

Clethodim on Oilseed Rape



TECHNICAL NOTE

September 2021

Stewardship

For 2021 there is one key change to the stewardship. UPL will now permit the mixture of propyzamide with clethodim to support resistance management strategies. For full details, please check the full stewardship document. To summarise the stewardship covers 4 key aspects:

1. Optimising Efficacy

- Apply at 1l/ha in a minimum of 200L of water to ensure good uptake.
- Ensure blackgrass has reached 3 leaves and is actively growing. Best coverage of weed is required for optimum efficacy.
- The addition of a true water conditioner with a pH buffering system (that has no built-in adjuvant) will improve efficacy in hard/alkaline water areas and is strongly recommended
- Follow up with an alternative mode of action such as propyzamide

2. Tank Mixing

- Tank mixing with an insecticide for CSFB control is permissible if required
- Alternatively, tank mixing with propyzamide for resistance management is permissible
- Do not mix with any other product

3. Timings

- A 10 day no spray period is in place before clethodim.
- A 14 day no spray period is in place after clethodim for other Plant Protection Products
- After 7 days, application of nutritional products and insecticides is permissible
- Do not apply after the 15th October

4. Minimising Risk

- Do not apply in cold weather, especially near frosts
- The mean temperature should be above 7°C
- Ensure there is no crop stress or pest damage
- Minimise spray overlap to reduce risk of crop damage

Caution: CENTURION MAX (MAPP 17911) BALISTIK (MAPP 18129) & SELECT PRIME (MAPP 16304) all contain 120g/l clethodim. All these labels have a LEGAL cut off at the 31st October. This is two weeks later than the supported, in-stewardship use.

Early Drilled Crops

With 2021 seeing a continued shift towards earlier drilling it is also important to consider that these crops will be larger than normally expected. If a crop is drilled early, developing rapidly, and has reached 6 true leaves prior to 15th October care must be taken. In these situations, UPL advise:

- Apply clethodim sooner, assuming the blackgrass is present
- We also recommend not mixing with an insecticide if the crop has reached 6 true leaves

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Propyzamide Mixtures

It is critical for resistance management and robust weed control that clethodim is either mixed or sequenced with an effective herbicide with an alternative mode of action. Providing the stewardship is followed, propyzamide does not increase the risk of crop damage when applied in mixture. It can therefore be used to insure against the possibility of not returning to the crop with a sequential spray.

Flea Beetle Interactions

Clethodim can have a delayed PGR effect when applied to crops at 6+ leaves (observed in the spring as the crop grows away). This is due to the interaction with the primordia. CSFB can exacerbate this issue when larvae begin feeding on the apical point in February. We advise that you bear this in mind next spring when choosing post-winter PGRs/fungicides.

Crops that suffer from significant CSFB larval invasion recover from clethodim phytotoxicity less well than those with less larval damage. This should also be considered when applying to large crops this autumn.

Other Grass Weeds

Annual Meadow Grass (*Poa annua*)

With a reduction in the residuals applied, *poa annua* has had an increased prevalence this in recent years. Clethodim is an important tool for controlling this weed, and 120g has very good efficacy when applied from one 1 leaf of the grass. Unlike blackgrass, *poa annua* is best treated when small, and efficacy will be optimised if treated before the grass starts tillering.

Rats Tail Fescue (*Vulpia myuros*)

This weed has become very topical in recent years, with an increasing prevalence in rotations. *Vulpia* is like *poa annua* in that it has fixed resistance at the 1781 position, which implies that on paper, *vulpia* should be as well controlled as *poa annua*. Unlike other ACCase graminicides clethodim remains active against the 1781 resistance gene, the most common resistance gene in Europe. This is dose related; hence it is important not to reduce the dose of clethodim products to below 1l/ha.

Vulpia has tiny leaves which are a bit rolled, so when plants are small the surface of interception of the herbicide is not huge. It is therefore difficult to get 120g into the plant. This can result in variable efficacy in the field as a lower dose will just stunt the weed. Efficacy should be more reliable when *vulpia* plants are a bit bigger (tillering phase) as this increases surface area.

Other Crops

There are a range of EAMUs available for clethodim covering a range of crops. The [UPL EAMU Guide](#) gives details on these. It is recommended that the stewardship is still followed, and the spray intervals are respected when using clethodim EAMUs.