

BASF/ADAS Sclerotinia Monitoring

7th May 2009



Sclerotinia germination increasing slowly at all sites except N. Yorks. Many crops are in full flower but forward crops are near the end of flowering. Sclerotinia infection could be underway in the west. Time to treat late crops and use second sprays so that crops are protected until the end of May.

Weather conditions and osr growth stages

Overview: Crops are mainly at full flowering, but forward crops will soon be finished flowering. There is considerable variation within and between crops due to late sowing, variable establishment, pigeon and rabbit damage and lack of rain. Sclerotial germination is now underway at 5 of the 6 depot sites but progressing slowly where sites are dry. Minimum temperatures are still not regularly above 7°C, the threshold for infection. Conditions have been favourable for sclerotinia infection in the west and in other areas where there has been rain recently. Petal tests are showing high levels of sclerotinia at high risk sites (40-50% petals infected) and only small changes between successive tests. Some infection could be underway and first symptoms should be evident by mid-May. It is now important to ensure flowering crops remain protected. Where first fungicides were applied 2-3 weeks ago the second spray could be applied soon so that it gives good protection for the rest of May.

- SE and East Anglia – Crops are moving steadily through flowering and many crops are beyond the mid-flowering stage and have over 50% pod set. There are considerable areas where pigeons and rabbits have damaged the crop that are at early flower. Sclerotial germination is active at some sites despite lack of rain. At Boxworth, germination has increased from 20% to 24% this week. Little petal sticking reported as rainfall has been limited in many areas.
- There has been a small increase in germination from 14% to 16% 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 crops during May.
- SW and West – Most crops are at the full flowering stage, but a few crops are already at the end of flowering stage. The germination in the Starcross, Devon depot has increased from 4% to 6% during the last week. At the Hereford site, germination has increased from 27% to 30%, 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. It is now urgent to ensure fungicides are applied to protect untreated crops and plan second sprays at high risk sites.
- Lincs, and E Midlands – Crops are generally at mid-flowering stage, some late sown crops are struggling in the dry areas and are just starting to flower. There was 10% new germination at Terrington, S. Lincs this week and the total is now 13%. Petal tests indicate that sclerotinia is active and could be damaging at high risk sites. The situation can change quickly once rain arrives. Soil temperatures are now

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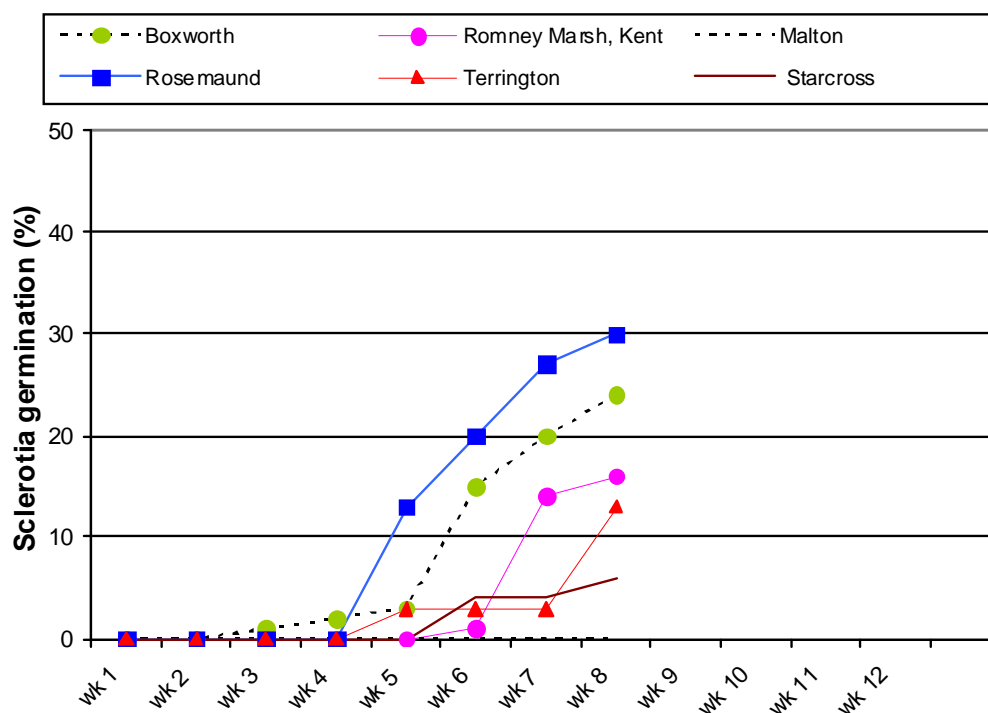
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favourable for sclerotial germination and night temperatures above 7°C could allow infection to occur. Fungicide treatments should now be in place for flowering crops and second sprays may be required about mid-May.

- N England - Most crops at the full flowering stage though there are some more backward crops. There is still no germination at the northern depot. 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 is increasing steadily where soils are moist

Petal infection results

The % petals infected with Sclerotinia spores are being measured at 6 sites at 3 different times - first flower and then for two more weeks. 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	25		
Kent	13 April	47.5	20 April	22.5	29 April	5+
Rosemaund	14 April	10	22 April	35	27 April	35
Terrington	17 April	25	24 April	17.5	29 April	2.5
Malton						

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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. Four of the sites have results at or above the 25% petal infection threshold for economic damage from sclerotinia. The Kent 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.