

# White leaf spot of winter oilseed rape in England

E.J. EVANS.

Agricultural Development and Advisory Service, Coley Park, Reading, England.

White leaf spot (*Pseudocercospora capsellae*) is an uncommon but increasing disease of oilseed rape in England. Low levels of infection have been recorded on winter oilseed rape in southern counties since 1976. In 1985, the disease occurred more widely and was more damaging than hitherto. Affected crops (mainly of cv. Bienvenu) were seen in the south-east and south-west prior to stem extension and in the West Midlands at the yellow bud stage. Levels of infection were generally low (< 10 % plants affected and often in foci).

fection reduced the photosynthetic area of pods causing premature ripening.

An un-replicated large block study was conducted in a Hants crop of cv. Bienvenu in June 1985. White leaf spot began to spread to the pods in mid-June. treatment of the farm crop with prochloraz (as "Sportak" at 1.25 litres c.p./ha) was advised on 17 June. The fungicide was applied with triazophos (as "Hostathion" at 1.0 litre c.p./ha) by tractor mounted sprayer (225 litres water/ha).

Details of disease assessments and yield are given below.

Treatment	% pod area affected by white leaf spot (16 July)	Yield (t/ha) at 91 % DM	Relative yield
Untreated	21.1	2.47	100
Treated	3.8	2.74	111

Symptoms in the spring were white rounded (up to 1 cm in diameter), slightly sunken leaf spots. When sporulating the central area of lesions appeared pink in colour and often turned grey with age. The disease spread to the upper leaves and bracts during cool, showery weather at the end of May and early June. Symptoms were numerous small, dark flecks. These soon coalesced to form dendritic lesions which occasionally developed into white leaf spots.

Symptoms on the pods were a network of dark lines which coalesced to form a brown to black slightly sunken lesion. Lesions were similar to those of dark pod spot (*Alternaria brassicae*). They differed from the latter in tending to be more elongate and lacking a distinct border. microscopic examination was often necessary however, to distinguish with confidence between the two. Severe in-

A similar sized untreated but wheeled strip was left extending 400 m across the field to measure the effect of the disease.

\* Prochloraz controlled white leaf spot on the pods, other diseases were not a problem.

\* There was no evidence of pest damage on pods from either area on 16 July.

\* The fungicide/insecticide tank mix appears to have given a worthwhile yield increase but replicated plot trials are necessary to confirm this effect.

Samples of harvested seed were later shown to be infected by *P. capsellae*. Early reports for 1986 suggest that white leaf spot is more widespread in southern England than in the corresponding period of 1984 and 1985. Further work is necessary to establish the relative susceptibility of cultivars and to attempt effective control by fungicide seed treatments and foliar sprays.