

Product profile

Harvest is a dual-purpose total herbicide / desiccant for contact control of grass and broad-leaved weeds pre-emergence of the crop and desiccation pre-harvest.

Active ingredient	150 g/L glufosinate-ammonium
Formulation	Soluble concentrate (SL)
Maximum individual dose	3 L/ha
Water volume	200 – 400 L/ha
LERAP	None
Pack size	10 L
MAFF	07321

For best results follow the recommendations provided here under the use-specific sections for weed control and desiccation.



WEED CONTROL

Key features

- ▶ Safe, reliable weed control
- ▶ Broad-spectrum control of all the main arable broad-leaved and grass weeds
- ▶ Class-leading control of grass weeds including annual meadow-grass, black-grass and wild oats
- ▶ Flexible tank-mix options to add residual control
- ▶ Can be used on all soil types and varieties

Best Use

Harvest controls emerged annual grass and broad-leaved weeds by contact action: it is not systemic. Speed of activity is influenced by weather and plant growth conditions. Activity is quickest under bright, warm conditions when target weeds are actively growing. Under optimum growing conditions, initial effects are seen as yellowing within 2-3 days and kill is usually complete within 10-14 days. Although speed of activity may be affected during less favourable growing conditions (cold/dry), efficacy is unaltered.

Application rate:

Key considerations in choosing the most appropriate application rate are; weed spectrum, weed growth stage and whether or not Harvest is to be co-applied with a residual partner.

Use 2 L/ha for:

- ▶ Contact weed control in typical annual meadow-grass and broad-leaved weed situations
- ▶ Tank-mixture with a residual partner

Use 3 L /ha for:

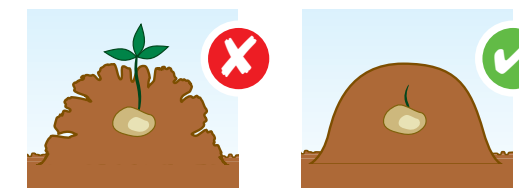
- ▶ Full spectrum contact control of annual grass and broad-leaved weeds
- ▶ Contact control of annual grass weeds that have reached 4 leaves

Apply:

- ▶ Pre-emergence of the crop
- ▶ When weeds have at least two expanded leaves and are actively growing
- ▶ To dry leaves, ideally in the middle of the day
- ▶ In 200 – 300 L/ha with conventional flat fan nozzles as a medium quality spray. Use the higher volume where target weeds are large or populations dense

Avoid:

- ▶ Application if the crop is emerging or soil is lifting or cracking
- ▶ Spray drift onto neighbouring crops
- ▶ Cultivations after spraying that encourage further weed germination



DO NOT:

- ▶ Apply before 1 March
- ▶ Spray if rainfall is imminent or likely within 6 hours of application (light rainfall after 3-4 hours will not usually affect activity)
- ▶ Apply to wet foliage

Tank-mixtures

For contact and residual weed control apply Harvest at 2 L/ha with Artist (1.5 - 2.5 kg/ha) or Sencorex WG (0.5 - 0.75 kg/ha) depending on weed spectrum and soil type.

Harvest is compatible with Sencorex WG, Artist or approved formulations of linuron in two-way tank-mixtures.

All the requirements or restrictions on other product labels must be adhered to when tank-mixing with Harvest. Consult your agronomist or Bayer CropScience for latest information.

Weed Spectrum

Harvest provides broad-spectrum control of all the main broad-leaved and grassweeds found in potato crops. The tables below summarise the main weeds controlled by Harvest alone and recommend application rates to suit weed growth stage.

Broad-leaved weeds

	2 L/ha	3 L/ha		2 L/ha	3 L/ha
Black-bindweed			Fool's Parsley		
Black nightshade			Groundsel		
Charlock			Henbit dead-nettle	MR	
Common chickweed			Knotgrass		
Common fumitory			Mayweeds		
Common hemp-nettle			Pale persicaria		
Common orache			Red dead-nettle	MR	
Common poppy			Redshank		
Cleavers			Scarlet pimpernel		
Corn spurrey			Shepherd's purse		
Crane's-bill			Small nettle	MR	
Fat-hen			Smooth sowthistle		
Field pansy	MR		Speedwells		
Field penny-cress			Vol. oilseed rape		
Field forget-me-not			Wild radish		

Grass weeds

	2 L/ha	3 L/ha
Annual meadow-grass		
Black-grass		
Italian rye-grass		
Loose silky-bent		
Sterile brome		
Volunteer cereals		
Wild oats		

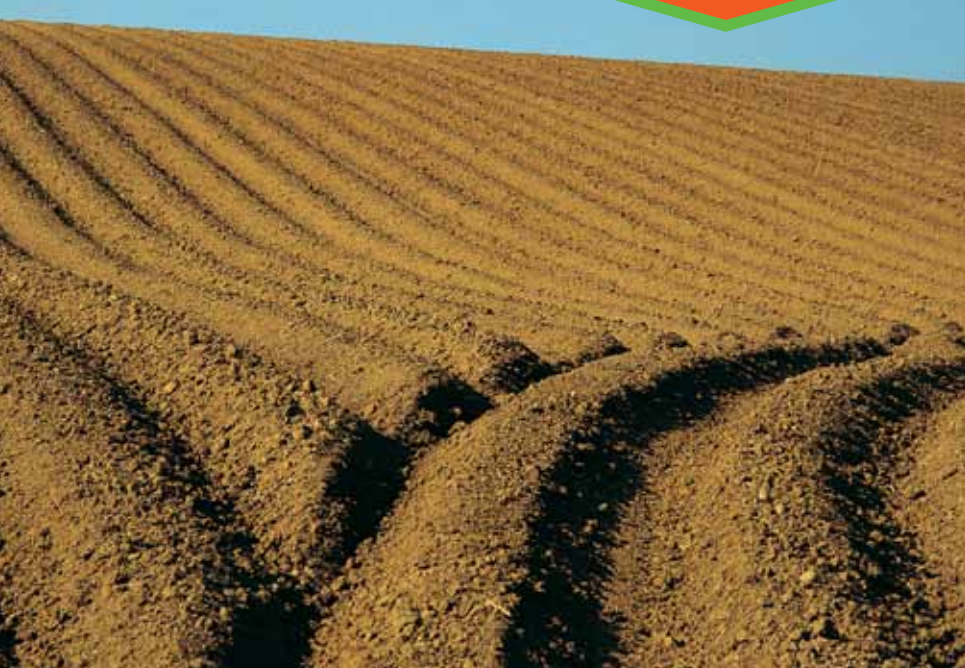
Key to weed growth stages

- Cotyledon to 4 leaves
- Cotyledon to 2 leaves

When Harvest is tank-mixed with a residual herbicide the full spectrum of control achieved will depend on the residual tank-mix partner chosen and the extent of its contact activity.



Harvest®



Summary of recommendations Potatoes – weed control and desiccation

2010
UPDATE

DESICCATION

Key features

- ▶ The flexible component for any desiccation programme
- ▶ A single application is often sufficient for full defoliation of determinate varieties (e.g. Estima) within 2-3 weeks
- ▶ In two-spray sequences can be used either; at T1 to open the canopy of naturally senescing crops, or T2 to complete burn-down
- ▶ Can be used with the 'Flail & Spray' technique on all crop types, including seed and salads

Best use

Harvest can be used with either of the two conventional desiccation techniques;

- ▶ By overall application to the haulm, referred to here as 'Desiccation spraying', or;
- ▶ By application to stems after removal of haulm by flailing, referred to here as 'Flail & Spray'

Recommended application timings, by technique and crop type are;

	Desiccation spraying - ware crops only	Flail & Spray - ware & seed crops
Recommended application timing	After the onset of senescence, 14-21 days before harvest	After flailing and preferably within 24 hours to prevent re-growth

For best results:

- ▶ Maintain a full fungicide programme until desiccation is complete to prevent tuber blight
- ▶ Allow skins to set if tubers are to be stored and ensure dry, well-ventilated conditions when in store
- ▶ If planning to retain seed from a ware crop, treat the crop as seed
- ▶ If re-growth occurs after application, and a further desiccation spray is required, switch to an alternative product

Apply:

- ▶ To a dry leaf in bright sunny conditions for best results
- ▶ In 200 - 300 L/ha with conventional flat fan nozzles as a medium quality spray - use the higher volume when desiccating dense crops
- ▶ With 'Flail & Spray' to stems of approx 15-20 cm
- ▶ No later than 7 days before harvesting the crop

Avoid:

- ▶ Spray drift onto neighbouring crops

DO NOT:

- ▶ Use on variety Kerr's Pink
- ▶ Spray if rain is imminent or likely within 6 hours of application
- ▶ Apply to wet foliage
- ▶ Apply under exceptional wet weather conditions (more than 40 mm rain within 5 days prior to desiccation) or under water saturated soil conditions




Tank-mixtures

Harvest is compatible with a range of late blight products e.g. Infinito and approved formulations of fluazinam or zoxamide+mancozeb.

All the requirements or restrictions on other product labels must be adhered to when tank-mixing with Harvest. Consult your agronomist or Bayer CropScience for latest information.

Desiccation options

The versatility of Harvest allows use in sequences with other desiccants or after flailing to give a controlled burn-down, make harvesting easier and protect tuber quality. A range of flexible options for desiccation with Harvest are summarised below.

	SENESCING CROPS*	NON-SENESCING CROPS*	SALAD & SEED CROPS
	1 SPRAY PROGRAMME	2 SPRAY PROGRAMME	'FLAIL & SPRAY'
Pre T1	 CHECK! Has canopy started to senesce?	 No need to wait for senescence	 No need to wait for senescence
T1	Harvest @ 3L/Ha 7-10 days	Diquat @ 1-2L/Ha 7-10 days	Harvest @ 3L/Ha 7-10 days
T2	Only needed if regrowth occurs	Harvest @ 3L/ha	Only needed if regrowth occurs

Senescing crops

A single application of Harvest is often sufficient for full defoliation of determinate varieties (e.g. Estima) within 3 weeks. Should re-growth occur, follow up 7 days later with an alternative desiccant; diquat or carfentrazone (approved formulations). Harvest should only be used at T1 after the onset of natural senescence*.

Non-senescing crops

Harvest can now be used as a T2 spray to follow T1 application of diquat before the onset of natural senescence. Open up the canopy with T1 diquat at 1 - 2 L/ha depending on haulm size and vigour. Follow with T2 Harvest seven days later to complete burn-down.

Salad and seed crops

'Flail & Spray': use Harvest within 24 hours of flailing for best results.

* Definition of natural senescence

"During the growth of the potato plant the lower leaves may turn yellow and fall from the plant, but this is a consequence of shading by the upper leaves rather than senescence of the plant. The onset of natural senescence is marked by the leaves in the upper third of the haulm beginning to show signs of yellowing. (Yellowing can also be caused by other factors so make sure the potatoes are past their peak of growth and that for example temporary drought or insect damage is not the causal agent). If potatoes are treated before the onset of natural senescence damage to the tubers may occur". (Reference: Jefferies and Lawson, Ann. Appl. Biol. (1991), 119, 387-389).

For more information visit the potato section at www.bayercropscience.co.uk

Artist contains flufenacet and metribuzin. Harvest contains glufosinate ammonium. Infinito contains fluopicolide and propamocarb hydrochloride. Sencorex WG contains metribuzin.

Artist, Harvest, Infinito and Sencorex are registered trademarks of Bayer.

Always read the label: use pesticides safely.

March 2010



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