

ABSTRAK

Mengatasi serangan jamur dapat digunakan alternatif obat yang lebih aman dan tentunya dapat digunakan untuk mengendalikan penyakit tersebut, salah satu alternatifnya adalah menggunakan daun kemangi. Tujuan penelitian untuk mengetahui konsentrasi terbaik ekstrak daun kemangi (*Ocimum basilicum* L) sebagai media perendaman telur ikan nilam selama 20 menit yang menghasilkan daya tetas telur, prevalensi jamur, dan sintasan larva ikan nilam (*Osteochilus hasselti*). Metode penelitian menggunakan rancangan acak lengkap (RAL). Perlakuan pada penelitian ini adalah A (kontrol), B (Konsentrasi ekstrak daun kemangi 20 ppm), C (Konsentrasi ekstrak daun kemangi 40 ppm), D (Konsentrasi ekstrak daun kemangi 60 ppm), E (Konsentrasi ekstrak daun kemangi 80 ppm). Parameter penelitian yang diamati adalah daya tetas telur, tingkat serangan jamur dan sintasan larva. Data dianalisis menggunakan ANOVA, apabila berpengaruh nyata dilanjutkan menggunakan Uji Beda Nyata Terkecil. Hasil penelitian daya tetas telur didapat hasil A $87,66 \pm 2,05\%$, B $92,66 \pm 2,05\%$, C $92,33 \pm 1,88\%$, D $93,66 \pm 1,24\%$, E $95 \pm 0,81\%$. Perlakuan D dan E berbeda, sedangkan perlakuan B dan C tidak berbeda nyata terhadap perlakuan A. Prevalensi jamur menunjukkan hasil yang tidak berbeda nyata. Didapatkan prevalensi A $2,66 \pm 2,05$, B $0,66 \pm 0,94$, C $0,66 \pm 0,94$, D $0,66 \pm 0,94$, dan E 0 ± 0 . Sintasan larva menunjukkan hasil yang tidak berbeda nyata. Didapatkan sintasan A $89,76 \pm 4,19\%$, B $88,36 \pm 9,76\%$, C $90,46 \pm 11,15\%$, D $79,36 \pm 11,84\%$, dan E $79,26 \pm 1,18\%$. Hasil tersebut menunjukkan perendaman menggunakan ekstrak daun kemangi selama 20 menit berpengaruh terhadap daya tetas telur tetapi tidak berpengaruh terhadap prevalensi dan sintasan larva.

Kata kunci: ekstrak daun kemangi; ikan nilam; daya tetas; prevalensi; sintasan

ABSTRACT

Overcome fungal attacks necessary to use alternative drugs that are safer and can certainly be use to control the disease, one alternative is to use basil leaves. The purpose of this study was to determine the best concentration of basil leaf extract (*Ocimum basilicum* L) as a media for soaking nilem fish eggs for 20 minutes which resulted in egg hatchability, fungal prevalence, and survival of nilem fish larvae (*Osteochilus hasselti*). The research method uses a completely randomized design (RAL). The treatments in this study were A (control), B (20 ppm basil leaf extract concentration), C (40 ppm basil leaf extract concentration), D (60 ppm basil leaf extract concentration), E (80 ppm basil leaf extract concentration). The research parameters observed were egg hatchability, fungal attack rate and larva survival. Data were analyzed using ANOVA, if it significant then continued with the Least Significant Difference Test. The results of the hatching of eggs obtained results A $87.66 \pm 2.05\%$, B $92.66 \pm 2.05\%$, C $92.33 \pm 1.88\%$, D $93.66 \pm 1.24\%$, E $95 \pm 0.81\%$. Treatments D and E were different, whereas treatments B and C were not significantly different from treatment A. The prevalence of fungi showed results that were not significantly different. The prevalence of A was 2.66 ± 2.05 , B was 0.66 ± 0.94 , C was 0.66 ± 0.94 , D was 0.66 ± 0.94 , and E was 0. significantly different. The survival rate was A $89.76 \pm 4.19\%$, B $88.36 \pm 9.76\%$, C $90.46 \pm 11.15\%$, D $79.36 \pm 11.84\%$, and E $79.26 \pm 1, 18\%$. These results indicate that soaking using basil leaf extract for 20 minutes affects the hatchability of eggs but does not affect the prevalence and survival of larvae.

Key words: basil leaf extract; silversharkminow; hatching rate; prevalence; survival rate