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**FUSARIUM MONILIFORME VAR. SUBGLUTINANS WOLLENW. & REINK.,
PATHOGENIC TO THE SPOTTED BEETLE EPILACHNA
VIGINTIOCTOPUNCTATA F.**

The grubs and adults of *Epilachna vigintioctopunctata* P. cause sever* damage to crops like brinjal, tomato and bittergourd. Krishnamurthy and Naidu (1971) recorded *Aspergillus flavus* Link as a fungal pathogen effectively checking the population of this pest in Thirupathi. The present paper reports the occurrence of *Fusarium moniliforme* var. *subglutinans* causing disease in the grubs, pupae and adults of *E. vigintioctopunctata*. During May-June 1977, many diseased larvae and pupae of this pest were observed on bittergourd plants in the Agricultural College Farm, Vellayani, Kerala State. A fungus was isolated, from the diseased insects and brought to pure culture identified as *Fusarium moniliforme* var. *subglutinans* Wollenw. & Reink. Pathogenecity tests conducted with third instar grubs, freshly formed pupae and 2-3 days old adults using 8 day old sporulating cultures of the fungus showed that it caused 80, 65 and 77 per cent mortality in grubs, pupae and adults respectively,

The infected grubs and adults became sluggish in 48 hours and death occurred in 72 to 96 hours. Before death softening of the body was observed. Under high humid conditions external mycelium appeared in 24 hours of death. In the case of adults the hyphae issued through the posterior extremity only. Conidia were observed on the external mycelium 48 hours after death.

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സംഗ്രഹം

'ടൊമാറ്റോ', 'കത്തീരി', 'പാവൽ' തുടങ്ങിയ കായ്കറികൾക്കു സാരമായ നാശമുണ്ടാക്കുന്ന 'എപ്പിലാക്'ൻ വിജിന്റിയോക്ടോ പക്റ്റോറാ എന്ന കീടത്തിന്റെ വിവിധ ഭാഗങ്ങളെ ബാധിക്കുന്ന ഒരു കമീസറോഗം വെള്ളായണി കാർഷികകാളേജ് തോട്ടത്തിൽ രേഖപ്പെടുത്തപ്പെട്ടിരിക്കുന്നു.

REFERENCES

- Krishnamurthy, C. and Naidu, M. S. 1971. *Aspergillus flavus* Link, a fungal parasite of *Epilachna vigintioctopunctata* F. *Curr. Sci.* **40**, 666—667.

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