

Powdery Mildew (PM)

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Summary

PM is caused by the fungus *Erysiphe polygoni* and is a common minor disease of brassicas, mostly in late summer and autumn.

Identification

Powdery fungal growth occurs on upper and lower leaf surfaces. Leaves can become yellow and drop prematurely.

Importance

Sometimes causes damage in summer sown forage crops when going into winter.



PM resistant (left) vs. susceptible variety (right).

Spread

PM survives winter as a fungus on infected plants, weeds or crop debris. Air-borne spores produced in spring can land on susceptible plants, causing new infections. Spores are also released after rain in autumn.

Prevention and management

Normally, no control is required. There are a number of fungicides available which are effective against PM, if it reaches high levels in high-value crops.

PM resistance

A number of varieties have shown good resistance in trials under moderate to high powdery mildew pressure.

Variety	Mildew resistance* score
<i>Invitation</i>	8.9 a
<i>Keystone**</i>	7.0 bc
<i>Major Plus</i>	6.5 c
<i>Winton</i>	6.5 c
<i>Highlander</i>	5.7 d
<i>Aparima Gold</i>	5.6 d
<i>Dominion</i>	4.9 e
Trial Mean	7.1

*Mildew resistance score from 2 Southland trials during 2007 & 2009 under moderate - high mildew pressure. Score on basis of 9 = high resistance, 1 = very susceptible.

Statistical significance lettering given for 5% LSD level, varieties with the same letter are not significantly different.

**Note: Keystone has only been in 2/5 yield trials and 1/2 mildew resistance trials.