

## ABSTRAK

**Ardita.103941101119.** Pemanfaatan ubi jalar terfermentasi *Lactobacillus* sp. terhadap pertumbuhan dan sintasan udang vaname (*Litopenaeus vannamei*) dibimbing oleh Abdul Haris dan Farhanah Wahyu.

Ubi jalar merupakan (*Ipomea batatas* L) tanaman pangan dengan produktivitas cukup tinggi. Selain itu, ubi jalar juga sangat potensial untuk dikembangkan sebagai sumber prebiotik terutama karena kandungan oligosakaridanya. Oligosakarida adalah komponen utama prebiotik karena dapat dicerna oleh mukosa usus, sehingga dimanfaatkan oleh bakteri di usus seperti *Lactobacillus*. *Lactobacillus* sp., merupakan probiotik yang dimana berfungsi sebagai imunostimulan, pemacu pertumbuhan, dan dapat dijadikan sebagai penyeimbang mikroorganisme dalam pencernaan. Penelitian ini bertujuan untuk mengetahui pemanfaatan ubijalar terfermentasi terhadap pertumbuhan dan sintasan udang vaname (*Litopenaeus vannamei*). Rancangan percobaan yang digunakan yaitu metode rancangan acak lengkap (RAL) dengan 4 perlakuan 3 kali ulangan. Hasil penelitian menunjukkan bahwa penambahan tepung ubi jalar yang terfermentasi menunjukkan hasil tidak berbeda nyata ( $P > 0,05$ ) setiap dosis yang berbeda terhadap pertumbuhan dan sintasan udang vaname. Pertumbuhan mutlak tertinggi yaitu pada perlakuan B (Ubi jalar 20%) sebesar 2,18 gram, perlakuan C (Ubi jalar 25%) sebesar 2,06 gram, kemudian perlakuan D (Ubi jalar 30%) sebesar 2,01 gram, dan perlakuan A (Kontrol) sebesar 1,96 gram. Sintasan tertinggi yaitu pada perlakuan B sebesar 97,78%, perlakuan C sebesar 95,56%, kemudian perlakuan D 93,33%, dan A sebesar 91,11%. Berdasarkan hasil penelitian dapat disimpulkan bahwa penambahan ubi jalar dengan dosis 20% dalam pakan mampu meningkatkan pertumbuhan dan sintasan udang vaname.

**Kata Kunci:** Fermentasi, Pertumbuhan, Sintasan, Ubi jalar, Udang vaname.

## ABSTRACT

**Ardita.105941101119** *Utilization of lactobacillus sp. fermented sweet potato on the growth and survival of white shrimp (Litopenaeus vannamei) supervised by Abdul Haris and Farhanah Wahyu.*

*Sweet potato (Ipomea batatas L) is a food crop with quite high productivity in addition, sweet potato is also very potential to be developed as a source of prebiotics, especially because of its oligosaccharide content. Oligosaccharides are the main component of prebiotics because they can be digested by the intestinal mucosa, so they are utilized by bacteria in the intestine such as Lactobacillus. Lactobacillus sp is probiotic which functions as in immune booster, growth booster, and can be used as a counterweight to microorganism in digestion. This study aims to determine the utilization of fermented sweet potato on the growth and survival rate of white shrimp (Litopenaeus vannamei)*

*The experimental design used was a completely randomized design (CRD) with 4 treatments and 3 replication. The results showed that the addition of fermented sweet potato flour showed no significantly different results ( $P > 0,05$ ) for each different dose on the growth and survival of vannamei shrimp. The highest absolute growth was in treatment B (20% sweet potato) of 2,18 grams C treatment (25% sweet potato) of 2,06 grams, then D treatment (30% sweet potato) of 2,01 grams, and 2,01 grams in treatment A (Control) of 1,96 grams. The highest survival was in treatment B of 97,78%, treatment C of 95,56%, then treatment D of 93,33%, and A of 91,11%. Based on the results of the study it can be concluded that the addition of sweet potato at a dose of 20% in the feed can increase the growth and survival of vannamei shrimp.*

**Kata Kunci:** *Fermentation, Growth, Survival, Sweet potato, Vannamei shrimp*