

Gallup®

Biograde® 360

Contains 360 g/l (30.9% w/w) GLYPHOSATE ACID as soluble concentrate.

A systemic herbicide for the control of annual and perennial grass and broadleaved weeds in stubbles, set aside, grasslands, orchards, forestry and non-crop areas, and for pre-harvest use in cereals, oilseed rape, linseed, peas and field beans.

**FOR USE ONLY AS AN AGRICULTURAL/HORTICULTURAL/INDUSTRIAL/FORESTRY
NON SELECTIVE HERBICIDE
Please see inside for DIRECTIONS FOR USE**

RISK AND SAFETY INFORMATION

Keep out of reach of children.
Keep away from food, drink and animal feeding stuffs.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
If swallowed seek medical advice immediately and show this container or label.
Wear suitable protective gloves when mixing the concentrate and during application by tractor mounted equipment and suitable protective clothing (coveralls) during application by hand-held equipment.
Do not contaminate ponds, waterways or ditches with chemical or used container.

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

Do not re-use container for any purpose and dispose of safely.
Safety data sheet available for professional users on request.

PCS No. 02126

PROTECT FROM FROST

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DIRECTIONS FOR USE The following table pertains to and forms part of the STATUTORY CONDITIONS RELATING TO USE

Crops/Situations	Maximum individual dose of product	Maximum number of treatments	Latest time of application
Winter and spring wheat Winter and spring barley Winter and spring oats Durum wheat	4 l/ha	One per season	7 days before harvest.
Oilseed rape, Linseed	4 l/ha	One per season	14 days before harvest
Peas (combining), Field beans	4 l/ha	One per crop	7 days before harvest
Stubbles of all crops	4 l/ha	One per season	5 days before drilling
	1.5 l/ha	One per season	2 days before drilling
Grassland	6 l/ha	One per season	5 days before cutting/grazing
Orchards: Apple, Pear	5 l/ha	One per season	After leaf fall/before green cluster stage
Plum, Cherry, Damson			After leaf fall/before white-bud stage
Forestry: Weed control	5 l/ha	Two per season	-
Green cover on land temporarily removed from production (set-aside)	4 l/ha	One per season	24 hours before cultivating
Non-cropped Areas	6 l/ha	Two per season	-

GENERAL INFORMATION

Barclay Gallup Biograde 360 is a foliar acting herbicide that controls annual and perennial grasses and most broad-leaved weeds when used as directed. It is translocated from treated vegetative growth to underground roots, rhizomes or stolons. Leaf symptoms, being a reddening then yellowing of the foliage, are first seen on grass weeds but take longer to appear on broad leaved weeds.

It is particularly important that the weeds have sufficient leaf growth and are actively growing when treated.

Perennial grass weeds must have produced fresh leaves, which are green and vigorous. Common couch or scutch is most susceptible to Barclay Gallup Biograde 360 when it is tillering and when new rhizomes have begun to grow. This is usually when the plants have about 5 - 6 leaves, each with approximately 12-15cm (5-6") of new growth.

The majority of perennial broad-leaved weeds are most susceptible if treated when they are actively growing and are at or near flowering stage. Annual weeds should be actively growing with grasses having at least 5cm (2") of leaf and broad-leaved weeds at least two expanded true leaves when sprayed. Couch or scutch grasses and other grass and broad-leaved weeds are less susceptible to Barclay Gallup Biograde 360 when growth is restricted by drought, waterlogging, frost, very high temperatures or natural dieback. Efficacy will be reduced if such conditions occur at or immediately after spraying.

Occasionally a slight check to crop growth may occur, particularly after direct drilling when crop seeds germinate amongst a mass of decaying foliage, stolons, rhizomes or roots. Thorough cultivations are necessary to disperse or bury decaying organic matter. Consolidate loose soils and ensure crops are adequately fertilised and appropriate measures are taken to prevent insect and fungal damage to the following crop, especially where following grassland.

Do not apply lime, fertiliser, farmyard manure, pesticides or similar materials within 7 days of Barclay Gallup Biograde 360.

Note: Barclay Gallup Biograde 360 does not give acceptable control of horsetail (*Equisetum arvense*).

WEATHER CONDITIONS

A period of at least 6 hours and preferably 24 hours free of rain must follow spraying. Do not spray onto weeds suffering from drought stress as reduced control may occur. Do not spray in windy conditions as drift onto other crops or vegetation can cause severe injury or destruction. Do not spray during frosty weather that prevents active growth and can induce weed senescence.

WEED CONTROL IN STANDING CEREAL CROPS (PRE-HARVEST)

Weeds Controlled: Common couch or scutch (*Elymus repens*), Black bent (*Agrostis gigantea*), Creeping bent (*Agrostis stolonifera*)
Perennial broad-leaved weeds, Onion couch (*Arrhenatherum elatius var. bulbosum*) (winter barley)

Crops: Winter and spring wheat including durum wheat, and winter and spring oats destined for milling or feed.
Wheat, and oats destined for milling or feed.
Barley destined for malting or feed.
(Consult purchasers of crops grown on contract and prospective purchasers of malting grade barley before treatment)*
DO NOT TREAT CROPS INTENDED FOR SEED. DO NOT TREAT UNDERSOWN CROPS.

Time

Spray when the moisture content of the grain measures less than 30%

Target weeds must be green, actively growing and accessible to the spray.

Method

Spray the crop and weeds overall. Use high clearance tractors with narrow wheels and crop dividers. Adjust boom height to maximise spray retention on the target weeds.

After spraying:

Wait at least 7 days before harvesting. Treated straw must be chopped and incorporated or removed, after which normal cultivations may be resumed. Treated straw must be used for feed and litter, but must not be used for horticultural purposes.

Dose Rate

Annual weeds and grass or low couch or scutch grass infestations up to 25 shoots/m²: 2 l/ha
Apply in 80-150 l/ha water for this dose rate

Low-medium couch or scutch-grass infestations, up to 75 shoots/m²: 3 l/ha

Medium-high couch or scutch-grass infestations, up to 75 shoots/m²: 4 l/ha

Perennial broad-leaved weeds; other perennial grasses:
4 l/ha
Apply in 150 - 250 l/ha water.

WEED CONTROL IN STANDING OILSEED RAPE AND LINSEED (PRE-HARVEST)

Weeds Controlled: Common couch or scutch (*Elymus repens*), Black bent (*Agrostis gigantea*)
Creeping bent (*Agrostis stolonifera*), Perennial broad-leaved weeds

Crops: Oilseed rape, winter or spring
Linseed, winter or spring

This treatment is suitable only for uniform, evenly maturing crops proceeding to harvest in prime condition.

DO NOT TREAT CROPS INTENDED FOR SEED

Time

Weed control:
Spray 2-3 weeks before harvest when the natural ripening of the seed is progressing and the moisture content of the seed measures less than 30%. Target weeds must be green, actively growing and accessible to the spray.

Method

Spray the crop and weeds overall. Minimise crop damage by use of high clearance tractors with narrow wheels and crop dividers.

After spraying:

Direct combine harvest the crop when fit. Treated straw must be chopped and incorporated or removed, after which normal cultivations may be resumed.

Dose Rate

Low-medium couch or scutch-grass infestations, up to 75 shoots/m²: 3 l/ha

Medium-high couch or scutch-grass infestations, over 75 shoots/m²: 4 l/ha

Perennial broad-leaved weeds; other perennial grasses:
4 l/ha

Apply in 200 - 250 l/ha water.

WEED CONTROL IN FIELD BEANS AND PEAS (PRE-HARVEST)

Weeds Controlled:	Scutch grass (<i>Elymus repens</i>), Black bent (<i>Agrostis gigantea</i>), Creeping bent (<i>Agrostis stolonifera</i>), Perennial broad-leaved weeds.
Crops:	Field beans, winter or spring. Peas to be harvested dry. DO NOT TREAT CROPS INTENDED FOR SEED.

Note: This treatment is intended for weed control and not for crop desiccation.

<u>Time</u>	<u>Method</u>	<u>Dose Rate</u>
Spray when the natural ripening of the seed is progressing and the moisture content of the seed measures less than 30%. Target weeds must be green, actively growing and accessible to the spray.	Spray the crop and weeds overall. Minimise crop damage by use of high clearance tractors with narrow wheels and crop dividers. After spraying: Wait at least 7 days before harvesting. Direct combine harvest the crop when fit. Treated straw must be chopped and incorporated or removed, after which normal cultivations may be resumed.	Low-medium scutch-grass infestations up to 75 shoots/m²: 3 l/ha Medium-high scutch-grass infestations over 75 shoots/m²: 4 l/ha Apply in 200-250 l/ha water.

STUBBLE - ANNUAL AND PERENNIAL WEEDS, VOLUNTEERS

Weeds controlled:	Common couch or scutch (<i>Elymus repens</i>) Black bent (<i>Agrostis gigantea</i>) Creeping bent (<i>Agrostis stolonifera</i>) Perennial broad-leaved weeds Annual grasses and broad-leaved weeds. Volunteer cereals and potatoes (Autumn only) Any crop to follow application on stubble.
Crops:	

<u>Time</u>	<u>Method</u>	<u>Dose Rate</u>
Autumn or winter applications: Spray when perennial weeds are actively growing, especially after mid-October. Common couch or scutch should have at least 6 new leaves approx. 12cm (5") long.	After harvest: <ul style="list-style-type: none">Do not cultivate.Remove straw.Allow weeds to regrow.Spray during mild conditions.Allow volunteer potatoes to make ample top growth and spray well before onset of frost or natural senescence. After spraying: <ul style="list-style-type: none">If before mid-November, wait at least 5 days before cultivating.If after mid-November wait for perennial grass leaves to turn red/yellow before cultivating.	Annual weeds and grasses or low couch or scutch grass infestations up to 25 shoots/m²: 2 l/ha Apply in 80-150 l/ha water for this dose rate Low-medium couch or scutch-grass infestations, up to 75 shoots/m²: 3 l/ha Medium-high couch or scutch-grass infestations, over 75 shoots/m² and volunteer potatoes: 4 l/ha Apply in 150 - 250 l/ha water.

Spring applications:
Spray when weeds are actively growing as for autumn applications. Roots chopped by cultivations must show leaf growth to be killed.

After harvest:

- Cultivate as required
- Leave for regrowth to appear - allow a minimum 21 days weed growth before spraying.

After spraying:

- Wait at least 5 days before cultivating.
Re-treatment may be necessary pre-harvest or in autumn as emergence in spring may be incomplete.

Note: the effect of 2 litres product/ha rate as the long-term control of couch/scutch grass is not known.

STUBBLE/CULTIVATED LAND - ANNUAL WEEDS/VOLUNTEERS

Weeds controlled: Annual grasses and broad-leaved weeds.
Volunteer cereals.

Crops: Any crop to follow application.

Time

Autumn/Spring/Summer

applications:

Spray when perennial weeds are actively growing.

For optimum control:

- Annual grasses should have at least 10cm (4") of green leaf
- Annual broad-leaved weeds should have at least 2 true leaves

Method

After harvest or cultivations:

Allow ground to remain undisturbed for as long as practicable to allow weeds to regrow.

After spraying:

- Wait at least 24 hours before cultivating.
- Wait at least 48 hours before drilling.

Dose Rate Litre/ha

1.5 l/ha

Apply in 80-250 l/ha water

GRASSLAND

Weeds controlled: Italian ryegrass (*Lolium multiflorum*)
Perennial ryegrass (*Lolium perenne*)
Broadleaf dock (*Rumex obtusifolius*)
Common nettle (*Urtica dioica*)
Annual meadow-grass (*Poa annua*)

Crop: Any crop to follow application

Time

Spray when grasses and weeds are actively growing at the following times and growth stages:

Annual grasses and annual broad-leaved weeds:

Spring, summer or autumn.

Annual grasses have at least 10cm (4") of green leaf.

Annual broad-leaved weeds have at least 2 expanded true leaves.

Perennial grasses and perennial broad-leaved weeds:

Mid to late summer.

Perennial grasses have at least 12cm (5") of leaf or 5 fully expanded leaves.

Perennial broad-leaved weeds have substantial leaf area or are near flowering.

Method

Lightly cut or graze and allow regrowth for about 4 weeks until the recommended growth stages are reached.

Spray at the dose rate recommended for the weed or grass type.

Wait at least 5 days, when the leaves become yellowed, before removing the growth for conservation or by grazing as required, prior to cultivating or drilling.

Surface mats of old grassland must be thoroughly broken by cultivations before reseeding. Either defer seeding until the following spring to allow surface mats to decompose or apply 2.5 tonnes/ha (1 tonne/ac) of ground limestone to the surface mat not less than seven days after treatment followed by rotary cultivation to break the surface and incorporate the ground limestone into the soil. Seeding may be conducted as required thereafter provided that the seeds are in contact with mineral soil.

Dose Rate Litre/ha

1-2 years old, only annual weeds and grasses: 3 l/ha

2-4 years old, with perennial grasses: 4 l/ha

Long leys e.g. 4-7 years old with perennial broad-leaved weeds: 5 l/ha

Permanent grassland with ragwort or predominantly fine-leaved grasses: 6 l/ha

Apply the recommended dose in 200-250 l/ha water

ORCHARDS

Weeds controlled: Most annual and perennial weeds.

Crop

Established (minimum 2 years)
trees of:
Apple, Pear, Plum, Cherry, Damson

Method

Apply as a directed MEDIUM or COARSE quality spray. Spray each leaf fall in autumn or before green cluster stage of apple and pear or white-bud stage of stone fruit. Avoid spraying or allowing drift to contact the trunk above 30cm (12") from the ground, or any branches. Spray must not contact any damaged bark.

Dose Rate

5 l/ha

Apply in 250 l/ha water.

FORESTRY/WOODLANDS

Use

Before planting:
Most broad-leaved and grass weeds.

Moderate control of many young woody weeds

Dose Rate

5 l/ha .

4 l/ha

Hydraulic sprayers: apply in 80 - 250 l/ha water .

Rotary atomisers: apply in total spray volume of 40 l/ha.

Remarks

If the ground has been disturbed by forestry operations, allow the weeds to recover. Apply when weeds are showing green leaf and are actively growing. Wait at least 7 days before any cultivations or before planting trees.

GREEN COVER ON LAND NOT BEING USED FOR CROP PRODUCTION (SET-ASIDE)

Weeds controlled: Annual meadow grass (*Poa annua*), Italian ryegrass (*Lolium multiflorum*), perennial ryegrass (*Lolium perenne*), broadleaf dock (*Rumex obtusifolius*), common nettle (*Urtica dioica*)

Crops: Any crop to follow application.

Users must ensure for themselves compliance with the management rules of any grant-aided scheme before use. The guidance given may be changed in future years.

Time

Spray whilst the green cover is actively growing at any time consistent with the prevailing weather conditions and within the management rules of any grant aided scheme.

Normally destruction of green cover under IACS cannot be started before 15 April and must be accomplished by 31 August. Deep rooted perennial broad-leaved weeds are best controlled when well grown and are at or near flowering.

Method

- Do not cut or cultivate prior to applying this product in this situation.
- Spray before weeds set seed (but not before 16 April).
- After spraying do not cut or cultivate before 16 July (obligatory) or for 5 days after application if after 16 July.
- Prepare the land for the next crop when permitted to do so by the management rules.

Dose Rate

Annual weeds and grasses: 1.5 l/ha

(note-if the green cover is dense and/or well established, use a higher dose-see below)

Apply in 80-150 l/ha water for this dose rate

Dense and/or well established green cover:

3 l/ha

Perennial grasses and broad-leaved weeds:

4 l/ha

Apply in 150 - 250 l/ha water.

LAND NOT INTENDED TO BEAR VEGETATION: General use around the farm and on amenity and industrial areas

Area of Use	Dose Rate	Remarks
Around buildings.	General use: 4 l/ha	Apply at any time of the year when weeds are showing green leaf and are actively growing. Weeds germinating after application will not be controlled. Avoid drift onto crops, lawns, amenity plants or any desirable species.
On industrial sites.		
Firebreaks.	Perennial broad-leaved weeds present: 6 l/ha	
Pavements.	<i>Hydraulic sprayers:</i> apply in 80 - 250 l/ha water	DO NOT USE UNDER GLASS OR POLYTHENE.
Verges along public paths and roadways.	<i>Knapsack sprayers:</i> apply in 100 - 250 l/ha water	See KNAPSACK RATE RECKONER tables.
Around traffic signs and advertising hoardings.		
Site preparation for landscaping projects; golf courses etc. DO NOT SPRAY HEDGE BOTTOMS.	<i>Rotary atomisers:</i> apply in total spray volume of 40 l/ha .	
Important: If poisonous weeds, such as ragwort, are present, keep livestock out of treated areas until such time that poisonous weeds have been removed.		

WICK/WIPER APPLICATORS (e.g. WEEDWIPER MINI)

Certain weeds, particularly those with an erect growth habit and having a spatial separation from desirable species, can be effectively controlled by wiping a concentrated solution of Barclay Gallup Biograde 360 onto the leaves or stems. Weeds must be actively growing at application. Do not apply when rain is expected within 6 hours as, apart from unsatisfactory weed control, herbicide might be transferred to desirable species by rain splash or foliar contact.

Barclay Gallup Biograde 360 dilution

The maximum concentration used must not exceed the following:

Herbicide glove treatments: 200 ml Barclay Gallup Biograde 360 made up to a total volume of 1 litre with water i.e. 20% v/v solution

Weedwiper mini: 1 volumes of product : 2 volumes of water

Other wipers: 1 volumes of product : 1 volumes of water for normal conditions; under warm, dry conditions use 1 : 2 dilution with water.

Weedwipers may be used in any crop where the wiper does not touch the growing crop.

Note: for ease of identification of treated weeds, a suitable commercially available water soluble dye may be added to the prepared solution at 1ml dye per 10 litres of prepared spray solution.

MIXING

Tractor mounted sprayers

Pour the recommended quantity of Barclay Gallup Biograde 360 into the spray tank already half-filled with clean water and under agitation. Top up the spray tank with more clean water to the required level, whilst maintaining agitation. Spray out on the day of mixing.

Knapsack sprayers

Add the recommended quantity of Barclay Gallup Biograde 360 to the knapsack spray tank approximately one-third filled with clean water. Agitate thoroughly with a clean rod or by shaking after replacing the lid until thoroughly mixed. Top up the tank with more clean water to the required level and agitate thoroughly before use. Spray out on the day of mixing.

DO NOT MIX, APPLY OR STORE BARCLAY GALLUP BIOGRADE 360 IN GALVANISED OR UNLINED MILD STEEL CONTAINERS OR TANKS. KEEP TANKS WELL VENTED AND CLEAR OF ALL SOURCES OF IGNITION.

APPLICATION & SPRAY QUALITY

Conventional hydraulic sprayers

Knapsack sprayers

Prepared spray solution should be applied as a MEDIUM of COURSE quality spray (BCPC definition) at nozzle pressures not exceeding 2.5 bar (35 psi).

Barclay Gallup Biograde 360 is a systemic weedkiller and is active at low doses. **Always take care to avoid spray drift. DO NOT SPRAY in windy weather or near to desirable species or amenity plants.**

SUITABLE NOZZLES FOR HYDRAULIC SPRAYERS

Sprayer type

Tractor mounted or drawn

Low Volume Application

Hardi 4110-14
or equivalent nozzles

Medium Volume Application

Hardi 4110-20; 4110-30; Lumark 04-F110; 08-F110
Teejet 11004; 11008 or equivalent nozzles

Knapsack

Cooper Pegler
VLV Orange
VLV Blue

Hardi 4110-16
Lumark 03-F110
Polyjet green; blue; red

SOILS

Barclay Gallup Biograde 360 may be used to control weeds on all mineral or organic soils or surfaces, including ash and gravel. Only weeds showing green leaf at the time of application can be killed. There is no residual activity with Barclay Gallup Biograde 360

COMPATIBILITY

Barclay Gallup Biograde 360 is compatible with adjuvant ADJ0128 and when used for rhododendron control ADJ0161. DO NOT mix with any herbicide, insecticide or fungicide.

FUTURE PLANTING

Barclay Gallup Biograde 360 has no long-lasting herbicidal activity in soils after application. Agricultural and horticultural quality soils may be planted up with trees after not less than 7 days after application, unless directed otherwise. Other amenity plants may be planted after the treated vegetation has died back or after cultivation. Under normal weather conditions, cultivations may be conducted 7 days after treatment. Under poor growing conditions wait for the characteristic red/yellow leaf symptoms to appear before cultivating.

CARE OF EQUIPMENT

Wash equipment thoroughly after use with water and cleaning agent to remove traces of herbicide. Traces of herbicide left in the equipment may damage crops sprayed later.

KNAPSACK RATE RECKONER

MEDIUM VOLUME APPLICATION

Product Recommendation (Litres of product in l/ha of water)

3L in 250L per hectare
4L in 250L per hectare
5L in 250L per hectare
6L in 250L per hectare

Amount of Barclay Gallup Biograde 360 per 10 litres to treat 400 m²

120 ml
160 ml
200 ml
240 ml

LOW VOLUME APPLICATION

Product Recommendation (Litres of product in l/ha of water)

3L in 100L per hectare
4L in 100L per hectare
5L in 100L per hectare
6L in 100L per hectare

Amount of Barclay Gallup Biograde 360 per 10 litres to treat 1000 m²

300 ml
400 ml
500 ml
600 ml
