shoots of subabul by both the nymphs and adults resulted in fading and drying of tender shoots. The appearance of this sap feeding insect in severe form may pose a threat to extensive cultivation of subabul in Karnataka. The occurrence of psyllids on subabul for the first time has warranted the subabul growers to take up suitable and timely control measures to check the population. It may also be necessary to have surveillance on the pest in other areas to supress its population in the initial stages to prevent ravage by the pest.

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References

GOPALAN, M., JAYARAJ, S., ARIAVANAM, M., KATHAPILLAI AND SUBBARAO, P. V., 1988, New Record of *Heteropsylla cubana* Crawford (Psyllidae; Homoptera) on Subabul, *Leucanena leucocephala* (Lam.) de Wit in India *Current Science*, **57** (20) : 1125-1125.

PRATAP SINGH, 1988, *Heteropsylla cubana* Crawford – A new psyllid pest of Leucaena in India. *Indian Forester*, **114** (4) 200-205.

THAKUR, M. L., AND PILLAI, S. R. M.,1985, Insect fauna of subabul (*Leucaena leucocephala* (Lam.) de Witt.) from South India. *Indian Forester*, **111** (2) : 68-77.

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Effect of Date of Planting and Weather Condition on the Development of Blight on Coriander caused by *Colletotrichum gloeosporioides*

Coriander blight incited by *Colletotrichum gloeosporioides* (Penz.) Penz. and Sacc., is one of the major diseases and causes considerable damage both in seed production and also in leafy vegetable (Naik, 1988). Most of the varieties available are found susceptible to blight. In the absence of resistant cultivars, disease escape is one of the techniques followed to minimize the losses due to plant diseases. Sufficient data are not available either on the effect of date of planting or the impact of weather conditions on the incidence of coriander blight. Hence, a field experiment was laid out during kharif, 1987 under rainfed condition at the MRS, UAS, Dharwad.

A susceptible local variety of coriander was used and planting was done at an interval of 7 days commending from first week of June and spread upto third week of July in 1 X 1 m2 plots. Each treatment was replicated thrice. Fifty days after sowing, the disease incidence and intensity were recorded. To record disease intensity, large number of seedlings in each treatment were uprooted and the number of individual flowers showing blighting symptom was noted

separately. Subsequently, intensity was calculated by using the formula–

$$\text{Per cent disease intensity} = \frac{\text{Number of flowers infected}}{\text{Total number of flowers prsent}} \times 100$$

Later, the data were statistically analysed and correlated to the weather conditions.

It is quite evident from the Fig., that the least incidence (23.83%) and severity (35.67%) of blight were observed on the crop sown during third week of June, while, maximum incidence (89.76%) and severity (88.90%) were noticed on the crop sown during second and third weeks of July, respectively. The blight intensity was more in early as well as late sown crops. These periods coincided with high relative humidity, rainfall and low temperature, which might have favoured the development of disease at susceptible stage of the seedlings. The high relative humidity during this stage of the crop played a significant role in development of disease and was significantly correlated with incidence and intensity of blight, whereas, temperature did not have significant correlation.

Though the rainfall during the susceptible stage of the host had no significant positive correlation, more incidence of blight was observed when the rainfall was intermittent and spread over a period of time. Amount of rainfall was found to be less important than prolonged wetness of the seedlings by intermittent rain for

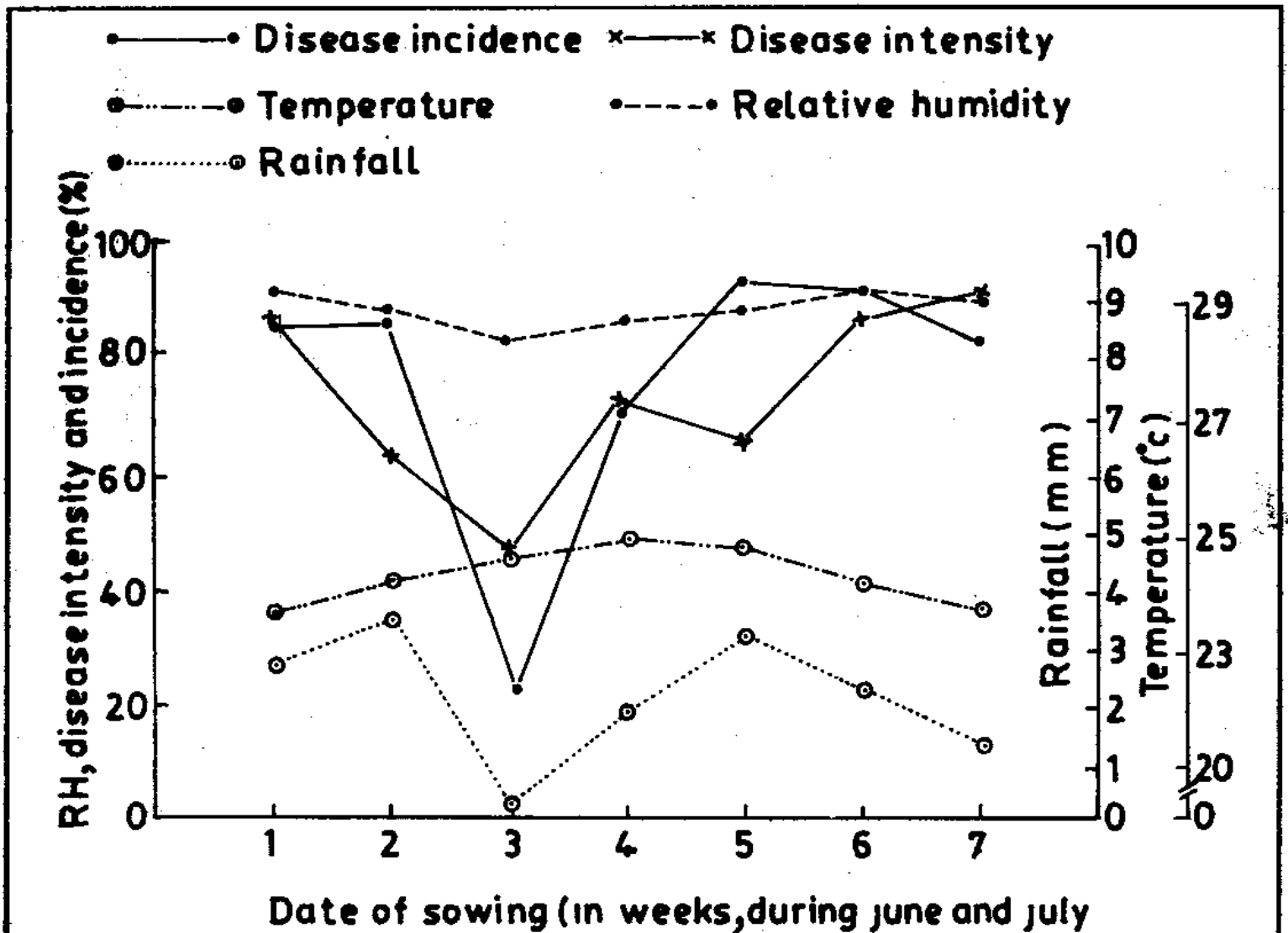

FIG. CORIANDER BLIGHT INCIDENCE AND INTENSITY IN RELATION TO WEATHER CONDITIONS

4-5 days during the susceptible stage and it also caused high atmospheric relative humidity which in turn might have helped development of blight.

Maximum incidence and severity of blight was observed when the relative humidity was above 88 per cent and temperature around 23.5°C, while, the minimum blight was observed with 82 per cent and 24.5°C, relative humidity and temperature, respectively. In the present investigation, the mean temperature and average rainfall did not show independent significant effect on blight development in combination with relative humidity. Similar results were recorded by several workers in various plant diseases caused by *Colletotrichum* spp., (Moses and Govind Rao, 1969; Chambers, 1969; Peries, 1979; Maiti and Sen, 1982; Naik, *et al.*, 1984; and Irwin, *et al.*, 1985).

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References

CHAMBERS,A.Y.,1969, Relationship of weather conditions to occurrence, severity and control of stem anthracnose of lima beans. *Phytopathology,* **59** : 1021.

IRWIN, J. A. G., CAMERON, D. F. AND RATCLIFE, D.,1985, Influence of environmental factors on the development of the anthracnose disease of *Styosanthes* spp. *Australian Journal of Agriculture Research,* **35** : 473–478.

MAITI, S. AND SEN, C., 1982, Incidence of major diseases of betelvine in relation to weather. *Indian Phytopathology,* **35** : 14-17.

MOSES, C. J. AND GOVIND RAO, P., 1969, Coriander anthracnose caused by *Glomerella cingulata,* a new record from India. *Indian Phytopathology,* **22** : 145-146.

NAIK, K. S., 1988, Studies on blight of coriander caused by *Colletotrichum gloeosporioides* (Penz.) Penz. and Sacc. *Mysore Journal of Agricultural Sciences,* **22** : 213.

NAIK, M. K., HIREMATH, P. C., HEGDE, R. K. AND HIREMATH, S. V., 1984, Status of anthracnose of betelvine (*Piper betel* L.) caused by *Colletotrichum gloeosporioides* (Penz.) Penz. & Sacc. in Karnataka. *Plant Pathology Newsletter,* **2 (2)** : 13-14.

PERIES, O. S., 1979, Studies on the relationship between weather and incidence of leaf diseases of Hevea. *Planter Malaysis,* **55 (637)** : 158-169.