

## RINGKASAN

Penelitian ini tentang pengaruh beberapa biakan jamur *Cordyceps militaris* sebagai pengendalian hayati pada ulat api *Setothosea asigna* Van Eecke. Dilaksanakan di lahan area percobaan balai penelitian PT PP London Sumatra TBK, Bah Lias Research Station (BLRS) . Bah lias, Kabupaten Simalungun, Sumatra Utara. Topografi datar dan ketinggian kurang lebih 25 meter diatas permukaan laut. Penelitian ini bertujuan untuk mengetahui efektifitas jamur *Cordyceps militaris* terhadap *Setothosea asigna* dari beberapa media. Penelitian ini menggunakan model Rancangan Acak Kelompok (RAK) non faktorial terdiri dari 6 perlakuan yaitu  $M_0$  = Kontrol,  $M_1$  = media jagung,  $M_2$  = media beras merah,  $M_3$  = media tepung terigu,  $M_4$  = media dedak,  $M_5$  = media kokon ulat api. Parameter yang diamati adalah mortalitas (jumlah mati dan jumlah hidup) dan gejala kematian secara visual

Hasil penelitian menunjukkan bahwa media biakan berpengaruh terhadap mortalitas ulat api *Setothosea asigna*. Media biakan tepung terigu ( $M_3$ ) dan media kokon ulat api ( $M_5$ ) menghasilkan pertumbuhan jamur *Cordyceps militaris* yang lebih baik dan lebih efektif dalam menanggulangi serangan ulat api *Setothosea asigna* dan dilihat dari gejala kematian secara visual ulat api mengalami perubahan dari bentuk tubuh, warna kulit, gerak tubuh hingga aktivitas makannya.

*Kata Kunci : Media Biakan jamur entomopatogen, Cordyceps militaris, Setothosea asigna.*

## SUMMARY

This research is about the effect of several *Cordyceps militaris* fungus cultures as biological control on the *Setothosea asigna* Van Eecke fire caterpillar. Carried out in the experimental area of the PT PP London Sumatra TBK research center, Bah Lias Research Station (BLRS). Bah Lias, Simalungun Regency, North Sumatra. The topography is flat and the height is approximately 25 meters above sea level. This research aims to determine the effectiveness of the *Cordyceps militaris* fungus against *Setothosea asigna* from several media. This research used a non-factorial Randomized Block Design (RBD) model consisting of 6 treatments, namely M0 = Control, M1 = corn media, M2 = brown rice media, M3 = wheat flour media, M4 = bran media, M5 = fireworm cocoon media. The parameters observed were mortality (number of dead and number of alive) and visual symptoms of death

The results of the study showed that the culture media had an effect on the mortality of the *Setothisea asigna* fire caterpillar. Wheat flour culture media (M3) and fireworm cocoon media (M5) produce better growth of the *Cordyceps militaris* fungus and are more effective in dealing with *Setothosea asigna* fire caterpillar attacks and it can be seen from the visual symptoms of death that fire caterpillars experience changes in body shape, skin color, body movements and eating activities.

*Keywords: Culture media entomopathogenic fungi, Cordyceps militaris Setothosea asigna.*