Amistar® Technology for *Sclerotinia* stem rot and blackleg in canola

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Where producers are struggling with difficult-to-control or resistant weeds, canola offers options for the use of pesticides with alternative modes of action. Canola is unfortunately not exempt from diseases that may damage yield. Two pathogens of concern are *Leptosphaeria maculans*, which causes blackleg/stem canker, and *Sclerotinia sclerotiorum*, which causes *Sclerotinia* stem rot. Both can lead to serious short-term yield losses, while *Sclerotinia* can remain a problem for several years.

Sclerotinia stem rot

The primary inoculum could originate from sclerotia that survived in the soil, either from infected plant remains or from alternative weed hosts.

The disease damages vascular tissue in the stem, therefore water and nutrients cannot be transferred effectively. The pathogen flourishes in temperatures of around 15°C combined with long-lasting humid (high humidity) conditions in the weeks right before canola starts flowering, leading to increased pressure.



Sclerotinia stem rot has become a growing concern in canola production areas.

Infection mainly occurs at night when temperatures are slightly lower and the micro-climate within the leaf canopy of the canola field is ideal.

Blackleg and stem canker

Leptosphaeria maculans survives primarily on plant remains from the previous season. The pathogen is also seed-borne. Be cautious of low-quality, untreated or retained seed which may be an inoculum source.

The ideal conditions for the development of the pathogen are cool yet humid weather in autumn. Young seedlings are normally infected early in the season. The fungus will remain dormant in the plant until later in the season when it starts actively developing. It will then lead to stem or crown canker, and the plant will then topple over or die.

An integrated approach

Firstly, we need to manage crop conditions by looking at crop rotation systems and the planting of resistant cultivars. The micro-climate within the field plays a crucial role in *Sclerotinia* infections. In this instance, the density of the canopy can be managed through the cultivar type, fertilisation and plant density.

As we cannot always control environmental factors, chemical management is key. For effective results, a registered agent needs to be administered at the right time. Syngenta's Amistar® is registered for the management of, among others, blackleg and *Sclerotinia* in canola. Amistar® is a highly systemic strobilurin fungicide offering extended residual action. It is a valuable tool in the hands of the canola producer that, combined with agricultural practices, can help manage both diseases.



Leptosphaeria maculans, which causes blackleg/stem canker, survives primarily on plant remains from the previous season.

The timing of administration is crucial and Amistar® should always be used as a preventative measure. In targeted disease-management programmes (single administration), Amistar® at a dose of 500ml/ha must not be applied later than the two- to four-leaf stage for the management of blackleg. For *Scelerotinia* management, it is advised to administer between 660 to 1 000mℓ/ha (depending on the expected pressure) at 10 to 25% flowering.

Where both diseases need to be managed, it is advised to rather administer SCORE® at the two- to four-leaf stage, followed up by Amistar® at 10 to 25% flowering. Alternating between these active ingredients contributes to a thorough anti-resistance management strategy.

Refer to the product label for the complete guidelines. For more information, contact Syngenta South Africa on 011 541 4000.