

## **Antifungal potential of yellow bur head *limnocharis flava* (Buchenau, 1868) against pathogenic oomycete, *lagenidium thermophilum***

### **ABSTRACT**

Fungal infection by marine oomycetes is the main problem that hinders crustacean production. Therefore, a study to find an alternative fungal treatment that is safer than chemical treatment is currently needed. One of the potential sources of antifungal properties is macrophytes. *Limnocharis flava*, known as yellow bur head, was found to have antimicrobial properties. Thus, this research was conducted to determine the potential of *L. flava* extract as an antifungal agent against the marine oomycetes *Lagenidium thermophilum* IPMB 1801. In this study, ethanol and methanol solvents were used to extract *L. flava*. The results showed that the methanol extraction yield of *L. flava* is higher (7.03 g, 35.16%) compared to ethanol extract (3.26 g, 16.26%). The antifungal screening test was conducted using the disc diffusion method. Ethanol and methanol extract of *L. flava* had antifungal activities against the hyphal growth of *L. thermophilum*. Continuation from the screening test, the minimum inhibitory concentration for both ethanol and methanol extracts was determined to be at 100 mg/ml respectively. These findings suggest that *L. flava* has the potential to become an antifungal treatment for the control of fungal infections in the crustacean industry.