Launched in 2015, Luna Sensation equips growers with a new tool that provides outstanding control of powdery mildew in grapes.

Powdery mildew (Erysiphe necator) is a common and widespread disease that occurs throughout New Zealand. In recent years powdery mildew has become more problematic with epidemics appearing in all the key grape growing regions.

Luna Sensation is a co-formulation of two active ingredients, fluopyram and trifloxystrobin. The complementary properties of the formulation has shown outstanding efficacy in field trials conducted prior to the launch (go to the Trials section on the Luna Sensation website to see the results). Further trials conducted in the 2015/16 season confirmed the premium performance of Luna Sensation (see trials overleaf).

However in 2015 research was conducted that showed reduced sensitivity and potential resistance development occurring in New Zealand vineyards to some powdery mildew fungicides. Following this Bayer Crop Science has made changes to the recommendations for the use of Luna Sensation for 2016.

www.lunasensation.bayer.co.nz
Luna Sensation – Resistance Management

Recent testing from New Zealand vineyards has shown the development of reduced sensitivity to powdery mildew from two fungicide groups. These are Group 3 – DMI fungicides and Group 11 – QoI (strobilurin) fungicides.

Luna Sensation is a co-formulation of fluopyram (a SDHI – Group 7 fungicide) and trifloxystrobin (a strobilurin – Group 11 fungicide).

RECOMMENDED SPRAY PROGRAMMES

Luna Sensation cannot be used later than 80% flowering. Luna Sensation should be used at critical powdery mildew control application timings – at either pre-early flowering (EL 18-19), or at 80% flowering (EL 25) as shown below. Rotate fungicide use through the season ensuring products with different MoA (modes of action) are used.

Luna Sensation - New Recommendations

Luna Sensation is rated as being of medium – high risk of resistance development. To protect against the resistance challenge to the components of Luna Sensation and best resistance management practice we are recommending the following:

- Only use one application of Luna Sensation per season (the label allows 2 applications)
- Do NOT use consecutive applications of Luna Sensation
- Do not use consecutive applications of a SDHI/QoI mixture containing fungicides
- Ensure Luna Sensation is incorporated into a robust season long powdery mildew spray programme

For more information on resistance management go to the Luna Sensation website – www.lunasensation.bayer.co.nz
TRIAL PROTOCOLS

- All trials had a pre-flower protectant (sulphur) programme
- Four applications were applied:
  - Pre-flowering
  - 80% capfall
  - Pea size
  - Pre-bunch closure
- No applications were applied after pre-bunch closure
- All treatments were applied at the recommended label rates

TRIAL RESULTS

These trials again demonstrate the outstanding efficacy of Luna Sensation. Equivalent control was shown where Luna Sensation was tank mixed with sulphur compared to Luna Sensaton applied alone.

TANK MIXING LUNA SENSATION WITH SULPHUR

Three trials conducted in the 2015/16 season included Luna Sensation and sulphur (Kumulus at 3 & 5 kgs/ha) treatments. The results were:

- Luna Sensation is compatible with sulphur
- No crop safety issues were observed with Luna Sensation and sulphur tank mixes
- Adding sulphur did not increase or reduce the efficacy of Luna Sensation
- Luna Sensation can be safely mixed with sulphur

LUNA SENSATION: RECOMMENDATIONS FOR TREATMENT OF BOTRYTIS

Luna Sensation will not control botrytis. If botrytis is being targeted along with powdery mildew, a suitable botrytis specific fungicide should be tank mixed with Luna Sensation. E.g. at 80% flowering Luna Sensation should be mixed with Teldor (or another botrytis fungicide).

To see trial results from previous years go to the Trials section in the Luna Sensation website www.lunasensation.bayer.co.nz
APPLICATION RECOMMENDATIONS:

<table>
<thead>
<tr>
<th>USE RATE</th>
<th>WATER RATE/SPRAY COVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>150 ml/ha</td>
<td>Apply Luna Sensation in 250-500 litres of water per hectare by ground based methods. Ensure full coverage of the canopy without runoff</td>
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<table>
<thead>
<tr>
<th>SPRAY TIMING/NUMBER OF APPLICATIONS</th>
<th>COMPATIBILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply immediately before flowering through to 80% flowering. <strong>NEW – Do not use more than one application per season</strong></td>
<td>The following mixes are compatible and crop safe when using Luna Sensation on grapes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RAINFASTNESS</th>
<th>WATER PH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luna Sensation is rainfast once fully dry on the plant</td>
<td>Luna Sensation is stable in water pH 5-8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RESIDUE PROFILE</th>
<th>SHEEP GRAZING</th>
</tr>
</thead>
<tbody>
<tr>
<td>When used as directed Luna Sensation will result in nil-detectable residues in wine grapes at harvest</td>
<td>Livestock that have been grazing or fed treated crops should be placed on clean feed for two months prior to slaughter</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>ADJUVANTS</th>
<th>WATER PH</th>
</tr>
</thead>
<tbody>
<tr>
<td>None required</td>
<td>Luna Sensation is stable in water pH 5-8</td>
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</tbody>
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<tr>
<th>WITHHOLDING PERIOD</th>
<th>SHEEP GRAZING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not apply after 80% capfall</td>
<td>Livestock that have been grazing or fed treated crops should be placed on clean feed for two months prior to slaughter</td>
</tr>
</tbody>
</table>

Regional Territory Managers

- **Upper North Island**
  - Phil Bertram
  - 021 426 825

- **Gisborne / Hawke's Bay / Nelson / Marlborough**
  - Marc Fox
  - 021 426 823

- **Lower North Island**
  - Jeff Smith
  - 021 426 824

- **North and Mid Canterbury**
  - David Parker
  - 021 760 794

- **Otago and Southland**
  - Daniel Suddaby
  - 021 426 822

NEED MORE INFORMATION?

To see how other growers are using Luna Sensation, or to learn more about the product, visit www.lunasensation.bayer.co.nz

Insist on Luna Sensation from Bayer.

www.lunasensation.bayer.co.nz

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