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Short Communication

MYCELIUM PRODUCTION OF *CORDYCEPS MILITARIS* THAI STRAINS ON THAI RICE VARIETIES MIXED WITH YOLK AND PUPAL POWDER OF THAI SILKWORM, *BOMBYX MORI*

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ABSTRACT

Four new isolates of *Cordyceps militaris* (BCC18247, BCC17991, BCC17944 and BCC27815) and *Paecilomyces tenuipes* were investigated for mycelium production on various culture media. We used fungal pathogen of *Bombyx mori, Beauveria bassiana* as positive control. *C. militaris* strains and *P. tenuipes* were grown on the PDA for 5 days and transferred to 5 recipes of culture media of different varieties of Thai rice *viz.,* plain rice, black rice, brown rice, glutinous rice and rice bran, supplemented with pupal powder of Thai silkworm, Nang Lai and yolk of chicken (*Gallus gallus* domesticus). The dead pupae were used as insect host of fungi. Mycelial growth of *Cordyceps* strains was determined by fresh weight of mycelia. The mycelial growth of *C. militaris* strains was detected on dead pupae of silkworm and on the medium comprising of pupal powder, yolk and glutinous rice on the 14th and 4th day, respectively, after fungal inoculation. Only the fruiting body of *P. tenuipes* was found growing up on pupal cadavers but not of *C. militaris* strains. The most effective recipe for mycelial growth was observed as glutinous rice + pupal powder + yolk for all *C. militaris* strains with the maximum growth reported for BCC17944.

Key words: *Bombyx mori, Cordyceps militaris*, mycelium, Thai rice.