Studies on Cercospora leaf spot of Mungbean *Phascolus aureus* **Roxh.**

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The cercospora leaf spot of Mungbean incited by *Cercospora canescens* Ellis & Martin was observed in a severe form during August, 1974 in the fields around Agricultural College Campus, Junagadh. The fungal physiology as well as the effect of different fungicides in controlling this disease were studied under this project.

Carrat leaf decoction medium was the best non-anythetic solid medium, while Richard's medium was the best liquid medium for the growth of fungus, *Cercospora canescens* was able to metabolize, nitrate nitrogen and amonical nitrogen. Orgnic nitrogan proved to be poor for the growth of fungus.

When aminoacids were tried for studying the effect of the growth of fungus as a nitrogan source, L-proline proved to be the best in supporting the fungal growth. L-tyrosine supported the best growth of the fungus when substituted as a carbon source.

Out of twenty one carbon sources tested for their suitability in supporting the growth, sucrose was found to be the best source of carbon followed by sorbose. Optimum pH for the growth and sporueation as, adjusted in Richard's medium was 6.0. The thermal death point of the mycelium and spore was observed in the range of 55° to 60° C and 60° and 65° C respectively.

An experiments were also conducted to find out the most effective fungicide in inhibiting the growth in vitro as well as in controlling the disease under field condition. Effective inhibition of the fungus in vitro was obtained with Benlate, Bavistin and Brestan 60. Benlate performed better that any other fungicides and antibiotics under field conditions in controlling the disease when compared with check. Two sprays of Benlate (0.05%) have been suggested at the interval of ten days. First spraying should be done after one and half month of the germination and second, 10 days after the first sprayirg for better control of cercospora leaf spot of Mungbean.