Pakistan J. Sci. Ind. Res., Vol. 27, No. 4, August 1984

A LEAF SPOT DISEASE OF DAHLIA DAHLIA VARIABILIS (WILLD.) DESF. CAUSED BY ALTERNARIA TENUISSIMA (KUNZE EX PERS.) WILTSHIRE

S. A. Jamil Khan and A. K. Khanzada

Cereal Diseases Research Institute, Pakistan Agricultural Research Council, University of Karachi, Karachi.

(Received May 26, 1984)

INTRODUCTION

In April, 1984 a diseased specimen of Dahlia was collected from nursery at the Cereal Diseases Research Institute, Karachi. The disease manifests in the form of small light brown to straw coloured irregular lesions with distinct black powdery growth of a fungus *Alternaria* sp. Under severe attack, spots become coalescent and cover the entire leaf surface. The maximum infection was noted on near leaf blade or lamina. The affected leaves turn yellow and finally defoliate (Fig. 1). The disease progresses from

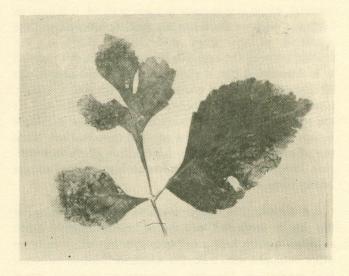


Fig. 1. Leaf spots of Alternaria tenuissima on Dahlia.

lower leaves spreading upward and the incidence of the disease observed was 60-80%.

On microscopic examination the casual fungus was identified as *Alternaria tenuissima* (Kunze ex Perse.) Wiltshire which closely agrees with the description given by Ellis[1]. There does not appear to be any previous record of *A. tenuissima* on Dahlia. Brief description of the fungus is as under:

Conidiophores solitary or in group, straight to cylindrical, septate, pale to mild pale brown having 1 to many scars, measuring $122 \mu \log$, 4-6 μ thick. Conidia solitary or in short chain 1-2 or 3, straight or slightly curved, obclavate, tapering gradually to the beak which is up to half the length of the conidium, pale to mild golden brown usually smooth, some minutely vertuculose, 4-7 transverse and many longitudinal septa, measuring 25-98 μ x 6-18 μ

Acknowledgement. The authors are thankful to Dr. A. Ghaffar, Prof. Plant Pathology, University of Karachi for help in the identification of fungus. The specimen has been deposited in the Mycological Herbarium Karachi, Vide ACC, No. 4709.

REFERENCES

1. M.B. Ellis, *Dematiaceous hyphyomycetes*, (Commonwealth Mycological Institute, England, 1971), p. 608.