BASF/ADAS Sclerotinia Monitoring

28th May 2009

Sclerotinia stem rot symptoms are now developing, mainly in the west. Late infection could still develop whilst the weather is unsettled. Most crops have now finished flowering but there is still flowering in some late crops and in pigeon damaged areas. Consider spray decisions on spring oilseed rape.

Weather conditions and osr growth stages

Overview: Most crops have finished flowering and are overall green with full sized translucent seeds. Late crops are still flowering whilst pigeon and pest damaged crops are still likely to keep flowering for several weeks.

Sclerotinia stem rot symptoms are now present in some crops in the Hereford area and in the south-west. High risk sites have 5-10% plants affected with lesions developing mainly below the mid-plant level. Fungicides appear to have given good control. In the east, only traces of infection have been reported so far. The recent unsettled weather has resulted in more petal sticking and more infection could still develop.

Sclerotial germination has been lower than usual this season in the depots. However petal tests have confirmed that there has been considerable air-borne production in some fields even where germination was low in the depots. Germination is continuing at low levels and there has been some new activity after recent rain.. Minimum temperatures are now consistently above 7ºC, the threshold for infection. Crops at high risk sites may still benefit from second fungicide sprays where flowering will continue into June.

Spring oilseed rape is also susceptible to sclerotinia and fungicide treatment should be considered at early to mid-flowering whilst the weather remains unsettled. Cultivation to establish spring oilseed rape could well result in a later germination of sclerotia than that reported for winter oilseed rape. Risks will be higher where soils are moist to the surface.

- SE and East Anglia – Most crops that have finished flowering and have well developed translucent seeds. Some late sown crops and areas with pigeon and rabbit damage are still flowering. Sclerotial germination has been restricted by the dry conditions. At Boxworth, germination has reached 26% but few apothecia are now present. There is some old petal sticking which might give some late infection after rain this week. Stem rot symptoms are evident at trace levels so far.
- There has been no increase in germination this week at the Romney Marsh site, but petal tests indicate high risks for some crops despite dry conditions. As the weather has become more unsettled some late infection could still develop at or just after the end of flowering.
- SW and West – Most crops have finished flowering, but a few late or pest damaged crops are still flowering. The germination in the Starcross, Devon depot has remained at 9%. At the Hereford site, germination has increased from 33% to 45%,

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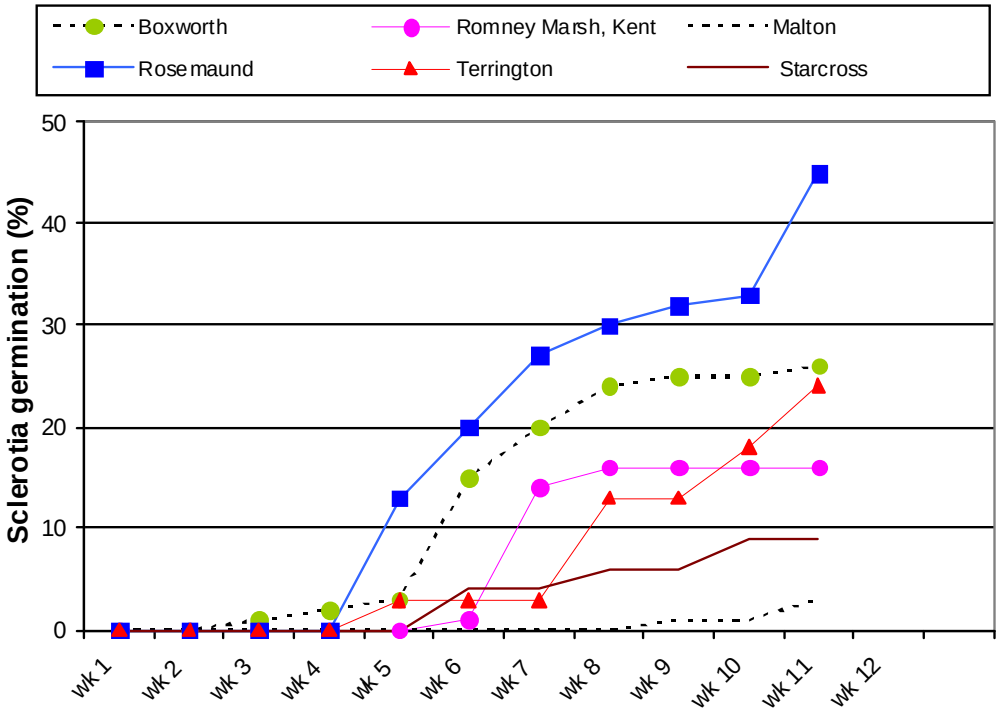
which is the highest to date in the depot network. Sclerotinia stem lesions have become obvious during the last week and up to 10% plants are affected in untreated areas. The west and south-west appear to be at higher risk than the east this season because of higher rainfall earlier in flowering.

- Lincs, and E Midlands – Crops have finished flowering or are at end of flowering stage.. There has been more heavy rain during the last week and 6% new germination at Terrington, S. Lincs this week brings the total to 24%. Petal tests indicate that sclerotiinia is active and could be damaging at high risk sites. Rain and night temperatures above 7ºC could still allow some late infection to occur.
- N England - Many crops have now finished flowering stage though there are some more backward crops at the late flowering stage. There has been 2% new germination at the northern depot this week, but the surrounding crop had a high level of petal infection indicating some crops in the region are at risk. Where there has been recent rain, there could be some risk of sclerotinia.

Sclerotia Germination (refer to website map for exact locations)



Key points

Germination has stalled at most sites because of dry weather. New germination after rain at Terrington this week.

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Petal infection results

The % petals infected with Sclerotinia spores are being measured at 6 sites at 3 different times. This supplements the sclerotial germination to show the degree of spore production and survival. Note these are **not** selected to be high risk sites.

	Start of flowering		Early flower		Mid flowering	
ADAS site	**Date**	**% infection**	**Date**	**% infection**	**Date**	**% infection**
Boxworth	13 April	0	20 April	2.5	27 April	5
Exeter	20 April	12.5	29 April	20	6 May	15
Kent	13 April	47.5	20 April	22.5	29 April	22.5
Rosemaund	14 April	10	22 April	35	27 April	40
Terrington	17 April	25	24 April	20	29 April	2.5
Malton	7 May	47.5	11 May	47.5	18 May	

Key points: Sclerotinia has been found on petals at all sites tested this season. The third petal tests are still underway for the site at Malton. Sclerotinia levels have increased since the start of flowering at Rosemaund, but decreased at Terrington. Five of the sites have results at or above the 25% petal infection threshold for economic damage from sclerotinia. The Kent, Malton and Terrington test scores have been high despite little germination in the depot when petals were sampled. Do not rely on dry weather to control your sclerotinia!

Actions

Most crops have now had their fungicide sprays. Second sprays may still be worthwhile at high risks sites with flowering crops so that protection will extend up to the end of flowering. In spring oilseed rape, a single spray just before mid-flowering may suffice.

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