE** 

A1 - GB30461641a

e 5 Litres





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#### ROUNDUP PROACTIVE XL

UFI: KPF1-E0Y7-K009-RH2Q

Contains 360 g/l glyphosate, present as 441 g/l (35% ww) of the potassium salt of glyphosate.

#### Warning

Causes serious eve irritation.

Toxic to aquatic life with long lasting effects.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

Keep only in original container.

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

If eye irritation persists: Get medical advice/attention.

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.

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



#### IMPORTANT INFORMATION:

FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL / HORTICULTURAL / INDUSTRIAL / FORESTRY / AQUATIC HERBICIDE-Crops/situations:

All edible and non-edible crops (destruction, before sowing/planting).

Grassland.

Apples, pears; plums, cherries, damsons.

Natural surfaces not intended to bear vegetation; permeable surfaces overlaying soil; hard surfaces.

Enclosed waters, open waters, land immediately adjacent to aquatic areas.

Forest, forest nursery (weed control, stump application and chemical thinning).

Amenity vegetation.

Maximum individual dose:

Maximum number of treatments: } Full details are given in the Statutory Area

Latest time of application: ) on the attached leaflet

Other specific restrictions: \ (Crop Specific Information - marked #)

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.



the following personal protective equipment: \* WEAR SUITABLE PROTECTIVE GLOVES when handling the concentrate and when handling contaminated surfaces

\* WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES The Water Act, 1989, The Water Resources sprayers, hand-held rotary atomisers, weed wiper Northern Ireland Water Resources Act 1992 and equipment, spot gun equipment or when making the Control of Pollution and Local Government cut stump treatments OR WHEN USING STEM (Northern Ireland) Order 1978, may apply to the INJECTION FOUIPMENT

\* However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher ponds/lakes discharging into such water courses... standard of protection.

\* WASH HANDS AND EXPOSED SKIN before eating and drinking and after work.

# Environmental protection

container except when used as directed. Do not a safe place. clean application equipment near surface water. Avoid contamination via drains from farmvards and roads.

Recommendations apply to the use of this herbicide for the control of weeds growing in or

by water and must be read in conjunction with the Official Code of Practice entitled "Guidelines for the Use of Herbicides on Weeds in or near Engineering control of operator exposure must be Watercourses and Lakes" obtainable from used where reasonably practicable in addition to Department of Environment and Rural Affairs (DEFRA publications 08459 556000), Scottish Executive Environment and Bural Affairs Department Department of Agriculture and Bural Development for Northern Ireland and the National Assembly for Wales Agriculture Department act of applying Roundup ProActive for the control of weeds growing in or by reservoirs and water courses, e.g. rivers, streams, ditches, drains and

#### Storage and disposal KEEP AWAY FROM FOOD, DRINK AND ANIMAL

FEEDINGSTLIFES KEEP OUT OF BEACH OF CHILDREN Do not contaminate water with the product or its KEEP IN ORIGINAL CONTAINER, tightly closed, in

> RINSE CONTAINER THOROUGHLY by using an integrated pressure-rinsing device or manually rinse three times. Add washings to sprayer at time of filling and dispose of safely. Triple rinsed containers may be disposed of as non-hazardous

### AMENITY INDUSTRIAL AND GENERAL WEED CONTROL

People, pets and wildlife need not be kept out of treated areas. It is best not to walk in areas where the spray is still wet as transfer to other vegetation may lead to unwanted damage to other foliage. Once the spray is dry this cannot occur.

Roundup ProActive XL is recommended for control of annual and perennial grasses and broad-leaved weeds in non-crop areas, for cleaning up weedy ground prior to planting or sowing and for aquatic weed control. Roundup ProActive XL may also be used as a directed spray

ornamental plantings, orchards and for spot treating weeds in grassland. Roundup ProActive XL must be targeted only at weed growth on hard surfaces such as roadsides and paths, (see recommendation table for details).

# 1.5 to 6 litres/ha – refer to Recommendation Tables

Crop specific information								
CROPS OR SITUATIONS	MAXIMUM INDIVIDUAL DOSE (kg product per hectare)	MAXIMUM TOTAL DOSE (kg product / hectare / crop)	LATEST TIME OF APPLICATION					
Permanent grassland (destruction), rotational grassland (destruction).	6	6	5 days before harvest, grazing or drilling					
Apple and pear orchards.	5	5	After harvest (post leaf-fall) but before green cluster stage					
Cherry, plum and damson orchards.	5	5	After harvest (post leaf-fall) but before white bud stage					
All edible and non-edible crops (destruction before sowing/ planting)	5	5	-					
Natural surfaces not intended to bear vegetation, permeable surfaces overlaying soil, hard surfaces	5	-	-					
Enclosed waters, open waters, land immediately adjacent to aquatic area.	6	-	-					
Forestry: Weed control	10 litres/hectare	-	-					
Stump application	200 ml/litre of water (20% solution of product in water)	-	-					
Chemical thinning (by injection)	2 ml per 10 cm diameter (or less)	_	_					

### Amenity vegetation OTHER SPECIFIC RESTRICTIONS:

200 microns

Users must consult the appropriate water regulatory body (Environment Agency/Scottish growing crop. Environmental Protection Agency/Natural Resources Wales) before using the product near water and must obtain their agreement before using this product to control aquatic weeds. The maximum concentration of active substance in treated water should not exceed

of tree

5 litres/hectare

When applying through rotary atomisers, the spray droplet spectra produced must be of a

minimum Volume Median Diameter (VMD) of

Weed wipers may be used in any recommended crop where the wiper or chemical does not touch the

When using weed wipers, the maximum concentrations used must not exceed the following: Weed wiper Mini 1:2 dilution with water Other Wipers

1:1 dilution with water

For stump application the maximum concentration must not exceed 200ml product per litre water (i.e. 20% solution).

Roundup ProActive XL.

### Application Guidance

Use the following guidance when spraying at a rate of 5 L/ha

na opraying oo	otion.		specified in the Compatibility section.			
SPRAYING WITH 5 L/HA			After application, large concentrations			
HYDRAULIC Sprayers	STANDARD VOLUME (200 L/HA)	LOW VOLUME (100 L/HA)	decaying foliage, stolons, roots or rhizom should be dispersed or buried by thoroug cultivation before crop drilling.			
Boom sprayer	sprayer 5 litres in 200   5 litres in 100   litres water covers 1 ha   5 loo ml in 10   litres water litres water covers 1 ha   5 loo ml in 10   litres water   10   l		Applications of lime, fertiliser, farmyard m and pesticides should be delayed until 5 of after application of Roundup ProActive XI			
Knapsack / handheld sprayer*			Keep stock out of treated areas for at leas days. TREATED POISONOUS PLANT SPI MUST BE REMOVED BEFORE REGRAZII			

Walking speed of 1 m/second and 1 m swath

Roundup ProActive XL can also be applied using Prevent the Spread of Ragwort. Ragwort plants rotary atomisers and weed wipers. See 'Mixing sprayed with this herbicide are more palatable and contain higher levels of toxins. Animals

IMPORTANT: This information is approved a 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.

DIRECTIONS FOR US

AVOID SPRAY DRIFT AS THIS CAN SEVERELY DAMAGE NEIGHBOURING CROPS OR PLANTS. DO NOT MIX. STORE OR APPLY ROUNDUP ProActive XL IN GALVANISED OR UNLINED STEEL CONTAINERS OR SPRAY TANKS. DO NOT leave spray mixtures in tank for long PERENNIAL GRASSES must have full

Restrictions A period without rain of at least 6 hours and preferably 24 hours must follow application of

> Do not spray onto weeds which are naturally senescent, or where growth is impaired by drought, high temperatures, a covering of dust, flooding or frost at, or immediately after application, otherwise poor control may result.

# Do not spray in windy conditions as drift onto

desired crops or vegetation can severely damaged or destroy them.

For more details of suitable nozzles see 'Mixing Do not tank-mix Roundup ProActive XL with adiuvants, pesticides or fertilisers, except as and spraying section'.

na foliage, stolons, roots or rhizomes be dispersed or buried by thorough tion before crop drilling. ations of lime, fertiliser, farmyard manure esticides should be delayed until 5 days. oplication of Roundup ProActive XL. tock out of treated areas for at least ! TREATED POISONOUS PLANT SPECIES BE REMOVED REFORE REGRAZING OF ayer | covers 500 m² | covers 1000 m²

CONSERVING Where Ragwort is present users should consult the Code of Practice on How to

and Spraving' section. should be excluded from treated areas until any

Ragwort has completely recovered or died and

there is no visible sign of the dead weed. Do not

include treated Ragwort in hav or silage crops.

Roundup ProActive XL herbicide controls most emerged grasses and broad-leaved weeds. If is important that all weeds are at the correct growth stage when treated, otherwise some EXTREME CARE SHOULD BE TAKEN TO re-growth may occur and this will need re-

> Apply Roundup ProActive XL herbicide once grasses and broad-leaved weeds have emerged and they have ACTIVELY GROWING green

periods and make sure tanks are WELL VENTED. emergence of healthy, green leaf. (Common Couch, for example, becomes susceptible at the onset of tillering and new rhizome growth, which usually occurs when plants have 4-5

> PERENNIAL BROAD-LEAVED WEEDS are mos susceptible around the flowering stage.

#### ANNUAL GRASSES AND BROAD-LEAVED a) Tractor mounted and powered hydraulic WEEDS should have at least 5 cm of leaf

Medium Volume application (150 – 300 L/ha)

may lead to run-off from the treated vegetation.

resulting in reduced control. Low drift nozzles

Avoid high water volumes (>300 L/ha) which

such as air induction and pre-orifice types

producing a medium or coarse spray (BCPC

reducing pressure and the appropriate nozzle

selection. Low drift nozzles which produce a

correct amount of Roundup ProActive XL and top

volume (or 10 L per 500 m<sup>2</sup>). To apply 3.0 L/ha

of Roundup ProActive XL, therefore, use a 1.5%

up to 10 litres. Similarly, knapsack sprayers fitted

with low volume nozzles such as Hypro DT 1.5

volume. To apply 3.0 L/ha Roundup ProActive XL

in this case use 3.0% solution.

up with water.

definition) should be used to minimise the risk of

or 2 expanded true leaves, respectively. In set-aside, annual grasses are best treated at full ear emergence, or before stem elongation. bars (20 – 35 psi) Application during the stem extension phase Half fill the spray tank with clean water, start of annual grasses e.g. Black-grass and Brome gentle agitation, and then add the correct amount species on set-aside between the end of April

require re-treatment BRACKEN should be treated after frond tips are unfurled but pre-senescence

and end of May, may result in poor control and

 OTHER SPECIES - recommendations for specific Areas of Use are given in the Recommendation Tables.

This product will not give an acceptable level of control of Horsetails (Equisetum arvense)-repeat treatment will be necessary.

Roundup ProActive XL herbicide controls Low Volume Application (minimum 80 L/ha) emerged and floating aquatic weeds including Low volume application can be achieved by Common Reed, Reed Sweet-grass, Reed Canarygrass and Water-lilv.

Treat when the weeds are actively growing with medium spray quality (BCPC definition) should be full emergence of green leaf, at flowering and used to minimise the risk of drift before dieback. Best results are obtained from o) Knapsack Sprayers applications in the periods from mid-July to Recommended delivery range is 80-250 L/ha. mid-August on Water-lilies and mid-August to mid-Half fill the spray tank with clean water, add the September on Reeds.

### Following crops

Upon soil adsorption the herbicidal properties When used at a walking speed of 1 metre/second of Roundup ProActive XL are lost permitting the to apply a swath of 1 metre width, most knapsack drilling of crops 48 hours after application. See the sprayers fitted with a Hypro AN 1.2 or similar 'Recommendation Tables' for specific restrictions. nozzle deliver approximately 200 L/ha spray

wipers, stem injection and spot oun applicators

Roundup ProActive XL mixes readily with water and can be applied in spray volumes ranging from solution, i.e. 150 ml Roundup ProActive XL made 10-400 L/ha using tractor mounted, knapsack. rotary atomisers and hand-held sprayers. Specialised application equipment such as weed typically deliver approximately 100 L/ha spray

Mixing and spraying

leaves, each with 10-15 cm of new growth). may be used where indicated. Correctly calibrate all sprayers under field or use conditions prior to application.

# c) Rotary Atomisers

Roundup ProActive XL may be applied neat These should be capable of applying accurately through specialised LILV applicators which have 80 – 400 L/ha within a pressure range of 1.5 – 2.5 drift reducing systems or at a spray volume of 10-40 L/ha through conventional rotary atomisers.

Hand-held machines can be used to apply a spray volume of 10-40 L/ha, e.g. Herbi and Herbaflex. of Roundup ProActive. Top up the tank with water Tractor-mounted rotary atomiser boom sprayers to the required level. To avoid foaming do not use are suitable for use in forest situations to apply a top tank agitation. Use of a defoamer may be spray volume of 10-40 L/ha.

> When rotary atomisers are used to apply Roundup ProActive XI ensure that the droplet diameter falls When used in paddocks keep livestock out within the range 200-300 microns for all uses. Stir the correct amount of Roundup ProActive XL to control the particular target species into the sprayer bottle half filled with clean water. Top Boat mounted sprayers up with water, close the top and shake gently to ensure good mixing.

### d) Weed Wipers

For ropewick applicators use a concentration of 1 part Roundup ProActive XL to 2 parts of water and Compatibility add a water-soluble dye if required. Care should be Roundup ProActive XL is physically compatible taken to avoid dripping onto wanted vegetation. with some other pesticides. For up to date

For new generation weed wipers, use 1part Roundup ProActive XL to 10 or 20 parts of water or Crop Science. as directed by manufacturer's instructions. A list of machines is included in the Company Advisory section at the end of this label.

### e) Cut Stump Applicators

the final water volume, for all pre-plant and post-For cut stump treatment an Enso attachment to plant directed sprays only. rotary saws may be used. DO NOT APPLY WITH MIXTURE B NF TO EDIBLE CROPS, GRASSLAND OR AQUATIC WEEDS.

This technique is specific to scrub clearance in Forestry, A suitable water soluble dve may be

Use a hatchet to cut one notch in trees up to 10 cm diameter and two to three notches in trees above 10 cm diameter, Use 2 ml of undiluted Roundup ProActive XL per notch. Specialist stem injection equipment can be used to inject 2 mls Roundup tank mixture. ProActive into hollow stems such as Japanese Knotweed and Giant Hogweed.

### g) Spot Gun Applicators

individual weeds

SPOT	AMOUNT OF ROUNDUP PROACTIVE (ML) PER 5 LITRES SPRAY SOLUTION						
DIAMETER	3.0	4.0	5.0	10.0			
(METRES)	L/HA	L/HA	L/HA	L/HA			
0.3	20	28	35	70			
0.6	85	110	140	280			

of treated area until treated Ragwort or other poisonous weeds have either been removed or died down completely.

#### For use in aquatic situations. Prepare sprayer as for

knapsack sprayers (Section b above). Calibrate and spray at the lowest speed possible. Always apply against the direction of any current.

Do not tank-mix Roundup ProActive XL when

N.B. Maintain continuous agitation when using

For knapsack sprayers: mix thoroughly and use

immediately when using Roundup ProActive XL in

Roundup ProActive XL in a tank-mixture.

information on compatible products contact Bayer Roundup ProActive XL is compatible with Mixture B NF (ADJ 0570). Where conventional hydraulic

using rotary atomiser sprayers.

before use.

#### sprayers are being used Mixture B NF may be Symptoms on the weeds added to the spray tank solution, at a rate of 2% of Symptoms of treatment are generally first seen

7-14 days, or longer, if growth is slow after spraving. Leaf symptoms take the form of a reddening then yellowing of the foliage and are first seen on the grass weeds but take longer to appear on broad-leaved weeds. Reaction of nettle

COMPANY ADVISORY INFORMATION

grasses and broad-leaved weeds. Roundup

by the micro-organisms present in soil and

aquatic bottom sediments. Until degraded.

the active ingredient in Boundup ProActive XI

therefore unlikely to contaminate groundwater

which, having no hazard classification, offers a

high standard of operator safety. To maximise

the intrinsic safety of Roundup ProActiveXL to

operator, consumer and environment, the label

recommendations and the DEFRA/HSC/NAW

publication "Code of Practice for Using Plant

Protection Products" of January 2006, should be

glyphosate, is practically immobile in soils and is.

Roundup ProActive XL is a alyphosate formulation

IMPORTANT: To obtain optimum weed control. weeds must be left undisturbed with no further treatment or cultivation for 7 days after application. Allow 2-3 weeks for symptoms to develop then re-treat any unaffected plants using

Always consult manufacturers' recommendations A covering of dew may reduce efficacy where run-off occurs.

spot treatments.

is slow.

Spot gun applicators are for the treatment of

### the Plant Protection Products Regulations 1995 and provides additional advice on the product General Information Roundup ProActive XI, herbicide is an advanced formulation containing glyphosate. Roundup ProActive is taken up by foliage and translocated to underground roots, rhizomes and stolons.

See Directions for Use (Restrictions) providing control of both annual and perennial Roundup ProActive XL will remain efficacious at low but not freezing temperatures however the onset of ProActive XL is rapidly adsorbed onto particulate symptoms will be delayed. matter in soils and water and is quickly degraded A covering of dew may reduce efficacy where runoff occurs

occur in the season following spraying.

Effects of weather

For aquatic weed control, on reeds and grasses

desiccation usually occurs 30-40 days after

leaf symptoms usually appear within 14-21 days

spraying. At this stage the reeds can be cut and

removed. During cold conditions leaf symptoms may

not appear before natural dieback but no growth will

maintain effective weed control

orifice' nozzles are recommended

New generation weedwiners

General Cautions

WeedswiperTM

Spraver hygiene

residues.

Using the correct nozzles to maximise coverage

Application only under appropriate weather

unexpected results to Bayer CropScience Ltd

using near or alongside hedgerows. The use of

low drift nozzles such as 'air induction' and 'pre-

Logic Contact 2000 Carier Bollmaster Allman

Ecowipe, Rotowiper (UK) Ltd, C-Dax™ Eliminator,

Follow the guidance on the disposal of surplus

spray solution, tank washings, concentrate and

containers as given in Section 5 of the DEFRA/

Plant Protection Products" of January 2006.

It is essential to thoroughly clean-out spray

assemblies, with a recommended detergent

tanks, pumps and pipelines and nozzle or disc

cleaner, between applying this product and other

pesticides to avoid contamination from pesticide

HSC/NAW publication "Code of Practice for Using

Take extreme care to avoid drift particularly when

Monitoring performance and reporting any

Reduced control is likely where weed growth is

impaired by natural senescence, drought, high temperature, a covering of dust, flooding or severe/ prolonged frost at, or immediately after application.

#### Weed resistance strategy Glyphosate, the active ingredient in Roundup

This section is not part of the Product Label under of spraying in the early autumn. Complete foliage

ProActive XL is a Group H herbicide based on the mode of action classification system of the Herbicide Resistance Action Committee. Under Best Practice there is a low risk for the

Strains of some annual weeds have developed

development of weed resistance to Roundup ProActive XL. There are no known cases of weed resistance to alvohosate in UK.

resistance to glyphosate in some parts of the world leading to poor control. A strategy for preventing and managing such resistance should be adopted. This should include integrating herbicides with a programme of cultural control measures and /or active ingredients with a different mode of action.

Users are encouraged to implement a weed resistance strategy based on (a) Good Agricultural Practices and (b) Good Plant Protection Practices

- Following label recommendations on rates and
- The adoption of Integrated Weed Management practices
- Minimising the risk of spreading weed infestations

# • The implementation of good spraying practice to Material Safety Data Sheet

for the specified uses should ensure that the product is used safely and efficaciously for those

A full Material Safety Data Sheet is available on request Download from https://cropscience.bayer.co.uk/our-products/

All other brands are Trademarks of other companies of which proprietary rights may exist

# Following the instructions on this Product Label

amenity or Telephone: 01223 226500

Roundup® is a Registered Trademark of the Bayer group

#### Cambridge, CB4 OWR TIK lenhone: 01223 22650 Website: https://cropscience.bayer.co.uk

Bayer CropScience Ltd

ROUNDID PROACTIVE XI

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Wear protective gloves/protective clothing/eye protection/face protection.

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

Keep only in original container. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. If eve irritation persists: Get medical advice/attention.

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.

### IMPORTANT INFORMATION:

FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL / HORTICULTURAL / INDUSTRIAL / FORESTRY / AQUATIC HERRICIDE-

# All edible and non-edible crops (destruction, before sowing/planting).

Apples pears plums cherries damsons

Enclosed waters, open waters, land immediately adjacent to aquatic areas.

Forest, forest nursery (weed control, stump application and chemical thinning). Amenity vegetation

> Maximum individual dose: Maximum number of treatments: } Full details are given in the Statutory Area

Natural surfaces not intended to bear vegetation; permeable surfaces overlaving soil; hard surfaces.

Latest time of application: } on the attached leaflet

Other specific restrictions: \ (Crop Specific Information – marked #)

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.



### RECOMMENDATION TABLES

AREA OF USE	CROP/ SITUATION	TARGET WEEDS/USAGE	WEED INFESTATION	APPLICATION RATE L/HA	WATER VOLUME	APPLICATION TIMING AND GUIDANCE
ALL EDIBLE AND NON-EDIBLE CROPS (DESTRUCTION, BEFORE SOWING/PLANTING)	Vegetation management	-	Annual weeds Perennial grasses Perennial broad-leaved weeds	1.5 4.0 5.0	80-250 L/ha* or hand-held equipment section	*Rotary atomisers may be used at a water volume of 10-40 L/ha. Ensure droplet diameter falls within the range 200-300 microns  Do not use in or alongside hedgerows
GRASSLAND - DESTRUCTION	GRASS	Short rotation Ryegrass,	Short rotation Ryegrass with annual weeds	3.0	150-250 L/ha*	Treat EITHER before grazing/mowing in June-Oct, when growth is 30-60 cm, not dense and lacking mature seeds, OR regrowth after grazing/mowing.
		longer leys and permanent	Leys 2-4 years old with perennial grass weeds	4.0		Select the application rate which controls/destroys the least susceptible weed and grass species present in the sward.
		pasture	Long leys 4-7 years old with perennial broad-leaved weeds	5.0		Grass may be conserved or grazed by cattle, dairy cows or sheep 5+ days after spraying. REMOVE POISONOUS PLANTS BEFORE GRAZING/MOWING.
			Permanent pasture See Weed Table below	6.0		If Ragwort is present, the guidance in the DIRECTIONS FOR USE must be followed.  ONLY direct drill grass and clover EITHER into 1-2 year leys without mat, 5+ days after spraying, OR long leys with some mat, in the spring following autumn application.

### APPLICATION RATE FOR GRASSLAND DESTRUCTION

3 L/HA 4 L/HA		5 L/HA	6 L/HA			
Annual Meadow-grass Meadow Fescue Common Chickweed Meadow Foxtail Common Mouse-ear Rough Meadow-grass Dock Seedlings Speedwell species Italian Rye-grass Timothy Mayweed species	Broad-leaved Dock Soft-grass Cock's-foot Curled Dock Common Bent Perennial Rye-grass Common Couch Plantains Creeping Bent Soft Brome Yorkshire Fog	Common Sorrel Sedges Common Nettle Sheep's Sorrel Creeping Buttercup* Soft Rush	Common Ragwort Nardus (Mat grass) Hard Rush Red Fescue Heath Rush White Clover* Jointed Rush Yellow Rattle Molinia (Purple Moor-grass) Sheep's Fescue			

\* White clover is best cut in June and sprayed one month later \*\* At full frond expansion

### Japanese Knotweed control

apanese Knotweed is an invasive alien species reducing biodiversity in areas where it becomes stablished and propagating from tiny fragments of root, often spreading along watercourses. It is cheduled under the Wildlife and Countryside Act 1981 and all parts of the plant must be treated as ontrolled Waste under the Environmental Protection Act 1990. Roundup ProActive XL can be used lone as part of an eradication programme or as part of an integrated programme in conjunction with oil disturbance or removal. Dormant rhizomes will not be controlled by Roundup ProActive XL, but may e stimulated to grow by soil disturbance and then sprayed. It is particularly suitable for use near water. sites must be monitored for at least three years and re-treated as necessary.

A OF USE	TARGET WEED	METHOD	APPLICATION RATE /	APPLICATION TIMING AND GUIDANCE		
	WATER VOLUME					AREA C
osed waters, open waters, immediately adjacent to attic area		Foliar application	5 L/ha Hydraulic sprayers 80-250 L/ha or hand-held equipment	For best results apply after the onset of flowering (usually August/September) but before dieback. Use specialist extending hand lances for stands 2-3m tall. Good coverage is essential; spray the underside as well as the upper surface of the leaves. Or Only as part of an integrated programme, spray when stems are 1-1.5 m high (Usually at end of May) and repeat once regrowth reaches 1-1.5m again later in same season or the following year. (More re-growth will occur from this timing.)		
		Stem filling technique	Cut stems approx. 200 mm above base of cane & 40 mm above node.  Rupture the central stem tissue with a screwdriver and use a spot gun to desirable pla		Use where overall spraying is not desirable, especially near watercourses or among desirable plants. Timing: After mid-August but before leaf	
		2 ml of neat solution per stem	Using specialist stem injection equipment, inject directly into individual stems.  Tall.  Stems must be >8 mm diar		Fores Roundu	
Hand-held weed wiper 1 part to 2 parts water Use where overall spraying is not desirable or target plants are small or unsuitable for stem fill treatment following foliar spraying.					ole for stem filling, (< 8 mm) e.g. in re-	AREA (

### Natural surfaces not intended to bear vegetation, permeable surfaces overlying soil, hard surfaces

AREA OF USE	TARGET WEEDS/USAGE	WEED INFESTATION	APPLICATION RATE L/HA	WATER VOLUME	APPLICATION TIMING AND GUIDANCE
NATURAL SURFACES NOT INTENDED TO BEAR VEGETATION, PERMEABLE SURFACES OVERLYING SOIL, RAILWAY BALLAST	Vegetation management -including roadsides, paths, and along fences	Annual weeds Perennial grass weeds Perennial broad-leaved weeds	1.5 4.0 5.0	Hydraulic sprayers 80-250 L/ha* or hand-held equipment.	Do not use under polythene or glass.
HARD SURFACES (EXCLUDING RAILWAY BALLAST)	Vegetation management on hard surfaces -including roadsides, paths, concrete and alongside walls	Annual weeds Perennial grass weeds Perennial broad-leaved weeds	1.5 4.0 5.0	Hydraulic sprayers 80-250 L/ha* or hand-held equipment.	Apply this product carefully. Ensure spraying takes place only when weeds are actively growing (normally March to October) and is confined only to visible weeds including those in the 30cm swath covering the kerb edge and road gulley – do not overspray drains
AMENITY VEGETATION	Vegetation management Ornamental areas	Annual weeds  Perennial grasses and broad-leaved weeds	1.5 5.0	Hydraulic sprayers (boom and knapsack) at water volumes 80-400 L/ha* See Mixing & Spraying section.	Where rotary atomisers are used their droplet diameter must fall within the range 200-300µm.

\*Rotary atomisers may be used at a water volume of 1-40 L/ha. Ensure droplet diameter falls within the range 200-300 microns

AREA OF USE	CROP/SITUATION	TARGET WEEDS/USAGE	WEED INFESTATION	APPLICATION Rate L/HA	WATER VOLUME	APPLICATION TIMING AND GUIDANCE	AREA OF USE
ORCHARDS	APPLE, PEAR, PLUM, CHERRY, DAMSON	Perennial grasses, broad- leaved weeds	All levels of most species	5	200-400 L/ha	Spray AFTER autumn leaf-fall and BEFORE: Apples, pears - green cluster stage	Forestry: - Post-plantin certain conife
		Root suckers	-	5		Stone fruit - white bud stage Treat root suckers in late spring only. Trees must have been established 2+ years. Avoid contact with tree 30+ cm above ground.	oor talli ooriiic

USE	CROP/SITUATION	TARGET WEEDS/USAGE	WEED INFESTATION	APPLICATION Rate L/HA	WATER VOLUME	APPLICATION TIMING AND GUIDANCE	
ND, PLANT FREE RNAMENTAL 3S, AMENITY ON	-	Individual weeds	All levels	1:2 dilution with wat For 'new generati	for wick-type weed wipers OR er in hot, dry conditions. on' wipers consult the er for guidance.	Weeds must be 10+ cm taller, and wiper 5+ cm higher, than desired vegetation.  Contact Bayer or your distributor for specific recommended weed wiper applicators.  Treated POISONOUS WEEDS must be removed or allowed to completely degenerate before grazing or conserving. If Ragwort is present, the quidance in the 'DIRECTIONS FOR USE' must be followed.	Forestry: - Stump applicatio

ndup ProActive can be used for site preparation and for weed control in planted out trees.

AREA OF USE	TARGET WEEDS/USAGE	WEED INFESTATION	APPLICATION RATE L/HA.	WATER VOLUME	APPLICATION GUIDANCE	Forestry: - Chemical thi
Forestry: - Pre-planting	Arable land, planting, replanting, & grassland areas	Arable weeds Grassland weeds	4.0 5.0	Hydraulic sprayers: 80-250 L/ha or rotary atomisers: 10-40 L/ha*	All tree species may be planted 7 days or more after treatment *Where rotary atomisers are used their droplet diameter must fall within the range 200-300µm.	ENCLOSED WA ADJACENT TO WATERS
Forestry: - Post-planting (directed) in	Clean-up around trees with knapsack applications.	Annual/perennial grasses and broad-leaves	4.0	Apply as a concentration of 1 part to 49 parts water (2%)	It is ESSENTIAL to use a TREE GUARD for all applications made in the growing season.	
conifers & broad-leaved trees		Woody weeds: Bracken/Beech Brush/Brambles Sycamore/Oak Hazel/Willow/Ash	3.0	or Weed wiper mini: 1 part to 2 parts water	Treat bracken after frond tips are unfurled but before senescence. Treat heather late August to end September. All other woody weeds are treated June-August, before leaf senescence (but after new growth of crop has hardened).	
		Heather (peat soils) Heather (mineral soils)	4.0 6.0			
		Rhododendron (*)	10.0 or 4% solution	250 L/ha	Cut back and treat regrowth when at least 1 metre in height throughout the entire coppice.	Enclosed
(*) For improved control of RI of 2% final water volume to 8.		,		1		Emergent wee water cress

	WEEDS/USAGE		RATE L/HA.		
ng (overall dormant season in ers – conifer release)	Grass weeds - Lowland areas - Upland areas  Bracken Beech & Birch Brambles	Black Bent, Cock's-foot, Common Couch, Creeping Soft-grass, False Oat-grass, Fescues, Meadow-grasses, Other Bent species, Purple Moor-grass, Sweet Vernal-grass, Tufted Hair-grass, Wavy Hair-grass, Wood Small-reed (Bush grass)  All levels of all species All levels of all species All levels of all species	1.5 2.0 2.0 2.0 2.0 3.0	Hydraulic sprayers: 200-250 L/ha or Hand-held equipment - see 'Mixing and Spraying' section	Species safe to spray when fully dormant and leader growth has hardened: Corsican, Lodgepole and Scots Pines, Norway Spruce, Sitka Spruce, Lawson Cypress, Western Red Cedar.  Douglas Fir and Noble Fir – safe to spray when fully dormant and leader growth has hardened but NOT in spring.  If overall application takes place after the optimum timing weed control may be reduced. It is advisable to spray a limited area of forest to test crop safety under local conditions before widespread overall application in subsequent years.  These recommended application rates refer to forestry usage only. Inadequate control may result if used in other areas.  Caution: The timing of hardening of leader growth varies considerably between locations and between seasons. It may occur as early as the end of July or be delayed to October or later. To avoid damage to Lammas growth, sprays should be directed away from leaders.
lication for chemical thinning	Deciduous trees Coniferous trees	All species All species		on of in water on of in water	Apply the solution to saturate the rim of the newly cut surface, with a suitable adapted clearing saw, spot gun or paintbrush. Treat as soon as possible after felling, in the period November to March/April. Do not apply in the period of active sap flow in the spring/early summer. Do not cut trenches or drill holes and fill with the solution or use undiluted product.  Note: for ease of identification of treated areas a suitable, commercially available, water-soluble dye may be added to the prepared spray solution.
hinning by injection of tree stems	Coniferous and deciduous species	-		per 10 cm diameter ss) tree	Use a hatchet to cut one notch in trees up to 10 cm diameter and apply 2 ml of the solution to each cut. Use two or three notches in trees over 10 cm diameter. Do not treat in the period of active sap flow in the spring/early summer.
WATERS, LAND IMMEDIATELY TO AQUATIC AREAS, OPEN	Emerged weeds: reeds, rushes, Sedges, grasses and Watercress	Dense infestations only	Hydraulic sprayi (optimum 250 litres) o See 'Mixing	L/ha ers 200-400 L/ha or hand-held equipment and Spraying.	Users must consult the appropriate Environment Agency Regional Office or Scottish Environmental Protection Agency before applying Roundup ProActive XL herbicide in reservoirs, water courses and waterways. Roundup ProActive XL herbicide may be used for the control of aquatic weeds in the presence of fish if used in strict accordance with the recommendations in this section
	Floating weeds:	Dense infestations only	6.0	L/ha	On Water-lilies it is preferable to use a tractor or boat-mounted sprayer. During

APPLICATION WATER VOLUME

Hydraulic sprayer 100-200 L/ha

or hand-held equipment

See 'Mixing and Spraying.

APPLICATION GUIDANCE

spraying, do not exceed a pressure of 2.0 Bars (30 p.s.i.). When using a tractor

mounted sprayer, do not exceed 8 kph (5 mph). With a boat-mounted sprayer,

use a slow forward speed to cause minimum disturbance to the floating leaves of the weeds. The use of a boat may result in some leaves being disturbed

before Roundup Pro Bio herbicide can be absorbed. Applications made in flowing water should be sprayed against the directions of the flow. When disturbed by wash, WATER-LILIES may require re-treatment.

## closed waters, open waters, land immediately adjacent to aquatic areas

-White Water-lily

-Yellow Water-lily

TARGET WEED INFESTATION

TARGET WEEDS	HYDRAULIC SPRAYERS AMOUNT OF ROUNDUP PROACTIVE		AREA TREATED	WATER VOLUME
Emergent weeds e.g. reed, grasses,	Boom sprayer 5.0 litres		1 ha	200-400 litres (Optimum 250 litres)
water cress	Knapsack sprayer	50 ml	100 m <sup>2</sup>	2.0 to 4.0 litres
Floating weeds e.g. water-lilies	Boom Sprayer	6.0 litres	1 ha	100-200 litres
	Knapsack Sprayer	60 ml	100 m <sup>2</sup>	4.0 litres