plant pathogens by stimulating the antagonists. In the the present study, the suppression or elimination of *Helminthosporium*, a pathogen on rice, by the spray of insecticides might be due to the of well known antagonists like *Trichoderma* and *Penicillium*.

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Effect of certain Nonsystemic Fungicides on the Control of Powdery Mildew Disease of Bhendi (*Abelmoschus esculentus* L.)

Powdery mildew caused by the fungus *Erysiphe cichoracearum* D. C. is an important disease affecting bhendi crop. The affected leaves dry up and finally fall off. For purposes of controlling this disease, sulphur dust and wettable sulphur are at present recommended. The efficacies of newer fungicides need to be tested and with this objective in view studies were undertaken to assess the efficacy of the fungicides on the control of powdery mildew of bhendi and the results are presented.

Experiments were conducted at the Vegetable Section, Agricultural College and Research Institute, Coimbatore to

compare the efficacy of five fungicides for the conrrol of powdery mildew disease of bhendi. Bhendi crop was raised as per the improved package of practices. Three rounds of treatments were given at fortnightly intervals initiating one month after sowing and the trials were conducted in two monsoon seasons 1968. The percentage of powdery mildew disease and the yield of pods were recorded and subjected for statistical scrutiny.

The results of investigations are furnished in a Table below.

TABLE. Effect of fungicides on the yield and control of powdery mildew disease (Pooled analysis of two seasons)

Treatment	Incidence of powdery mildew (% traasformed)	Mean yield (Kg/plot)	Percent on control
Morestan (0.05%)	43.40	6.41	131.7
Wettable sulphur (0.25%)	40.87	5.66	116.2
Wettable sulphur (0.5%)	31.49	7.85	161.2
Cosen (0.1%)	41.32	6.44	132.2
Sulphur dust (22 kg/ha)	29.03	7.56	155.2
Control (no treatment)	59.10	4.87	100.0
Significant by 'F' test	Yes	Yes	—
S. E.	2.64	0.29	—
C. D. (P=0.05)	7.62	0.87	—

Sulphur dust significantly reduced the incidence of powdery mildew disease in bhendi with 29.03 per cent (transformed) as against 59.10 per cent in the untreated control. Next in rank was wettable sulphur 0.5 per cent incidence. These two treatments were on a par statistically. Sulphur dust has been recommended for the control of powdery mildew disease in other vegetable crop (by Dutorr 1948), Anon (1947) and Nour (1957). Cosan (0.1%) and Morestan (0.05%) were also superior to control. But in the case of Morestan (0.05%) phytotoxic injury on fruits was noticed in the forst picking after treatment. The usefulnss of Morestan (0.1 per cent) in the control of powdery mildew has been established in other vegetable crops by Mandloi

and Khare (1969), Pessanha *et al.* (1969) Paulus *et al.* (1969), Kakran and Sidkey (1969) and Kushwah and chand (1971). But phytotoxic injury was noticed in fruits of first picking due to Morestan treatment is also reported by Sohi and Sridhar (1971). wettable Sulphur (0.5 percent) and sulphur dust also recorded significantly higher yields with an increase of 61.2 and 55.2 per cent respectively over control.

Thus the studies have revealed the superiority of sulphur dust (22 kg/ha) and wettable sulphur (0.5%) towards the control of powdery mildew disease of bhendi. Cosan (0.1%) was also found to be comparatively effective in reducing the powdery mildew disease.

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