Pak. J. Bot., 6(2): 163, 1974.

COTTON WEEDS AS HOSTS OF MYROTHECIUM RORIDUM Tode ex. Fr.

MUHAMMAD TANVEER, AHMAD SALEEM AND ESHAN-UL-HAO

Cotton Research Institute, Multan, Pakistan,

Myrothecium roridum is a wide spread fungus, causing leaf spot disease of cotton in cotton tract s of Punjab (Tanweer & Saleem, 1974). It has been observed on many cotton varieties including the local ones. The disease first appears as small circular, whitish, grey ringed spots with define margins on the leaves. As the spots grow in size, they coalesce to form large irregular spots. Concentric rings appear under unfavourable conditions of development and on both sides of the leaf black pinhead sized sporodochia of round to irregular shape are seen.

The fungus, in addition to cotton, has also been reported to be pathogenic on Beet (Sleeth, 1956) Gardinia, Viola(Barnett, 1960), Red clover (Cunfer et al 1969) Snapdragon (Wilhelm& Baker, 1945), from different countries of the world. In Pakistan, it has been found on Lycopersicum esculentum and Xanthium strumarium (Khan & Kamal, 1958).

During the cotton growing season of 1973-74 symptoms of the disease have also been observed at the Cotton Research Institute, Multan on Amaranthus viridis Linn (Amaranthaceae) CMH, 14; Convolvulus arvensis Linn. (Convolvulaceae) CMH,8; Cucumis sp. (Cucurbitaceae) CMH 15; Portulaca oleracea Linn. (Portulacaceae) CMH, 9, and Corchorus olitorius Linn. (Tiliaceae) CMH, 10.

All these hosts are weeds of cotton crop and may be serving as primary source of inoculum for the disease spread. The fungus has been identified as Myrothecium roridum Tode ex Fr. (IMI No. 184668). To control Myrothecium leaf spot of cotton in addition to other control measures, eradication of weeds from cotton fields and their vicinity is suggested. Further studies on the role of cotton weeds in the spread of disease needs investigations.

Acknowledgement

The authors are greatly indebted to Dr. Mahbub Ali, Director and Mian Talib Hussain, Senior Scientific Officer, Cotton Research Institute, Multan, for reading the manuscript and valuable suggestions.

CMH-Cotton Mycological Herbarium, Cotton Research Institute, Nultan.

References

Barnett, H.L. 1960. Illustrated genera of Fungi Imperfecti-Burgess Publishing Co., Minn.

Cunfer, B.M, J.H. Graham and F.L. Lukezie. 1969. Studies on the biology of Myrothecium roridum M. verrucaria pathogenic on red clovr. Phytopath, 59: 1306-1309.

Khan, S.A. and M, Kamal, 1968. The Fungi of South West Pakistan. Pak. J. Sci. & Ind. Res. II: 61-80.

Sleeth, B. 1956. Slow necrosis of beets of Ireland. Pl. Dis. Reptr. 40-80.

Tanveer M. and A. Salcem. 1974. Myrothecium leaf spot disease of corton in Pakistan. The Pak. Cottons, 18, No. 4 (In Press).

Wilhelm G., and K.F. Baker, 1945. Myrothecium Crown and stem canker of green house snapdragon in Colorado, Pl. Dis. Reptr., 29: 700-701.