



USE PLANT PROTECTION PRODUCTS SAFELY AND WITH RESPONSIBLE CARE. PLEASE ALWAYS FOLLOW THE LABEL WHEN APPLYING PLANT PROTECTION PRODUCTS.

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ZORVEC™
Enicade® NTEC
FUNGICIDE

THIS CHANGES EVERYTHING

BETTER CROP MANAGEMENT

FOR BETTER BUSINESS

Zorvec™ Enicade® NTEC fungicide provides an unmatched combination of consistency and control of potato late blight that can be used every season to help achieve a better crop, even under challenging conditions.

Zorvec™ Enicade® NTec at a glance

Zorvec™ Enicade® NTec is the first member of a novel class of fungicides to control diseases caused by oomycete pathogens. Zorvec Enicade NTec offers an unmatched combination of consistency and longer-lasting disease control, helping you yield healthier, more uniform potato crops for better business.

Zorvec Enicade NTec affects a novel target site with a completely new biochemical Mode of Action and has no cross-resistance with existing fungicides.

It produces multiple effects on the pathogen's life cycle for better efficacy and length of control. Zorvec Enicade NTec protects treated leaves as they grow and expand, including leaves that are less than 20% of their final size at the time of application. Zorvec Enicade NTec is a crop protection technology with the potential to provide many benefits to growers, including lower operational costs and overall improved farm management efficiency.

Product	Zorvec™ Enicade® NTec
Active substance	Zorvec® ISO common name: oxathiapiprolin Chemical class: piperidinyl thiazole isoxazoline
Mode of Action (MoA)	OSBPI (Oxysterol binding protein inhibitor)
FRAC classification	Group 49 (F9)
Formulation	Oil Dispersion (OD) containing 100 g/L Zorvec®
Recommended application rate	0.15 L on late blight (<i>Phytophthora infestans</i>)
Application method	Foliar application
Number of applications	Max. 4 applications per season

Zorvec™ Enicade® NTec ranking on potatoes

Zorvec™ Enicade® NTec vs competing products at commercial rates						
Multiple effects on the Pathogen's Life Cycle						
Fungicide	Rainfastness	Preventative	Curative	Anti-sporulant	Stem blight	Mobility
Zorvec®	+++	+++	++		+++	S + T
Fluopicolide + propamocarb	++(+)	+++	++	++(+)	++	S + T

Rating	+++	++	+	-
Designation	Excellent	Good	Moderate	Poor

S: Systemic activity T: Translaminar activity

Source: Ratings for Zorvec® based on internal data (2012-2014). For competing products based on Euroblightrating (2012).

Key attributes and benefits of Zorvec™ Enicade® NTec

DELIVERS 3-4 MORE DAYS
of disease control



THAN THE COMPETITION
even under high disease pressure

Depending on environmental conditions.

- Robust spray intervals even under extreme disease pressure
- Reduction in frequency of sprays

RAINFAST



AFTER 20 MINUTES

- Allows for flexibility when weather causes a delay in the application
- Reduces the need for re-sprays and unscheduled applications

PROTECTION OF new growth



- Systemic movement to new and emerging leaves
- Essential for maximising yield potential when the crop is established

Key attributes and benefits of Zorvec™ Enicade® NTec

For resistance management purposes, we have selected robust partners to be associated in the tank mix with Zorvec™ Enicade® NTec.

Zorvec Enicade NTec is a copack combining Zorvec™ Enicade® and Gachinko*. Gachinko is a suspension concentrate containing 200g/L amisulbrom. The recommended rate in association with Zorvec Enicade is 0.3L/ha on late blight (*Phytophthora infestans*). Amisulbrom has a different mode of action as it is a Qil (Quinone inside Inhibitor). It belongs to FRAC Group 21 (C4).

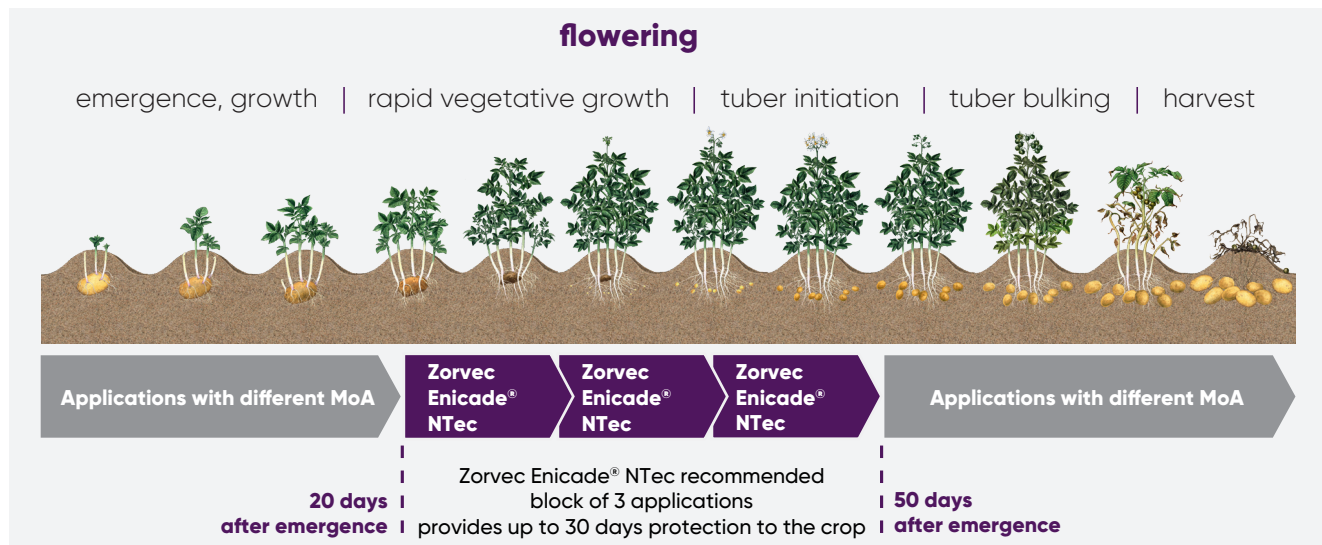
The following table summarises the recommendations of us for proactive resistance management.

Strategy	Tactics
Limit exposure	<ol style="list-style-type: none"> 1. Limit the number of applications to 4* maximum per season (no more than 3 times in sequence), and rotate with other MoA for rest of the spray programme. 2. Prefer block applications to alternate. 3. Apply preventively. 4. Do not stretch the spray interval.
Slow pathogen growth	<ol style="list-style-type: none"> 1. Follow prophylactic practices as much as possible. 2. Always apply Zorvec Enicade in a mixture with Gachinko.
Contain the resistant isolates - Reduce survival - Reduce spread	<ol style="list-style-type: none"> 1. Follow Zorvec Enicade with a highly effective, preferably curative product. 2. Use preferably in the first half of the season.

* Gachinko is a registered trademark of Nissan Chemical Industries Ltd.

(*) or less in case of regulatory restrictions

Target growth stage for Zorvec™ Enicade® NTec



The use of Zorvec Enicade NTec shall not exceed 33 % of the total number of fungicide applications targeting late blight or 4 applications per crop, whichever is lower. Do not make more than 3 consecutive applications in alternation with a product that has a different Mode of Action (MoA). In cases of heavy disease pressure, the spray interval can be reduced to 7 days.

Consistent performance compared to competitors in the field

Since 2014, DuPont has been conducting trials to compare late blight prevention techniques. One block consisted of 3 Zorvec™ Enicade® NTec applications at 10-day intervals, while the other block consisted of 4 applications of competing products at 7-day intervals. The following summarises 16 trials conducted in 2016 in Europe. In those trials, in order to keep the disease under control in the reference programme, some additional curative products like cymoxanil or propamocarb + cymoxanil had to be added to the initial plan.

Infection level (%)	Number of applications	After the block
Zorvec™ Enicade® NTec	3 applications 10-day intervals	1.9 %
Mandi-propamid + cymoxanil	4 applications 7-day intervals	8.3 %

Source: DuPont, Netherlands (2016)



Zorvec™ Enicade® + Gachinko* provides an unmatched combination of consistency and control of potato late blight that can be used every season to help achieve better crops, even under challenging conditions.

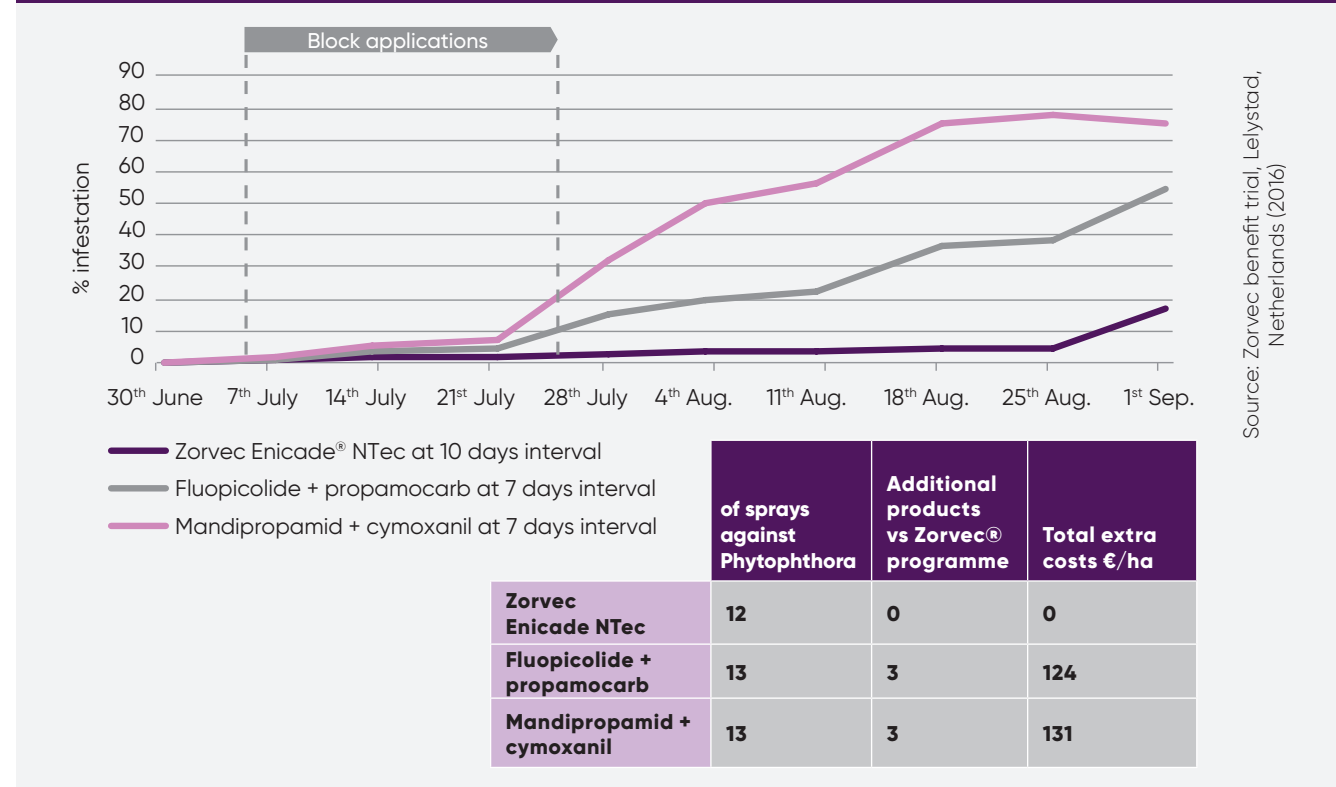
* Gachinko is a registered trademark of Nissan Chemical Industries Ltd.

Early optimised protection programme

Zorvec™ Enicade® NTec offers outstanding protection. The spread of disease can be stopped early and blemishes are reduced. Growers have the opportunity to reduce sprays in their protection programme and thereby save costs.

In this trial below, Zorvec Enicade NTec in a block of 3 applications at 10-day intervals during the rapid growth phase reduced the inoculum right from the start and maintained it at low levels across the crop cycle. The reference product in this case with 4 applications at 7-day intervals could not control the inoculum level and the disease spread in the field despite 1 additional spray and 3 additional curative products added after the block.

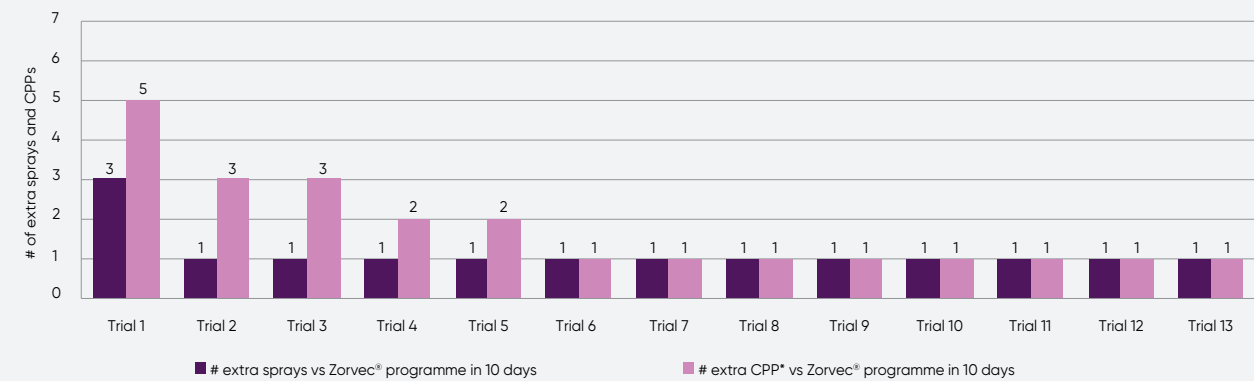
Early reduction of inoculum with Zorvec™ Enicade® NTec



Better farm management

Zorvec™ Enicade® NTec provides 3-4 more days of control when compared to competing products, even under high pressure and challenging conditions. Growers have more flexibility in spray timing, can better manage labour costs and work, and potentially reduce the number of applications for further optimisation.

Optimising the spray schedule with Zorvec™ Enicade® NTec



Source: Benefit trials conducted in Germany, France and Netherlands (2016)

- Three applications of Zorvec Enicade NTec (10-day spray interval) replaced four applications of the reference product (7-day interval). One spray could be saved.
- Due to high disease pressure, some additional products (mainly curative) had to be added to the reference programmes.
- Growers might have reacted with much shorter intervals and even extra sprays in the reference programmes to limit the disease spread.

Infection level (%)	After the block
Zorvec Enicade NTec	1.9%
Mandipropamid + cymoxanil	8.3%

* Crop Protection Products

Strong canopy protection to ensure final yield

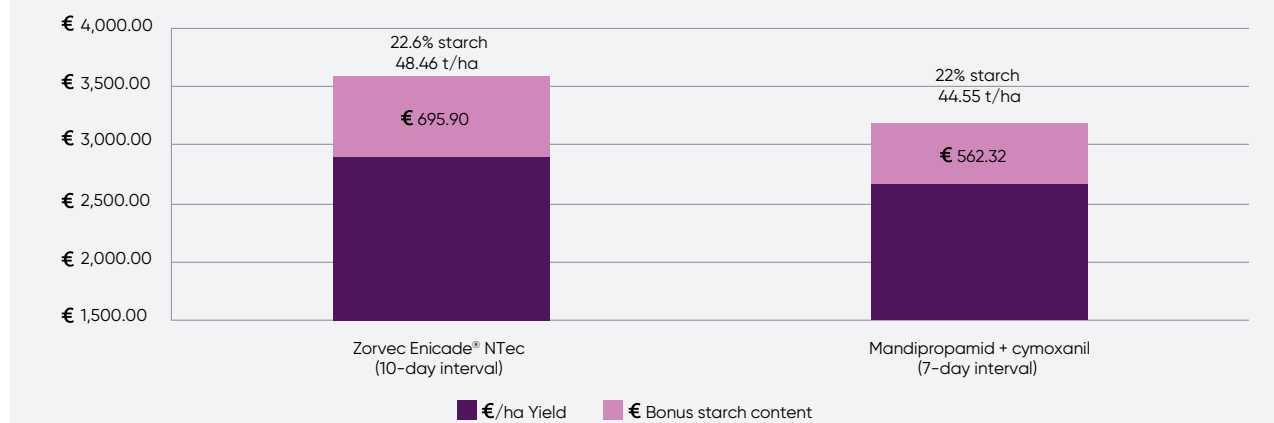
The well-known secret to maximising quality and yields is to keep clean foliage for as long as possible. Zorvec™ Enicade® NTec helps growers reach their target marketable yields and at the same time helps reduce production costs and time expenditure.

Source: Zorvec trial, IJlstad, Netherlands, 2016



Thanks to outstanding protection against late blight, Zorvec™ Enicade® NTec provides the opportunity to optimise the marketable yield and starch content of potatoes.

Zorvec™ Enicade® NTec helps to maximise yield and starch content

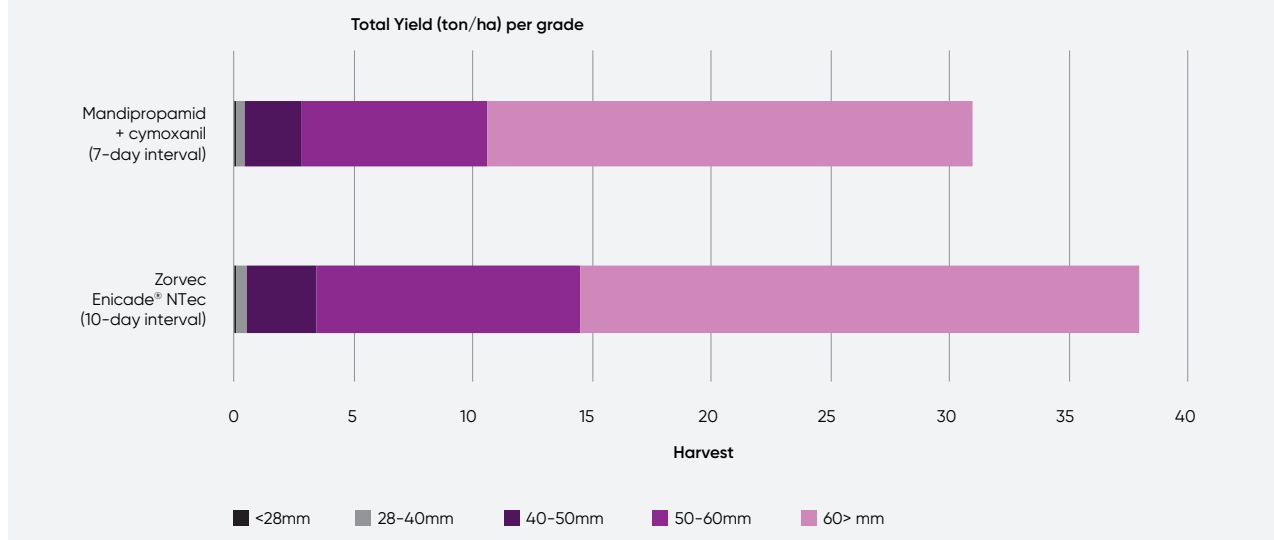


Source: 3 benefit trials in Western Europe 2016

Reference programme with €68 additional costs compared to programme with Zorvec™ Enicade® NTec

Zorvec™ Enicade® NTec early in the programme enables the crop to thrive and reach its optimal potential. The trial below conducted in 2016 has shown that a block of 3 applications of Zorvec Enicade NTec at 10-day intervals helps to maximise the yield, but also to maximise the best qualities desired by the processors.

Zorvec™ Enicade® NTec helps to optimise the marketable yield for French fries varieties



Source: DuPont field trials, France 2016