

Tyfu Cymru: Technical Advice Sheet

Pumpkin Disease Control

Powdery Mildew

The main disease of concern in pumpkin during the early season is powdery mildew, and this can start to be a problem from June onwards, starting with flowering. A powdery white fungal infection of the leaves can spread across the leaf surface until it leads to leaf drop. This reduces the amount of sugar available to the growing fruit, leading to a smaller fruit size. When you crop walk look for signs of powdery mildew throughout the canopy – warm shaded conditions, typically around the older leaves in the lower canopy are more prone to developing the disease. A range of products are available for powdery mildew control (see below), and a food-grade bicarbonate treatment is available for organic growers. Bicarbonate will only treat the disease that is present when it's applied as it lacks a lasting protective action. Powdery mildew is less of a concern later in the season once the fruit start to mature as leaf shed will allow light to reach the maturing fruit.



Secondary Rots

In addition to powdery mildew secondary rots can be of concern. Leaf damage can risk the development of Botrytis on the leaf material, but a spray of a suitable fungicide (e.g. Signum) can be used to control development if there is a significant risk in the crop.

Fruit rots, either from wounds or from the blossom scar, can be a problem later in the season. Careful management of calcium nutrition can be useful in strengthening the fruit to resist rot development.

If fruit is to be lifted they should not be washed, but stored in a warm (or ambient) store to cure without chilling. Fruit can be stored this way for many months without spoilage allowing for spring marketing.



| Powdery Mildew Control Options for Pumpkin | | | | | | |
|--|--|----------------------|--|-----------------------------------|---|----------|
| Product | Active Ingredient | Max no. applications | Max Individual Dose (L/ha or kg/ha) | Max Total Dose (L/ha or kg/ha) | Harvest interval (days) | FRAC no. |
| Amistar EAMU 0893/2017 | azoxystrobin | 2 | 1.0 | - | 3 | 11 |
| Serenade ASO EAMU 0706/2013 | <i>Bacillus subtilis</i> strain QST 713 | 20 | 10.00 | - | 0 | 44 |
| Signum EAMU 2651/15 | boscalid + pyraclostrobin | - | 1.5 | 3.0 | 1 | 7 + 11 |
| Takumi SC EAMU 2915/16 | cyflufenamid | 2 | 0.15 | - | 1 | U06 |
| Prestop EAMU 2843/18 | <i>Gliocladium catenulatum</i> strain J1446 | 3 | 6.00 | - | Apply before fruit has reached full size on main stem | BM02 |
| Karma EAMU 2503/19 | potassium hydrogen carbonate | 8 | 3.0 | - | 1 | N/A |
| Talius EAMU 2627/2015 | proquinazid | 1 | 0.25 | - | 3 | 13 |

Disclaimer

Every effort is made to ensure the accuracy of information and recommendations given in these notes. All applications of crop protection chemicals should be made in accordance with label recommendations, which should be consulted before spraying. Some of the pesticides mentioned in these notes may not be supported by label recommendations for their use on pumpkin crops but are permissible via Extension of Authorisation for Minor Use (EAMU) in the UK under 'The Revised Long Term Arrangements For Extension Of Use (2002)'. In these cases, the use of the pesticide is at the risk of the user and Tyfu Cymru does not accept liability for any loss or damage caused by such use. The references to on-label approvals and EAMUs for use of pesticides in pumpkin crops and are correct at the time of writing. These are subject to change and approval may be withdrawn at any point. It is the grower's responsibility to check approvals before use of pesticides. If in doubt a grower should seek advice from a BASIS qualified advisor - this is available free of charge for eligible growers through the Tyfu Cymru program, please contact us to arrange an appointment – email/telephone advice is also available.