

## Short Note

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### Natural Occurrence of Entomopathogenic Fungi on *Spilosoma obliqua* (Walker) and *Oxya nitidula* (Walker).

S. Dayakar\*

Professor (Ento), Department of Entomology, College of Agriculture,  
Rajendranagar, Hyderabad-500030, India

*\*Corresponding author*

During random pest monitoring surveys conducted in Rangareddy district of Telangana state, mycosed insect cadavers were observed in farmers' fields. The cadavers were carefully collected in separate specimen tubes and the standard procedure followed for the isolation of the fungi were followed (Monga *et al.*, 2010). The insects were cut into pieces and were surface sterilised with 0.1% mercuric chloride solution and washed four times in sterile distilled water. In order to isolate the fungi, these pieces were maintained on Potato Dextrose Agar (PDA) medium and were incubated at 25±2 degree Celsius and 95±5% RH.

The fungal cultures thus formed were purified by single conidium isolation technique (Samsinakova and Kalalova, 1983) and purified subsequently on Sabouraud's Dextrose Agar (SDA) medium. The isolated fungi were sent for identification to ITCC, New Delhi and were identified as *Fusarium pallidoroseum* (Cooke) Sacc from Bihar hairy caterpillar

and *Fusarium moniliforme* Sheldon and *Paecilomyces lilacinus* (Thom) Samson from rice grasshopper.

To find out the influence of different mycological media on growth and suitability of the isolated native fungi, the fungal cultures were multiplied on PDA, SDA, Chitin containing Medium and Czapek Dox Agar (CDA) medium. All fungal culture media favoured the growth of the fungi (Table 1). SDA supported the maximum biomass of both *F. pallidoroseum* (0.628 g) and *F. moniliforme* (0.607 g) whereas PDA supported the maximum biomass of *P. lilacinus* (0.626 g). The other media in decreasing order were PDA, Chitin and CDA for both the species of *Fusarium* and SD, chitin and CD for *P. lilacinus*. However, there was no significant difference between PD and chitin containing medium in supporting the biomass of *Fusarium* spp. Further studies on biological properties, viability of spores, pathogenicity and low cost mass multiplication of these fungi are needed.

**Table.1** Influence of different mycological media on biomass production of isolated entomopathogenic fungi.

Type of Media	Biomass produced (g)		
	<i>F. pallidoroseum</i>	<i>F. moniliforme</i>	<i>P. lilacinus</i>
PDA	0.561 <sup>b</sup>	0.517 <sup>b</sup>	0.626 <sup>a</sup>
SDA	0.628 <sup>a</sup>	0.607 <sup>a</sup>	0.518 <sup>b</sup>
Chitin	0.511 <sup>b</sup>	0.495 <sup>b</sup>	0.459 <sup>c</sup>
CDA	0.408 <sup>c</sup>	0.361 <sup>c</sup>	0.366 <sup>d</sup>

In a column, means followed by same letter are not significantly different by DMRT (P = 0.05)

### References:

- Monga, D., Kumar, K.C. and Kumar, R. 2010. Record of *Fusarium pallidoroseum* (Cooke) Sacc. on cotton mealy bug, *Phenococcus solenopsis* Tinsley. Journal of Biological Control, 24 (4): 366-368.
- Samsinakova, A. and Kalalova. S. 1983. The influence of a single. Spore isolate and repeated subculturing on the pathogenicity of conidia of the entomophagous fungus *Beauveria bassiana*. Journal of Invertebrate Pathology, 42: 156-161.