



Assessment of light leaf spot on oilseed rape

Method/protocol submitted by:

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Adapted from Jon West

Objectives of the method/protocol:

To estimate the attacks of light leaf spot on oilseed rape in experimental plots.

Brief description of the method/protocol:

This protocol presents a sampling method and a scoring scale to assess light leaf spot development in field experiments on oilseed rape at the leaf and pod level.

Possible uses of this method/protocol:

To estimate the components of resistance to diseases in oilseed cultivars.

Method/protocol:

- Sampling of the stems:

This assessment is made in mid-March.

- 1) Examine all leaves and pods in 3 areas of 0.5 x 0.5 m, at equal distances down the plot.
- 2) Ignore all naturally senescent tissue.
- 3) Include all necrosis and chlorosis attributable to disease.
- 4) Estimate % infection using the descriptions below. Record the average % infection from the 3 areas. Interpolate values if necessary.

- Severity classes:

Class	% infection	Leaves	Pods
1	0	No infection observable	No infection observable
2	0,1	Trace of infection	Trace of infection
3	1	Diseased plant with 1 small lesion ; plants with a few scattered lesions	Terminal raceme with a few scattered lesions
4	5	Leaves appear 1/10 infected ; diseased leaves with 2 lesions	Terminal raceme appears 1/10 infected ; diseased pods with 1 or 2 lesions
5	10	Leaves appear 1/4 infected ; diseased leaves with few large or many small lesions	Terminal raceme appears 1/4 infected ; diseased pods with 2 or more lesions
6	25	Area appears ½ infected ½ green	Area appears ½ infected ½ green
7	50	Area appears more infected than green	Area appears more infected than green
8	75	Very little green tissue left	Very little green tissue left
9	100	Leaves/pods dead – no green tissue left	Leaves/pods dead – no green tissue left

These descriptions are guides for specific levels; interpolate between these points as necessary e.g. 15%, 27%, 60% etc.

Post-flowering, diseases on stems and pods only should be recorded.

Advantages / Disadvantages of the method/protocol:

Relatively quick method to analyse large areas of crop. It can be done by an individual.

Supprimé : Possible uses of this method/protocol:¶

To estimate the components of resistance to diseases in oilseed cultivars.¶

References or examples of studies carried out by using this method/protocol:

West, J. et al. (2008): Components of resistance to diseases in winter oilseed rape cultivars: CORDISOR, HGCA project report ; no. 446, London : HGCA.