

BASF/ADAS Sclerotinia Monitoring

14th May 2009



Sclerotinia germination now very slow where soils are dry. Many crops are now at or near the end of flowering but late crops are at full flowering. Sclerotinia infection could be underway in the west. Final spray decisions required.

Weather conditions and osr growth stages

Overview: Many crops are rapidly coming to the end of flowering and are overall green with translucent seeds. Later crops are at full flowering whilst pigeon and pest damaged crops are at early flowering. The early end to flowering offers some savings in second fungicide sprays. Sclerotial germination is now underway at all 6 depot sites but the numbers of fruiting bodies (apothecia) has decreased in the recent dry conditions. The first germination has started in North Yorkshire this week. Minimum temperatures are still not consistently above 7°C, the threshold for infection. Some petal sticking has been reported during the last week in the west and east. Conditions appear to have been most favourable for sclerotinia infection in the west so far this season. Petal tests are showing high levels of sclerotinia at high risk sites (40-50% petals infected). Some early infection could be underway and first symptoms should be evident by mid-May. It is now important to ensure flowering crops remain protected as the weather is unsettled. Where first fungicides were applied 2-3 weeks ago the second spray could be applied soon so that it gives good protection to crops likely to be flowering for the rest of May.

- SE and East Anglia – There are many crops that have finished flowering in the main body of the field and have well developed translucent seeds. Some late sown crops and areas with pigeon and rabbit damage are in full flower. Sclerotial germination has halted, at least temporarily, because of the dry conditions. At Boxworth, germination has reached 24% but few apothecia are now present. Little petal sticking reported as rainfall has been limited in many areas.
- 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 night temperatures are sometimes above 7°C, there is likely to be a risk of sclerotinia infection when there is some rain. Fungicide protection should now be maintained to protect flowering crops until the end of May.
- SW and West – Most crops are at the late flowering stage, but a few crops are already green with full sized seeds in the lower pods. The germination in the Starcross, Devon depot has not increased from the 6% recorded last week. At the Hereford site, germination has increased from 30% to 32%, which is the highest to date in the depot network. Petal tests are showing high levels of sclerotinia at high risk sites. As petals have been sticking to the foliage for more than a week, some stem lesions could soon be detectable. The west and south-west appear to be at higher risk than the east because of higher rainfall. Complete second sprays on strongly flowering crops at high risk sites.
- Lincs, and E Midlands – Crops are generally at late flowering stage, some late sown crops are struggling in the dry areas and are at mid-flower. There was no new germination at Terrington, S. Lincs this week and the total is still 13%. Petal tests

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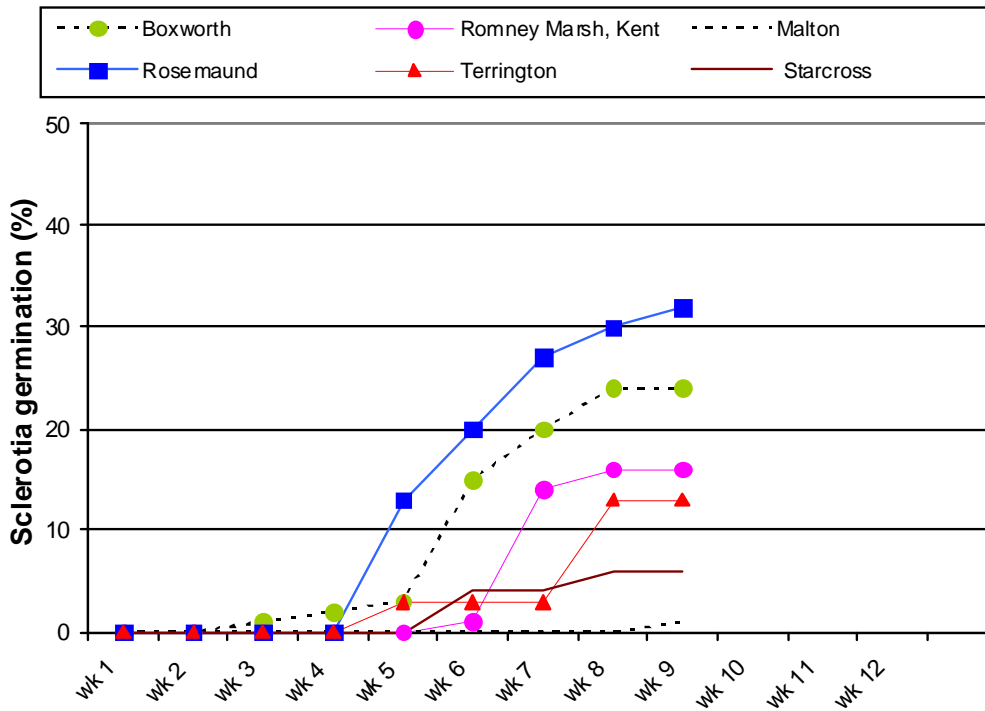
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indicate that sclerotinia is active and could be damaging at high risk sites. Rain and night temperatures above 7°C could allow infection to occur. Fungicide treatments should now be in place for flowering crops and second sprays may be required about mid-May.

- N England - Most crops are beyond the mid-flowering stage though there are some more backward crops. There has been the first germination (1%) at the northern depot, 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 already. Night temperatures below 7°C have limited the number of 'infection events' so far.

Sclerotia Germination (refer to website map for exact locations)



Key points

Germination has stalled at most sites because of dry weather. First record in North Yorkshire this week.

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.

ADAS site	Start of flowering		Early flower		Mid flowering	
	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	17.5
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	40	11 May			

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Key points: Sclerotinia has been found on petals at all sites tested so far. The third petal tests are underway and the preliminary results shown above may change as final counts are still to be completed after 10-14 days. Sclerotinia levels have increased since the start of flowering at Rosemaund. 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 are high despite little germination in the depot when petals were sampled. Do not rely on dry weather to control your sclerotinia!

Actions

As most crops have now had their first sclerotinia spray, plan the second sprays so that protection will extend up to the end of flowering. In untreated late crops with lower yield potential a single spray just before mid-flowering may suffice if flowering is largely completed by the end of May. There are some dry areas but the lessons of 2007 have been learnt –even 6 weeks without rain will not prevent sclerotinia infection.