



Product profile

Incorporating advanced *tzt* technology the triazolinthione active substance prothioconazole, Rudis is a curative and protectant fungicide for broad-spectrum disease control on outdoor crops of Brussels sprouts, cabbage, broccoli/calabrese, cauliflower, carrot, parsnip, leek, swede and turnip.

Active substance	480 g/L prothioconazole
Formulation	Suspension concentrate
Pack size	1 litre
Maximum individual dose	0.4 L/ha
Maximum number of applications	3 per crop
Latest time of application	21 days before harvest
Water volume	200-500 L/ha
LERAP	B

Key advantages

- ▶ Strongest broad spectrum DMI
- ▶ Best QoI alternation partner
- ▶ Kinder dedicated formulation for vegetable crops
- ▶ Only DMI with QoI type physiological boosting effects

Diseases controlled

Brussels sprouts, cabbage, broccoli/calabrese and cauliflower	Dark leaf spot (<i>Alternaria brassicae</i> and <i>Alternaria brassicicola</i>) Ring spot (<i>Mycosphaerella brassicicola</i>) Powdery mildew (<i>Erysiphe cruciferarum</i>) Light leaf spot (<i>Pyrenopeziza brassicae</i>)* Phoma leaf spot (<i>Phoma lingam</i>)*
Leeks	Leek rust (<i>Puccinia allii</i>) Purple blotch (<i>Alternaria porri</i>) Leaf blotch (<i>Cladosporium allii</i>) † Leaf blight (<i>Stemphylium botryosum</i>) †
Carrots	Leaf blight (<i>Alternaria dauci</i>) <i>Sclerotinia</i> rot (<i>Sclerotinia sclerotiorum</i>) - moderate control Powdery mildew (<i>Erysiphe heraclei</i>)
Parsnips	Leaf blight (<i>Alternaria dauci</i>)* <i>Sclerotinia</i> rot (<i>Sclerotinia sclerotiorum</i>)* - moderate control Powdery mildew (<i>Erysiphe heraclei</i>)*
Swedes and turnips	Powdery mildew (<i>Erysiphe cruciferarum</i>)* <i>Alternaria</i> (<i>Alternaria brassicae</i>)*

Qualified minor use recommendations:

* Based on limited data control of these diseases can be expected from applications of Rudis.

† Based on limited data useful reductions in these diseases can be expected from applications of Rudis.

tzt technology

The *tzt* technology in Rudis advances disease control and plant health. Being a new generation DMI it combines exceptional protection with sustained curative activity for powerful broad-spectrum disease control. Uniquely for a DMI it also stimulates photosynthesis and enhances nitrogen assimilation to deliver greening and physiological yield effects in the same league as strobilurins.

User Guide



Brussels sprouts and cabbage

- ▶ The first application is recommended before disease establishes in the crop (making use of disease forecasting systems as appropriate).
- ▶ Follow with further applications at an interval of about 21 days according to disease pressure.
- ▶ For control of white blister mix with a specific oomycete curative fungicide.

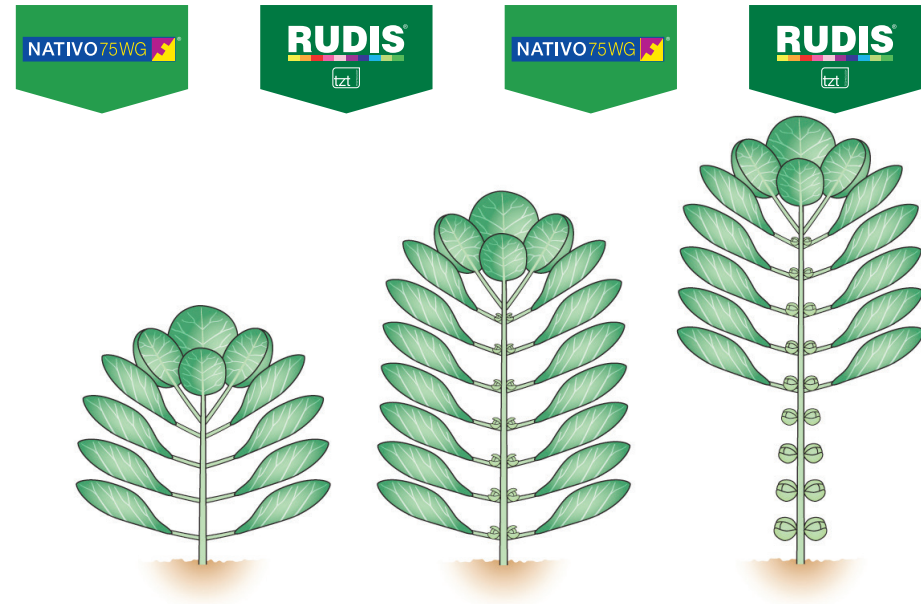
Programme planning

Trials show the best response for boosting quality and yield comes from using Rudis in sequence with Nativo 75WG in programmes.

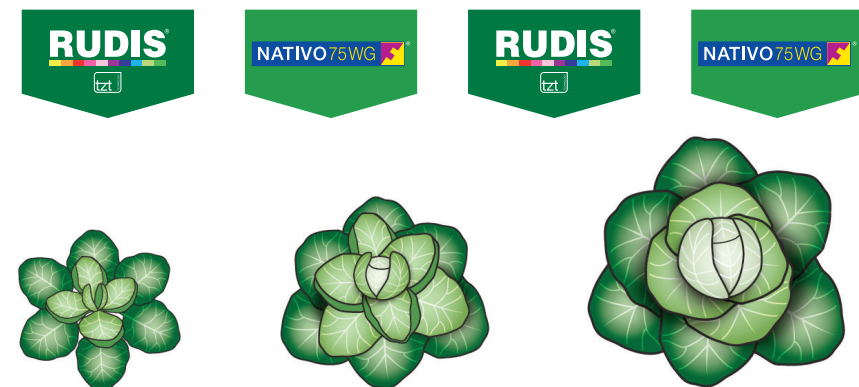
- ▶ If the crop is disease free when the programme begins, apply Nativo 75WG first (T1) for its protectant activity and plant health promoting characteristics, then follow with Rudis and alternate the two.
- ▶ If the crop has disease present when the programme begins, apply Rudis first (T1) for its curative activity and greening effect, then follow with Nativo 75WG and alternate the two.
- ▶ At times it may be necessary to use a block of two sprays of Rudis or Nativo 75WG according to the situation faced.

The diagrams alongside show example programmes in Brussels sprouts and autumn/winter cabbage.

Brussels Sprouts; disease free at T1



Autumn / winter cabbage; disease present at T1



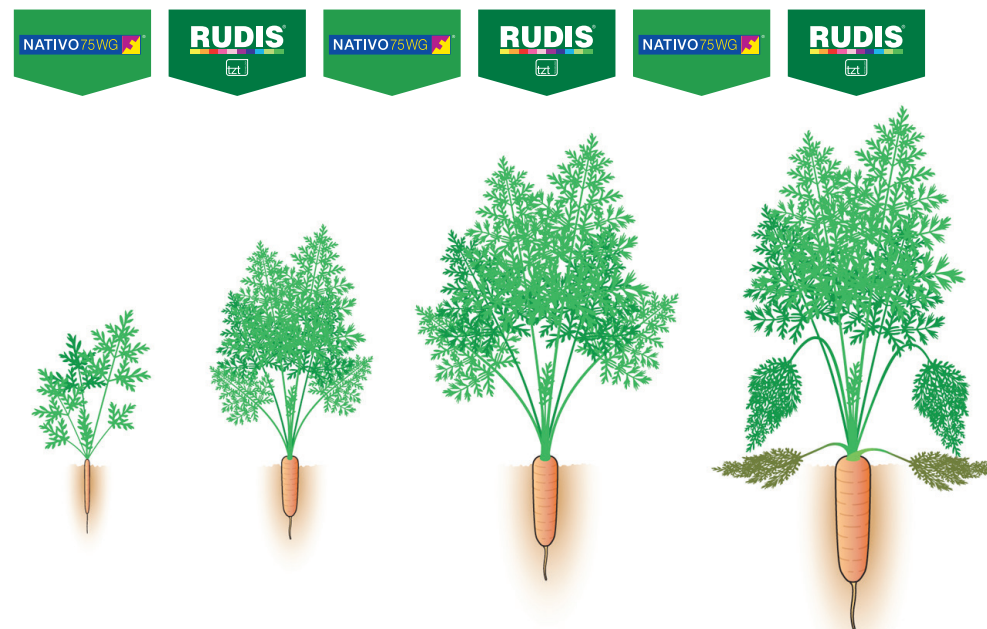
Carrots

- ▶ Use only on crops that will be mechanically harvested.
- ▶ The first application is recommended before disease establishes itself in the crop (making use of disease forecasting systems as appropriate).
- ▶ Follow with further applications at an interval of about 21 days according to disease pressure.
- ▶ Typically the first application should be made prior to canopy closure in June/July; this is particularly important for control of *Sclerotinia sclerotiorum* to ensure that all leaves are adequately protected as the micro-climate under the crop becomes optimal for spore release from soil germinating fungal bodies.
- ▶ To reduce *Alternaria* infection on the leaves Rudis should be applied in early/mid August, or when first signs of disease appear on the foliage after the 5 true leaf stage of the crop (GS 15) if earlier.

Programme planning

Trials show the best response for boosting quality and yield comes from using Rudis in sequence with Nativo 75WG in programmes.

- ▶ If the crop is disease free when the programme begins, apply Nativo 75WG first for its protectant activity and plant health promoting characteristics, then follow with Rudis and alternate the two as illustrated alongside.
- ▶ If the crop has disease present when the programme begins, apply Rudis first for its curative activity and greening effect, then follow with Nativo 75WG and alternate the two.
- ▶ At times it may be necessary to use a block of two sprays of Rudis or Nativo 75WG according to the situation faced.



Parsnips, swedes and turnips

- ▶ Use on parsnip, swede and turnip are Qualified Minor Use recommendations. There is limited evidence of crop safety and/or product efficacy and the commercial risk of using Rudis under these Qualified Minor Uses is borne entirely by the grower.
- ▶ The first application is recommended before disease establishes itself in the crop (making use of disease forecasting systems as appropriate).
- ▶ Follow with further applications at an interval of about 21 days according to disease pressure.
- ▶ Typically the first application should be made prior to canopy closure in June/July; this is particularly important for control of *Sclerotinia sclerotiorum* to ensure that all leaves are adequately protected as the micro-climate under the crop becomes optimal for spore release from soil germinating fungal bodies.
- ▶ To reduce *Alternaria* infection on the leaves Rudis should be applied in early/mid August, or when first signs of disease appear on the foliage after the 5 true leaf stage of the crop (GS 15) if earlier.
- ▶ On swede and turnip for control of leaf spot diseases (*Alternaria* species) or for curative activity against other target diseases, mixing with an approved sticker/wetter adjuvant may enhance the activity of Rudis.

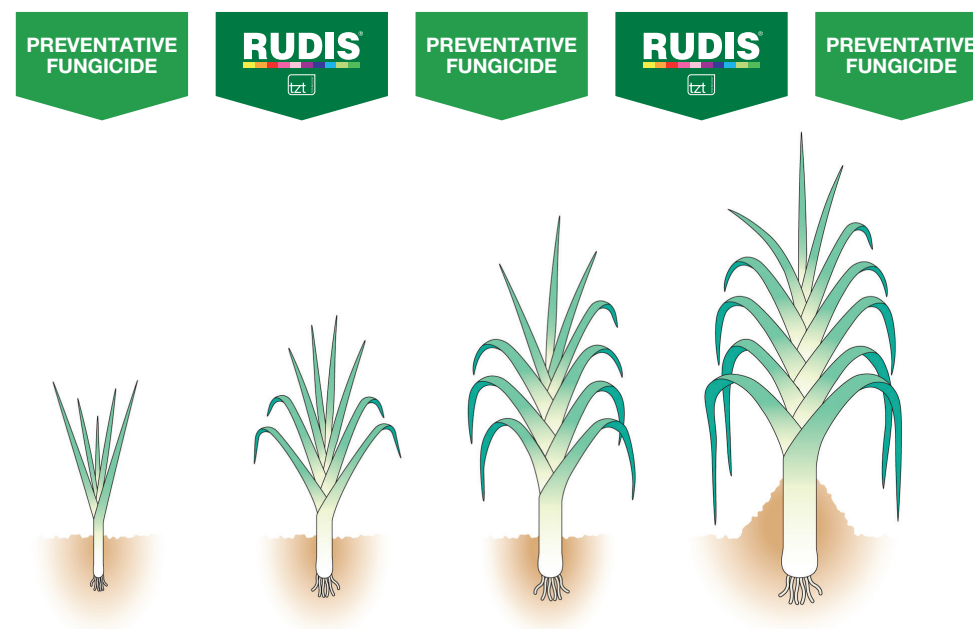
Leeks

- ▶ The first application is recommended before disease establishes in the crop (making use of disease forecasting systems as appropriate).
- ▶ Follow with further applications at an interval of about 21 days according to disease pressure.
- ▶ For control of leek rust, mixing with an approved sticker/wetter adjuvant may enhance the activity of Rudis if in a curative situation or if the crop is very waxy.
- ▶ For control of white tip mix with a specific curative fungicide.

Programme planning

- ▶ If the crop is disease free when the programme begins, apply a preventative fungicide first, then follow with Rudis as illustrated below.
- ▶ If the crop has disease present when the programme begins, apply Rudis first for its curative activity and greening effect, then follow with another alternative chemistry and alternate the two.
- ▶ At times it may be necessary to use a block of two sprays of Rudis according to the situation faced.

Leeks; disease free at T1



Resistance management

Rudis contains prothioconazole, a member of the DMI cross-resistance group. Use Rudis as part of an Integrated Crop Management (ICM) strategy incorporating other methods of control, including where appropriate other fungicides with a different mode of action.

The possible development of disease strains resistant to Rudis cannot be excluded or predicted. Where such resistant strains occur, Rudis is unlikely to give satisfactory control.

Application

- ▶ Apply at 0.4 L/ha in a water volume of 200 to 500 L/ha as a medium quality spray.
- ▶ When crops are dense use higher water volumes to ensure good coverage and penetration.
- ▶ If the crop is intended for processing consult the processor before use.
- ▶ Do not spray more than 3 applications of Rudis per crop or per season.
- ▶ Do not apply by handheld equipment e.g. knapsack sprayer.
- ▶ If the crop is intended for processing consult the processor before use of Rudis.

Compatibility

Rudis is physically compatible with a range of other products; for the current list please visit www.bayercropscience.co.uk

Nativo 75WG contains trifloxystrobin and tebuconazole.
Rudis contains prothioconazole.
Nativo 75WG and Rudis are registered trademarks of Bayer.

Use plant protection products safely. Always read the label and product information before use. Pay attention to the risk indications and follow the safety precautions on the label.
For further information, please visit www.bayercropscience.co.uk or call Bayer Assist on 0845 6092266 / 01223 226644.

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