

### FRUIT ROT OF BITTER GOURD

Mature fruits of bittergourd (*Momordica charantia* L.) were found to be seriously infected by a fungal pathogen during July-September 1979, in the Instructional Farm and Research Station attached to the College of Horticulture, Vellanikkara.

The disease started with the appearance of small, slightly sunken, light brown, water-soaked lesions on the fruits, particularly around the styler ends. These lesions progressively enlarged along the long axis and eventually coalesced involving larger patches which turned black. The fruits were badly shrunk and decayed and remained attached to the plant partially. The fungus was isolated and brought into pure culture on potato dextrose agar medium and Koch's postulates were satisfied.

Based on microscopic studies, the fungus was identified as *Glomerella cingulata* (Stonem) Spauld and Schrenk (Saccardo, 1905) and the imperfect stage as *Colletotrichum gloeosporioides* (Penzig) Sacc. (Saccardo, 1884).

Perithecia are dark brown to black, globose to obpyriform, ostiolate, slightly papillate with periphyses and measure  $1.10-3.25 \mu$  diam. Asci are clavate to cylindrical, thickened at the apex, eight spored, interspersed with paraphyses, forming groups at the base of the perithecium, unitunicate and measure  $32-75 \times 7-14 \mu$ . Ascospores are narrowly oval, uniseptate and measure  $8-18 \times 3-7 \mu$ .

Acervuli are subepidermal, dark brown to black and measure  $450 \mu$  diam. Setae are sparse, 0-2 septate, dark brown in colour, variable in length, rarely  $100 \mu$  long and  $10 \mu$  broad. Conidia are produced on the apex of cylindrical to fusiform conidiogenous cells. Conidia are cylindrical, rounded at both ends, hyaline, aseptate 1-2 guttulate with granular protoplasm and measure  $12-18 \times 3-5 \mu$ .

Arx (1957) has reported that the pathogen has 600 host plants. *Momordica charantia* L. is a new host of the pathogen.

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#### സംഗ്രഹം

മൂപ്പെത്താറായ പാവയ്ക്കുകളിൽ ത്ളോമരൊല്ലാ സിങ്കുലോറ്റാ എന്ന കുമിളിന്റെ ആക്രമണം നിമിത്തം സംഭവിക്കുന്ന അഴുകൽ രോഗം ഇന്ത്യയിലാദ്യമായി കേരളത്തിൽനിന്നു രേഖപ്പെടുത്തിയിരിക്കുന്നു. ഈ കുമിളിന്റെ അപൂർണ്ണദശയായ കോളിറോറ്റിക്കാ ത്ളിയോസ്പോരിയോയിഡസ് രോഗബാധിതമായ കായ്കളിൽത്തന്നെ കാണുകയുണ്ടായി.

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