



**Autumn disease control and  
growth regulation for oilseed rape**

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# Beneficial autumn growth effects

Besides disease control, useful growth regulatory effects from an autumn Folicur spray include:

**Improved root growth:** An average 20% increase in root weight has been shown by crops treated with 0.5-0.75 L/ha Folicur in September/October.

**Reduced height of crop:** Folicur applied in early autumn to vigorously-growing crops produces lower-lying plants with reduced stem development:

| Folicur – effect on crop height 5 December (mean of 6 cultivars) |             |            |                       |
|--|-------------|------------|-----------------------|
| Folicur rate (L/ha)  | Application |            | % reduction in height |
|  | date        | crop stage |                       |
| 0.5  | 23 Sept     | 3 leaves   | 17%                   |
| 0.5  | 7 Oct       | 5 leaves   | 42%                   |
| 0.5  | 23 Oct      | 7 leaves   | 50%                   |

Folicur at 0.5 L/ha is sufficient for late September to early October, but 0.75 L/ha is required for mid to end of October applications. Only strongly growing crops should be treated (avoid backward or stressed crops).  
Source: ADAS trial series

**Improved over-wintering in harsh conditions:** Folicur preserves plant populations and sets up the crop for maximum production in spring, especially where light leaf spot infection is involved:

| Effect of 0.75 L/ha autumn Folicur on crop stand<br>Assessed and photographed in early spring |             |                             |
|---|-------------|-----------------------------|
| Trial no.   | Application | Extra plants/m <sup>2</sup> |
| 1   | 15 Oct      | + 22%                       |
| 2   | 17 Oct      | + 13%                       |
| 3   | 14 Oct      | + 7%                        |

Source: ADAS trial series



Folicur treated in autumn



untreated

Trial work has shown that the growth regulation/improved over-wintering effects of Folicur are most likely to be beneficial in strongly-growing early-drilled crops.

# The need for autumn disease control

The two most important autumn/winter diseases are light leaf spot and phoma leaf spot (which later develops into stem canker). Both are favoured by cool, wet conditions and each can easily cause losses of 1 T/ha where control measures are inadequate. In general terms, light leaf spot is important in Scotland and the North, with phoma predominant in the South and East. Downy mildew commonly occurs in autumn but rarely has any damaging effect.



**Light leaf spot**

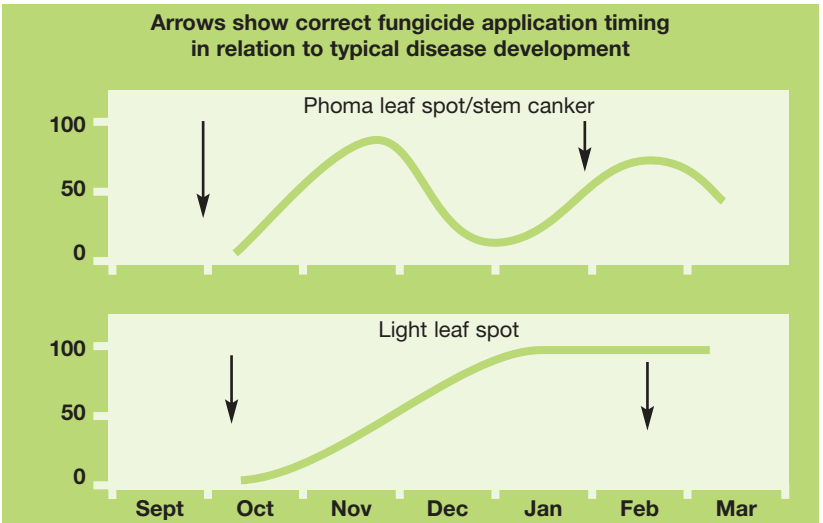
Initial bleached or pale green leaf lesions eventually develop a characteristic outer edge of white spores



**Phoma leaf spot**

Once leaf symptoms are seen, a grower has only 7-10 days to apply a fungicide before infection spreads to the stem base

**Timing is the key:** ADAS surveys show that waiting until spring before trying to control an attack of these diseases is too late to prevent yield loss. It is vital to spray in autumn/early winter at first signs of light leaf spot infection, or when no more than 10-20% of plants show signs of phoma leaf spot. To maintain effective control, a follow up spring spray will be required in most situations.

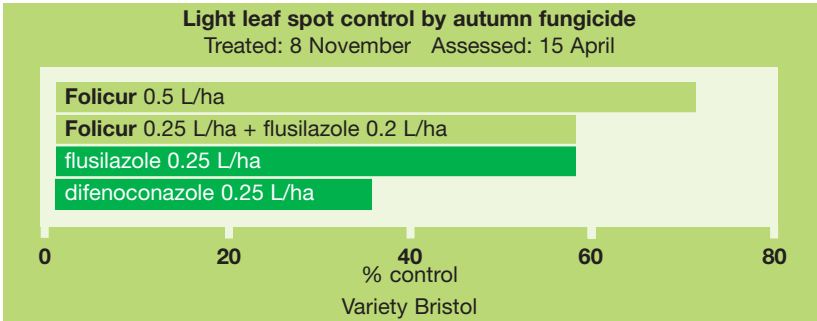


Source: ADAS trial series

# The need for autumn disease control (cont.)

## Light leaf spot control

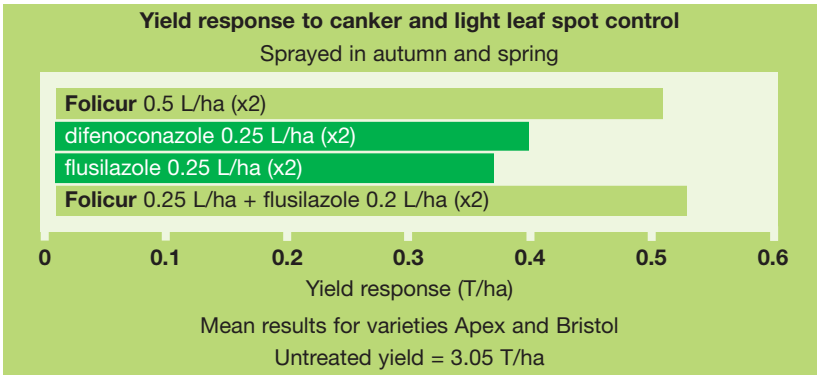
In a trial at the NIAB site at Brampton, Folicur at 0.5 L/ha, applied in early November, showed outstanding control of light leaf spot when assessed the following spring:



Source: NIAB

## Phoma/light leaf spot control

In the same trial at Brampton, the autumn fungicide sprays were followed by a repeat treatment in spring. Control of mixed phoma and light leaf spot infections by treatments involving Folicur resulted in very worthwhile and cost-effective yield responses:



Source: NIAB

# Action for autumn

- ▶ **Monitor crops** frequently for light leaf spot or phoma leaf spot symptoms. To confirm light leaf spot on symptomless plants, or those with indistinct symptoms, stimulate the formation of diagnostic leaf lesions by incubating leaves for a few days in a polythene bag at 10-15°C
- ▶ **Assess risk** of disease development (take into account varietal disease susceptibility, prevailing weather and disease history of site)
- ▶ **Apply fungicide** to crops at risk (especially if continuing cool, wet conditions are forecast):

| Main use   | Guideline rate of use  | Timing  |
|--|--|---|
| <b>Light leaf spot</b><br><br>(Phoma reduction)<br><br>(Beneficial growth regulatory effects)                                  | 0.5 L/ha Folicur   | At first signs of light leaf spot infection (usually Nov/Dec in Scotland and the North; October onwards further South)      |
| <b>Phoma leaf spot/stem canker</b><br><br>Light leaf spot<br><br>(Beneficial growth regulatory effects)                        | 0.25 L/ha Folicur + 0.2 L/ha flusilazole*  | When no more than 10-20% of plants show leaf spots (October onwards)  |
| <b>Beneficial growth regulatory effects, including improved over-wintering</b><br><br>Light leaf spot<br><br>(Phoma reduction) | 0.5 L/ha Folicur   | End September to early October  |
|  | 0.5 L/ha Folicur OR<br>0.1 L/ha Folicur per average no. of leaves per plant (e.g. 0.6 L/ha at crop 6-leaf stage) | Mid-October to end October<br><br><b>Important:</b> only treat vigorously growing crops. (Avoid backward or stressed crops) |

Note: no more than 2.5 L/ha Folicur in total may be applied per crop  
\*Approved formulation containing 250 g/L flusilazole

- ▶ **Be prepared** to follow up the autumn treatment with a spring application to maintain effective disease control
- ▶ **Bonus** – when disease control measures are required, the beneficial growth properties of Folicur give added value

# Folicur compatibility list for OSR

| Folicur is compatible with any one of the following products: |   |
|---|---|
| Herbicides  | Butisan S<br>Co-Pilot<br>Dow Shield<br>Falcon*<br>Katamaran<br>Kerb Flo<br>Laser  |
| Do not tank-mix Folicur with Carbetamex                       | Matrikerb<br>Sceptre  |
| Insecticides  | Contest* •<br>Decis •<br>Decis Protech •<br>Hallmark with Zeon technology •<br>Mavrik •<br>Pearl Micro •<br>Toppel 10 • |
| • Do not apply to crops in flower                             |   |
| Fungicides  | Plover<br>Punch C<br>Sanction   |

\*Compatible as a 3-way mix: Folicur + Contest + Falcon

For the latest compatibility information contact Bayer Assist on 0845 6092266, visit [www.bayercropscience.co.uk](http://www.bayercropscience.co.uk) or contact your advisor.



# Folicur application

|                         |  |
|-------------------------|--|
| Maximum individual dose | 1.0 L/ha   |
| Maximum total dose      | 2.5 L/ha per crop                                    |
| Water volume            | 100-200 L/ha in autumn                               |
| Spray quality           | Apply as a MEDIUM quality spray (as defined by BCPC) |
| Spray pressure          | 2-3 bar is recommended                               |

**Decis®, Folicur®, Pearl Micro® and Sceptre® are registered trademarks of Bayer. All other brand names used in this list are trademarks of other manufacturers in which proprietary rights may exist.**

Butisan S contains metazachlor, Carbetamex contains carbetamide, Contest contains alpha-cypermethrin, Co-Pilot contains quizalofop-P-ethyl, Decis contains deltamethrin, Decis Protech contains deltamethrin, Dow Shield contains clopyralid, Falcon contains propaquizafop, Folicur contains tebuconazole, Hallmark with Zeon technology contains lambda-cyhalothrin, Katamaran contains metazochlor+quinmerac, Kerb Flo contains propyzamide, Laser contains cycloxydim, Matrikerb contains clopyralid+propyzamide, Mavrik contains tau-fluvalinate, Pearl Micro contains deltamethrin, Plover contains difenconazole, Punch C contains carbendazim+flusilazole, Sanction contains flusilazole, Sceptre contains quizalofop-P-ethyl, Toppel 10 contains cypermethrin.

**Always read the label: use pesticides safely.**

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