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ALTERNARIA BLIGHT OF *CANNA INDICA* L

A severe leaf blight of canna (*Canna indica* L.) was observed in the Agricultural college Campus, Vellayani, Kerala, during February - March, 1972. The disease appeared on the leaves as water-soaked spots which gradually turned yellowish brown and finally dark brown in colour surrounded by a light yellow halo. Generally the infection started along the margins of the leaves from where they spread inwards forming big patches. Occasionally, the spots appeared near the midrib or any other part of the lamina. The characteristic concentric rings could be observed on individual spots. The old leaves got infected first and later the disease spread to other leaves. Under hot humid periods, the infection was found to spread rapidly.

On tissue isolation from the infected leaf material a species of *Alternaria* was obtained. The pathogenicity of the isolate was established by artificial inoculation of healthy canna plants and identical symptoms produced on inoculated leaves within 4-6 days. The fungus was found to be capable of infecting tomato and chilli. On chilli fruits, the spread of the pathogen was rather slow.

The isolate grew well on potato-dextrose agar medium but sporulation was sparse. The nature of spores were brownish in colour with swollen base, tapering at the proximal end forming a filiform beak. Spores were produced in chains and they varied in size and shape. They measured 23.46 — 121.44 X 6.90 — 13.80 μ with a mean of 48.45 x 9.96 μ (including the beak); the beak alone measured 22.49 — 66.24 μ . The spores were transversely and longitudinally septate, the number of septa varied from 2 - 7 and 0 - 3 respectively (Fig. 10).

The causal organism was identified as *Alternaria tenuissima* (Kunze ex Pers.) Wiltshire and this is a new record on *Canna indica*. There is a report of *Alternaria tennis* from Canada which caused petal blight of canna (Thompson, 1961). However, the petal blight phase was not observed during the present study.

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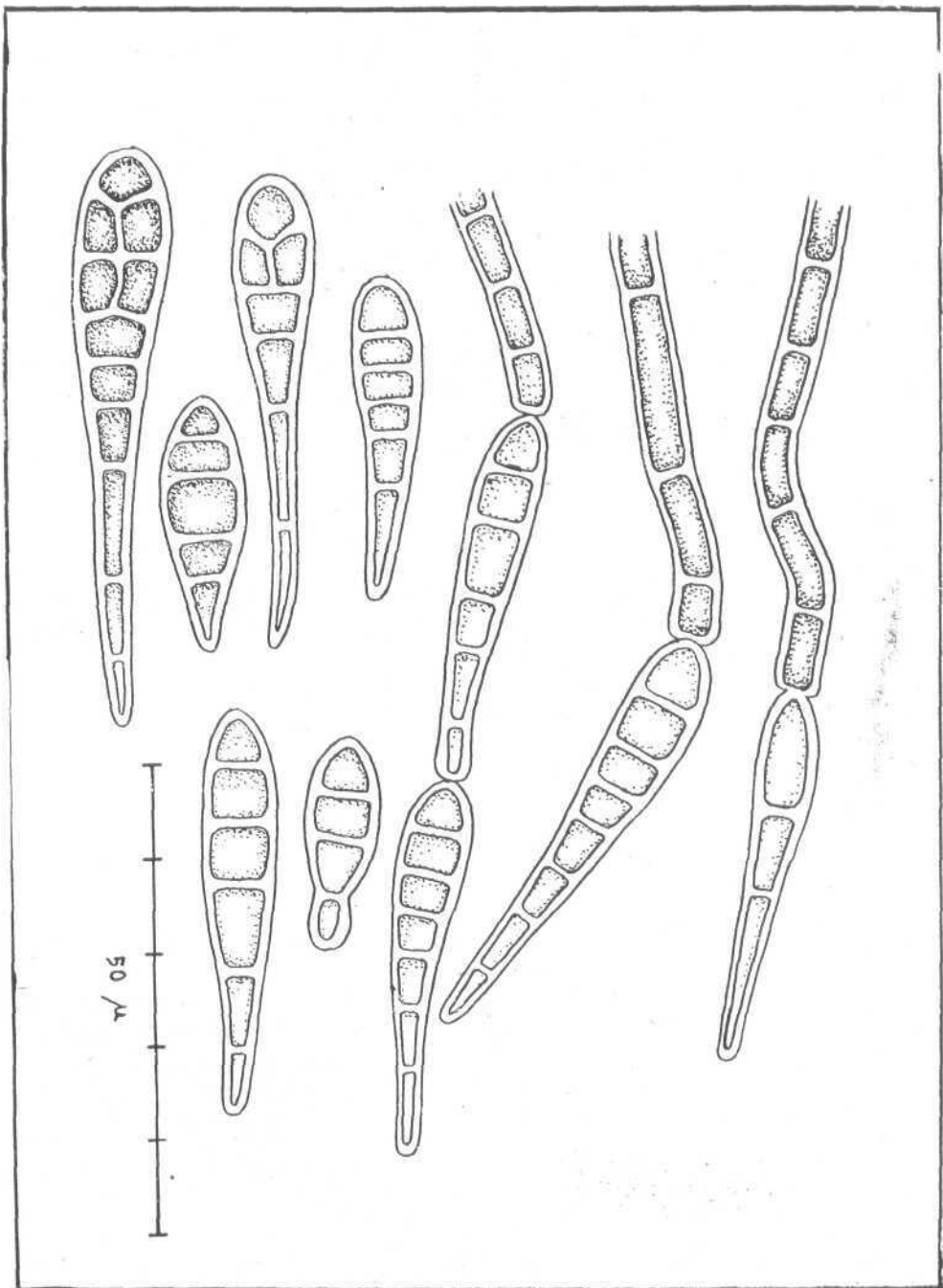


Fig. 1. Conidia of different forms and conidiophores from the host.

സംഗ്രഹം

അഗ്രിക്കൾച്ചറൽ കോളേജ് വളപ്പിൽ കാനച്ചെടികളെ ബാധിക്കുന്ന ഒരു പുതിയ രോഗം ഇലകൾ രോഗം കാണുകയുണ്ടായി. ആട്ടർനേറിയ സൈസീമ എന്ന കുമിളാണ് ഈ രോഗകാരണം. ഇലകളിൽ പാടുകളായി പ്രത്യക്ഷപ്പെടുന്ന ഈ രോഗം ഈർപ്പവും ഉയർന്ന ഉഷ്ണവും അന്തരീക്ഷനിലയിൽ പെട്ടെന്ന് പടർന്നുപിടിക്കുകയും ഇലകരിച്ചിൽ രൂക്ഷതരമാകുകയും ചെയ്യുന്നു.

REFERENCE

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