

Technical Information Sheet

Zorvec Endavia® – for control of potato late blight (*Phytophthora infestans*)

Key facts

Product Registration Number:	MAPP 20370 replaces M19407 which expires on 24 Feb 2024
Active Ingredient:	70 g/L benthiavalicarb and 30 g/L oxathiapiprolin FRAC Groups 40 + 49
Formulation:	Oil dispersion
Application Rate:	0.4L/ha
Maximum No. of Applications:	2024 New Best Advice: 20% of programme, Max 3 per crop (Label statement: 4 per crop)
Minimum interval between applications:	7 days
Water Volume:	Minimum 200 litres of water per hectare
PHI:	7 Days
Buffer Zone:	None

Managing late blight. What has changed?

- 1. Late blight is becoming ever more aggressive.
- 2. P.infestans is becoming more challenging, with new strains exhibiting resistance to different chemical groups (MoA) in the fungicide armoury , making the inclusion of robust resistance management across the programme a key part of managing potato late blight.
- 3. As part of routine surveillance for resistance across Europe, Corteva Agriscience has confirmed that in the Northern area of mainland Europe, there are now wild isolates of late blight confirmed as resistant to Zorvec. Corteva Agriscience have a robust monitoring programme in place for the UK & Ireland, but no breakdown of efficacy to Zorvec in the field has been found.

To reduce the potential risk within the UK, Corteva have issued the following application advice for the potato ware crop.

- 1. Apply Zorvec products strictly in alternation with effective chemistry having a different mode of action, other than CAA (benthiavalicarb, mandipropamid, dimethomorph)
- 2. The post-Zorvec application interval to the following non-Zorvec containing spray should not exceed 7 days.
- 3. In curative situations (disease evident or confirmed in the local area) Zorvec co-formulations should be applied in tank-mix with a partner fungicide containing a curative active ingredient e.g., cymoxanil or propamocarb.
- 4. Sprays containing Zorvec should not exceed 20% of the total number of sprays applied to the crop – two sprays per crop if the expected programme is less than 15 sprays.
- 5. A single crop should not receive more than 3 sprays containing Zorvec products.
- 6. Whilst still available, tank-mixing Zorvec products with mancozeb is recommended.

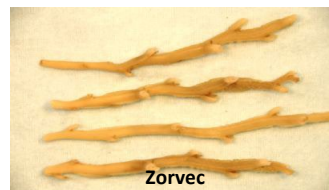
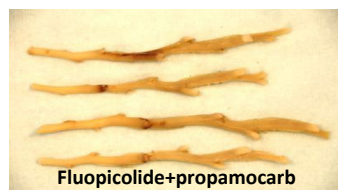
For seed crops (incl home-saved seed) the following must also be observed;

- 1. Zorvec applications must always be applied with a full rate of a curative fungicide e.g., cymoxanil.
- 2. A single crop should not receive more than 2 sprays containing Zorvec products and these 2 sprays should not exceed 20% of the total late blight programme.

Zorvec Endavia: the complete blight fungicide

Unique in chemical group FRAC Group 49

- AI: Oxathiopiprolin
- NO cross resistance with existing groups
- **Strongly preventative**
 - Sporangia/zoospore germination
 - Zoospore release
- **Curative**
 - Kills hyphae and haustoria within plant tissue
- **Movement into new growth**
 - Held within leaf through waxes and moves into the xylem
 - Moves into expanding shoots and leaves PLUS upwards into new growth
- **Stem blight activity**
 - Through movement within leaf/stem waxes



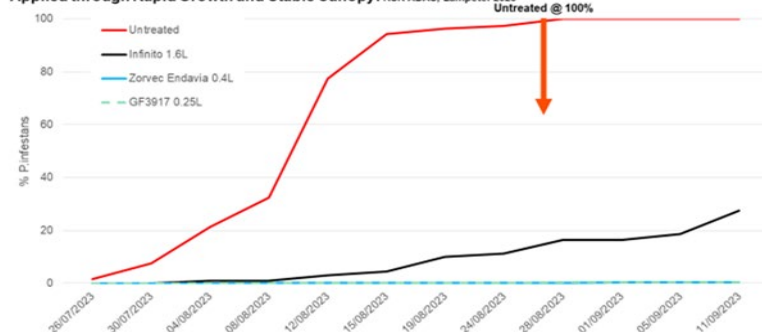
Stems were inoculated with *P. infestans* and treated post infection with each fungicide. Chlorophyll was removed using a solvent. This allows stem blight to become visible in stems where they are often masked by colouring. Zorvec is clearly the most effective in controlling stem blight.

- **Persistent - Offers robust control throughout a 7-day spray interval**
 - Even during Rapid Growth Phase of crop
- **Rainfast**
 - At least as rainfast as the best current standard
- **Wide range of compatibilities**
 - For a full tank mix list please visit the website- <https://www.corteva.co.uk/tools-and-advice/tank-mix.html>

Zorvec trials in 2023 show it remains proven as an effective A.I against late blight

Zorvec Efficacy: Zorvec vs Infinito

Applied through Rapid Growth and Stable Canopy: RSK ADAS, Lampeter 2023



Conclusions

- Persistent, systemic and curative activity showed true worth under severe pressure (Aug/Sept).
- Zorvec 'Bonus' benefit is seen in Stable Canopy phase from application in Rapid Growth phase 1-3 weeks depending on disease pressure.