

## **ABSTRACT**

**Leo Alvian Ginting** “*Test of Pathogenical Cordyceps militaris fungus against Larvae Setothosea asigna E. (Lepidoptera : Limacodidae) in Screen house*”, supervised by Ir. Syahrial Oemry, MS and Ir. Lahmuddin Lubis, MP. This study aims to examine the pathogenity of *C. militaris* entomophatogen fungus against *S. asigna* larvae in screen house. This study was conducted in screen house of Agriculture Faculty, University of Sumatera Utara, Medan with altitude 25 m on sea level. This study research using completely randomized design (CRD) nonfactorial with seven treatments and four replication, namely P<sub>0</sub> (control), P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub>, P<sub>4</sub>, P<sub>5</sub>, P<sub>6</sub> (applied to *C. militaris* fungus each 10, 15, 20, 25, 30 and 35 grams corn media).

The results showed that the application *C. militaris* fungus in corn media was significantly affected the mortality percentage of larvae *S. asigna* on obsevation II and III. The highest mortality percentage on observation II on *C. militaris* in 35 gr corn media + 100 ml aquadest/plant (P<sub>6</sub>) about 25% and the lowest on *C. militaris* in 10 gr corn media + 100 ml aquadest/plant (P<sub>1</sub>) about 7,50%. The highest mortality percentage on observation III on *C. militaris* in 35 gr corn media + 100 ml aquadest/plant (P<sub>6</sub>), *C. militaris* in 30 gr corn media + 100 ml aquadest/plant (P<sub>5</sub>) and *C. militaris* in 25 gr corn media + 100 ml aquadest/plant (P<sub>4</sub>) about 100% and the lowest on *C. militaris* in 10 gr corn media + 100 ml aquadest/plant (P<sub>1</sub>) about 85%. Larvae *S. asigna* was infected by *C. Militaris* suffered mimification and after afew days grow colonies colored white fungus (micelium) around the larva body.

**Keywords :** *S. asigna*, *C. militaris*, mortality percentage, corn media

## ABSTRAK

**Leo Alvian Ginting**, “Uji Patogenitas Jamur *Cordyceps militaris* L. Terhadap Ulat Api (*Setothosea asigna* E.) (Lepidoptera : Limacodidae) Di Rumah Kasa”, dibawah bimbingan Ir. Syahrial Oemry, MS dan Ir. Lahmuddin Lubis, MP. Penelitian bertujuan untuk mengetahui patogenitas jamur *C. militaris* L. untuk mengendalikan ulat api *S. asigna* E. di Rumah Kasa. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) non faktorial, yang terdiri dari tujuh perlakuan dan 4 ulangan yaitu P<sub>0</sub> (Kontrol), P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub>, P<sub>4</sub>, P<sub>5</sub>, P<sub>6</sub> (diaplikasikan *C. militaris* masing-masing 10,15,20,25,30, dan 35 gr dalam media jagung).

Hasil penelitian menunjukkan aplikasi *C. militaris* dalam media jagung berpengaruh nyata terhadap persentase mortalitas larva *S. asigna* pada pengamatan II dan III. Persentase mortalitas *S. asigna* tertinggi pada pengamatan I terdapat pada perlakuan jamur *C. militaris* dalam media jagung 35 gr + 100 ml air/tanaman (P<sub>6</sub>) sebesar 25% dan terendah pada perlakuan jamur *C. militaris* dalam media jagung 10 gr + 100 ml air/tanaman (P<sub>1</sub>) sebesar 7,50%. Persentase mortalitas *S. asigna* tertinggi pada pengamatan II terdapat pada perlakuan jamur *C. militaris* dalam media jagung 35 gr + 100 ml air/tanaman (P<sub>6</sub>), jamur *C. militaris* dalam media jagung 30 gr + 100 ml air/tanaman (P<sub>5</sub>), jamur *C. militaris* dalam media jagung 25 gr + 100 ml air/tanaman sebesar 100% dan terendah pada perlakuan jamur *C. militaris* dalam media jagung 10 gr + 100 ml air/tanaman (P<sub>1</sub>) sebesar 85,00%. Larva *S. asigna* yang terinfeksi *C. Militaris* akan mengalami mumifikasi dan setelah beberapa hari akan tumbuh koloni jamur berwarna putih disekitar tubuh larva.

Kata kunci : *S. asigna*, *C. militaris*, Persentase mortalitas, Media jagung