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Figure 1. Carcasses of *A. flavus*-infected silkworm larvae.

NEW RECORD OF FUNGAL PATHOGEN *ASPERGILLUS FLAVUS* LINK ON MULBERRY SILKWORM *BOMBYX MORI* L. FROM INDIA

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THE mulberry silkworm *Bombyx mori* L. is an important economic insect. It is affected by several micro-organisms[1]. *Aspergillosis* is a serious disease of silkworms in Japan, and young worms are highly susceptible[2]. Hitherto, only one species, *Aspergillus tamarii* Kita, has been reported to cause the disease in mulberry silkworms in India[3]. The occurrence of *Aspergillus flavus* Link on mulberry silkworms is reported here.

During studies on fungal diseases of silkworm, some dead worms (figure 1) showing yellow-green colour were noticed. A microscopic study revealed the presence of mycelia and fungal spores characteristic of *Aspergillus*. The pathogen was directly isolated from the body surface of dead worms with sterile forceps and cultured following the stamp agar method[4]. The culture plates were incubated at 28±2°C and 80±5% relative humidity. Initially the culture colonies were white and after 48 h turned yellow and later, green. The fungus was identified as *A. flavus* Link.

The characters of the isolated fungus are similar to earlier descriptions for the species[5]. Hyphae are 715±175 μm long and 9.76±2.36 μm broad. The hyphal walls are rough, broadening upwards and gradually enlarging into vesicles. The vesicles are dome-shaped and measure 28.71±6.61 μm in size. Conidiophores arise from submerged hyphae. Conidial heads are different shades of yellow-green and have chains of conidia. Conidia, 4.65±0.85 μm, are pyriform to globose and less coarsely roughened. The vesicles bear a sterigma, which is in single series in young forms and in double series in mature forms.

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