

FUNGICIDAL CONTROL OF LEAF SPOT OF LADY'S FINGER

Lady's finger (*Abelmoschus esculentus*) is an important vegetable crop cultivated extensively in Kerala. The crop is subject to severe leaf spot disease caused by *Cercospora hibisci* Tracy and Earle. The main symptom of the disease is development of characteristic olive brown to sooty coloured spots on the under surface of the leaves. The size of the spots varies very much. Usually the entire lower surface of the leaves gets affected (Fig. 1). When the disease occurs in severe form the infected leaves fall down. Singh (1953) reported that three sprayings with Bordeaux mixture (4-4-50) or 0.3 percent Perenox eliminated the infection of Bhindi by *Phyllosticta* sp. and *Cercospora hibisci*. Tandon and Singh (1968) reported that *Cercospora* leaf spot of groundnut was controlled effectively by 5 to 6 applications of Dithane M-22 and Dithane Z-78.

A field experiment was conducted to determine the effect of Bordeaux mixture 1 percent, copper oxychloride (Fytolan) 0.3 percent and Zinc ethylene bisdithio carbamate (Dithane Z-78) 0.2 percent in controlling the disease. Each treatment and control (no fungicide) was replicated four times. The first fungicidal spraying was given as soon as the initial symptom of the disease was noted; a second spraying was given twenty days thence. During spraying special care was taken to cover the lower surface of the leaves, since the infection usually occurred on the lower surface. The incidence of the disease was graded after fifteen days of the second spraying. A total of one hundred and four plants were graded for each treatment. The plants were graded according to the severity of infection based on the criteria given below.

<i>Grade</i>		<i>Criteria</i>
Slight		Not more than one or two spots per leaf
Mild	•••	Ten percent of the leaf area infected
Medium	...	Thirty percent of the leaf area infected
Heavy		Sixty percent of the leaf area infected
Very heavy		Above sixty percent of the leaf area infected

The data were statistically analysed, based on which the fungicides could be ranked thus with reference to degree of infestation :

Control - Dithane Z 78 - Fytolan - Bordeaux mixture

Bordeaux mixture 1 percent was thus found to be superior to Fytolan and Dithane Z-78 and two sprayings with Bordeaux mixture 1 percent one as soon as the initial symptoms were noticed and another twenty days thereafter were found effective in controlling the disease.

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References

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CONTROL OF BHINDI LEAF.SPOT

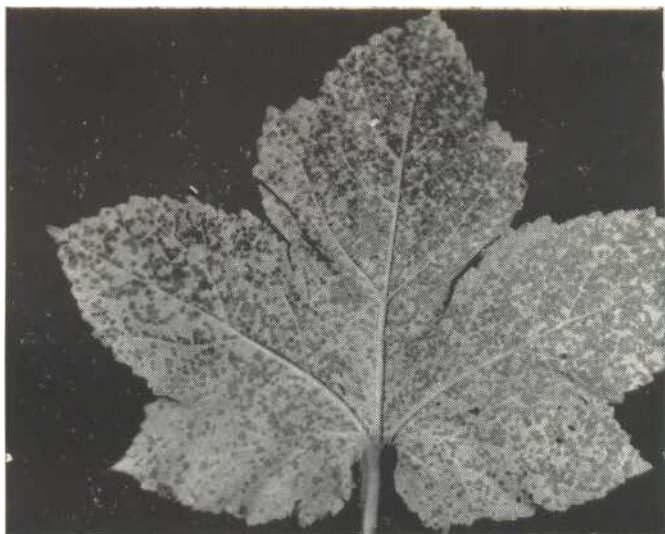


Fig. 1. Bhindi leaf showing spots caused by *Cercospora hibisci*,