

Horus®

GUIDE TO EFFECTIVE USE



Horus®

- ▶ Gives outstanding control of black-grass, rye-grass and a range of broad-leaved weeds in winter wheat
- ▶ Can be applied from early post-emergence in the autumn through to the spring
- ▶ Is a unique liquid ODesi® formulation of mesosulfuron and iodosulfuron
- ▶ Provides both contact and residual weed control
- ▶ Must always be used as part of an integrated grass weed programme, including an effective pre-emergence herbicide (e.g. Liberator, delivering 240 g/ha flufenacet)

Product profile

Active ingredients (concentration)	Mesosulfuron-methyl – 10 g/L Iodosulfuron-methyl-sodium – 2 g/L
Mode of action	ALS inhibitors HRAC Resistance Group B
Formulation	ODesi (OD Oil dispersion) shake the container before use
Crops	Winter wheat (all varieties)
Maximum individual dose	1.2 L/ha
Maximum number of treatments	One per crop
Latest time of application	Flag leaf ligule just visible (GS 39) of the crop
LERAP	Category B
Pack size	5 L
MAPP number	14541

Label claim

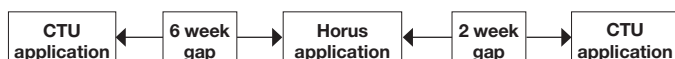
Weed	Susceptibility
Black-grass (sensitive)	Post-emergence to GS 39
Black-grass (resistant-EMR)	Post-emergence to GS 29
Wild oats	Post-emergence to GS 29
Annual meadow-grass	Post-emergence to GS 31
Rough-stalked meadow-grass	Post-emergence to GS 31
Perennial rye-grass (from seed)	Post-emergence to GS 31
Italian rye-grass	Post-emergence to GS 30
Common chickweed	Post-emergence to GS 18 (8 expanded true leaves)
Mayweeds	Post-emergence to GS 18 (8 expanded true leaves)

Best use

- ▶ For the best and most consistent grass weed control apply Horus at 1.2 L/ha + biopower at 1 L/ha at GS 11-13 of the grass weed when the majority have emerged, which on average is in autumn
- ▶ Horus used before February should be tank-mixed with an effective residual partner
- ▶ Horus applied in the spring or beyond GS 21 is more likely to result in sub-optimal application conditions which can significantly reduce profitability through poorer control and/or reduced yields
- ▶ Horus should be applied to actively growing weeds for maximum efficacy
- ▶ When a compromise on application timing has to be made, greater efficacy will be obtained where applications are applied going into a cold period rather than coming out of one
- ▶ Avoid the use of Horus on a crop of winter wheat treated with, or intended to be treated with, chlorpyrifos as crop damage can occur. Where a sequence is used, leave a 4 week gap between applications

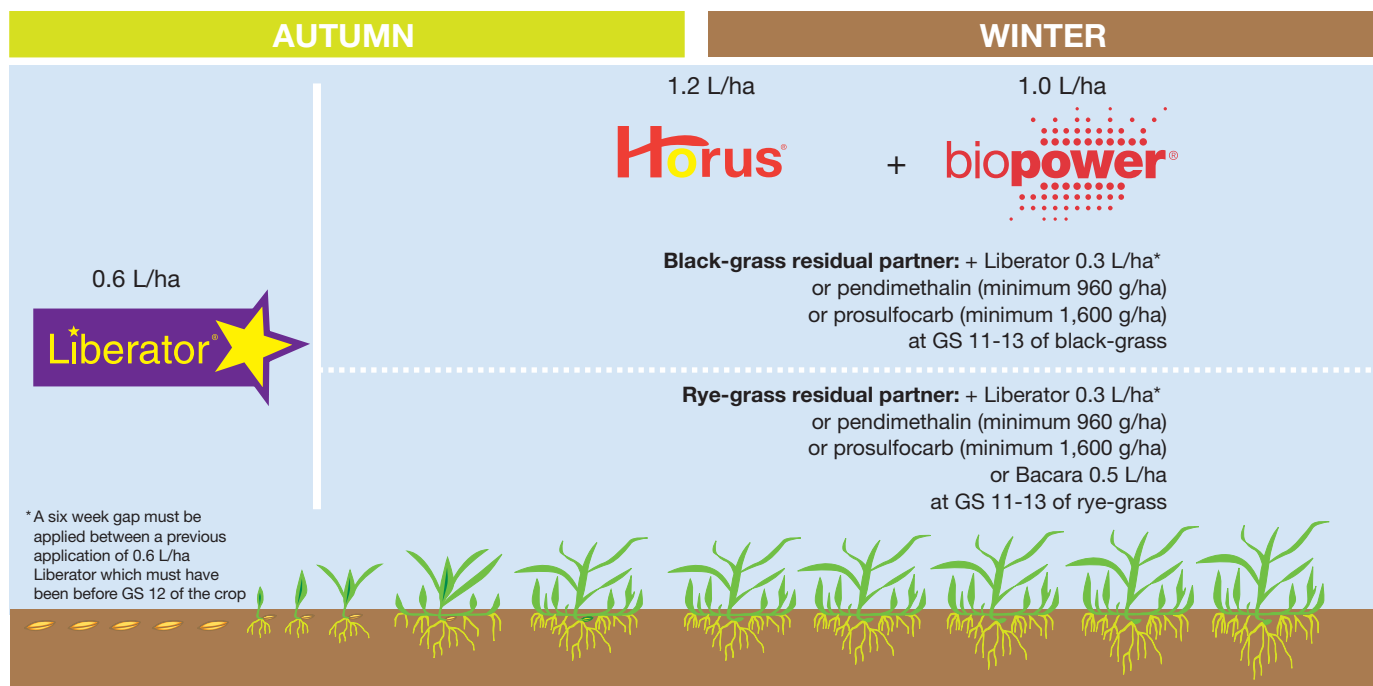
Sequences and tank-mixes

- ▶ Only one of the following ALS inhibiting herbicides can be applied to the same crop in sequence or in tank-mix with Horus: Chekker, Sekator, Eagle, and only if used in conjunction with a robust non-ALS inhibitor autumn herbicide programme, this is particularly important where both components are applied in the spring
- ▶ Do not apply Horus in any non-approved ALS herbicide tank-mixes or sequences
- ▶ CTU is antagonistic to Horus. The use of CTU as a 'holding spray' can reduce Horus efficacy and/or delay application. If you are using CTU, allow the following timings:



Grass-weed control programmes

Resistance is becoming more widespread and so responsible stewardship is critical. Acceptable levels of control of black-grass and rye-grass will only be achieved where Horus is applied as part of an overall weed control programme, at the optimum timing, and in tank-mix with an effective residual partner in the autumn, following an effective pre-emergence treatment delivering 240 g/ha of flufenacet, such as Liberator 0.6 L/ha. The following gives guidance on appropriate herbicide programmes for grass weed control. Where feasible, cultural control methods should be integrated into any grass weed control programme.



Application

- ▶ **Always** shake the container well before use
- ▶ **Always** apply with biopower adjuvant at 1.0 L/ha (but not exceeding 1% of total spray volume)

Cautions

- ▶ Application should not be made to frosted, waterlogged or stressed crops
- ▶ Avoid application to wet or ice covered leaves as run-off may occur
- ▶ Sharp or severe frosts following application may cause crop scorch from which the crop will normally recover
- ▶ Crop effects (yellowing) may be observed following treatment, particularly on spray overlaps and for late season/spring applications or where applied to unusually 'soft crops'. These effects are transitory in nature and will normally have no adverse effect on grain yield

Key aspects of Horus resistance management strategy

- ▶ Maximise the use of cultural control techniques such as stale seed beds, delayed drilling, crop rotation and competitive crops
- ▶ Use in sequence with effective non-ALS herbicides such as 240 g/ha flufenacet (e.g. Liberator 0.6 L/ha)
- ▶ Control weeds when they are most vulnerable at 1-3 leaf stage
- ▶ When using a residual partner, always use an effective product at an effective dose
- ▶ Monitor weed control effectiveness and investigate any odd patches of poor grass or broad-leaved weed control. If unexplained, a resistance test may be appropriate