

ADDITION TO THE FUNGAL FLORA OF PAKISTAN COTTON

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In report on the fungi of Pakistan (Ahmad, 1956, 1969; Khan & Kamal, 1968; Saleem *et al.*, 1975; Mirza & Qureshi, 1978) at least 40 genera and 80 species of fungi have been recorded on cotton. In the present study 8 species of fungi associated with cotton have been reported, 4 of which (marked with asterisk) are new records for Pakistan. These fungi were isolated from seeds, seedlings or rhizosphere of cotton plants. Infected parts of the plants were cut into small pieces, sterilized in 0.1% solution of mercuric chloride, rinsed twice in sterile distilled water and transferred on Potato Dextrose Agar. The dishes were incubated at 28°C for 72 hours and fungi arising out of the infected parts were identified. The fungi are arranged alphabetically in accordance with the classification of Ainsworth *et al.*, (1971). Cultures of fungi have been deposited in the Herbarium of the Commonwealth Mycological Institute, Kew, Surrey, England.

PHYCOMYCETES

Peronosporales

Pythium butleri Subramanian

Gossypium hirsutum seedling, Multan IMI 199924

ASCOMYCETES

Sphaeriales

Chaetomium erectum Skolko & Groves, Canad. Jour. Res. C. 26: 277–278, 1948.

Gossypium hirsutum seed, Multan

**Chaetomium subaffine* Sergejeva 148, 1961

Gossypium hirsutum seedling, Multan IMI 199926

DEUTEROMYCETES

Sphaeropsidales

- **Phoma sorghina* (Saccardo) Boerema, Devenbosch and van Kesteren.
Gossypium hirsutum leaves, Multan IMI 199920

Moniliales

- Aspergillus niveus* Blockwitz. Ann. mycol. Berl. 27: 205–206, 1929.
Gossypium hirsutum seedling, Multan IMI 199922
- Fusarium sporotrichoides* Sherb akoff Mem. Cornell Univ. Agri. Expt. Stn 6:
 183, 1915.
Gossypium hirsutum seedlings, Multan IMI 199923
- Myrothecium verrucaria* (Alb. & Schw.) Ditmar in Sturu, Deutschl. Crypt. Flora.
 3(1): 1831.
Gossypium hirsutum rhizosphere, Multan IMI 199919
- **Sporotrichum* sp. Link Ex. Fries. Mag. Gres. Naturf. Freunde, Berlin, 3: 13, 1809.
Gossypium hirsutum seed, Multan.

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OCCURRENCE OF LATE BLIGHT OF POTATO IN PAKISTAN

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During a survey, the potato summer crop (July-October 1984) was found heavily infected by a foliar pathogen in Kalam and Malam Jaba valleys of district Swat, Pakistan. The crop looked as if it has been completely burnt. Brown to dark brown, water-soaked lesions were found on leaflets, rachis, petioles and stems. On underside of leaflets, a downy whitish fungal growth was observed. Under the microscope, sporangiophores were seen arising from stomatal openings. Sporangiophores hyaline and branched; sporangia hyaline, thin walled, oval with apical papilla were borne at the tip of a branch of sporangiophore. Sporangia 20–38 X 12–23 μm in diam. The fungus was identified as *Phytophthora infestans* (Mont.) deBary similar to that described by Kiraly *et al.* (1974). This is the first report on the occurrence of late blight on potato crop in Pakistan.

Reference

- Kiraly, Z., Z. Klement, F. Solymosy and J. Voros. 1974. *Methods in Plant Pathology*. Elsevier Scientific Publishing Company Amsterdam. pp. 509.