Table 2: Effect of Benlate 50 W at 1 kg/ha on white mold and seed yield in Kentwood beans at Mitchell.

Treatment	White Mold Sept. 8 (%)	Seed Yield Sept. 13 (kg/ha)
Check	67.7 b+	2605 a
Spray at bloom (July 23)	66.3 b	2635 a
Spray at 5% disease (August 11)	46.3 a	2633 a

Table 3: Effect of Benlate 50 W at 1 kg/ha on white mold in Fleetwood beans at Ailsa Craig.

Treatment	White mold Sept. 9 (%)
Check	71.0 b+
Spray at bloom (July 31)	67.0 ab
Spray at 27% disease (Aug. 19)	58.5 a
Spray July 31 and Aug. 19	55.0 a

+ Values in a column followed by a common letter are not significantly different at P = 0.05 (Duncan's New Multiple Range Test).

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Effect of Numbers of Apothecia of *Sclerotinia sclerotiorum* on White Mold of White Bean

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The effect of number of apothecia of *Sclerotinia sclerotiorum* on the subsequent number of white bean plants (*Phaseolus vulgaris*) infected with white mold was investigated at Guelph in 1981. The plot measured 23 m x 21 m and was planted in 0.75 m rows with the susceptible variety Seafarer. Each row was divided into 2 m subplots. The number of apothecia was

recorded in all subplots on 22 and 31 July. On 13 August, 100 of the 310 subplots were rated. The percentage of infected plants was determined on 5 August for all subplots, and on 11, 14 and 20 August for 77, 55 and 33 subplots, respectively. Disease was first observed on 5 August. Percentages of diseased plants were regressed against numbers of apothecia to examine the effect of local apothecia on disease.

First, subplots were examined (Table 1). Only plots that contained apothecia were used in the regression analysis. Low to moderately high regression coefficients were obtained between numbers of apothecia and disease. This suggests that some of the disease in small plots was due to inoculum produced within those plots but that much of the disease was due to inoculum produced outside the plot.

In a second analysis the entire plot was divided into quarters. Each quarter plot measured 10 m x 10.5 m. High regression coefficients were found between apothecium numbers on 22 and 31 July and percentage of infected plants throughout August (Table 2). The numbers of apothecia present after the epidemic started, represented by counts on 13 August, were less strongly related to disease severity. These results suggest that most of the disease within an area of 105 m^2 was caused by apothecia that were produced in that area and which appeared before the epidemic started.

Table 1: Regression coefficients (r) relating the number of apothecia to the percentage of infected plants per subplot (2 m section of row).

Date apothecia were counted	Date diseased plants were counted			
	5 August	11 August	14 August	20 August
22 July	0.07	0.25	0.67	---
31 July	0.28	0.11	0.19	0.44
13 August	---	---	0.58	0.56

Table 2: Regression coefficients (r) relating the number of apothecia to the percentage of infected plants per quarter plot (10 m x 10.5 m).

Date apothecia were counted	Date diseased plants were counted			
	5 August	11 August	14 August	20 August
22 July	0.85	0.94	0.87	0.78
31 July	0.95	0.77	0.73	0.76
13 August	---	---	0.21	0.43