

## **ABSTRAK**

### **PEMANFAATAN MINYAK PALA *Myristica fragrans* (Houtt, 1774) SEBAGAI BAHAN PEMBIUS ALAMI PADA TRANSPORTASI BENIH GURAMI *Oosphronemus goramy* (Lacepede, 1801) SISTEM KERING**

**Oleh**

**IMADUDDIN KHOLISH**

Minyak pala merupakan bahan alami yang dapat digunakan sebagai bahan anestesi dalam kegiatan transportasi ikan. Pala mengandung senyawa myristicin yang dapat menekan aktivitas ikan selama kegiatan transportasi berlangsung. Penelitian dilaksanakan pada bulan Mei-September 2021 di Laboratorium Budidaya Perikanan, Fakultas Pertanian, Universitas Lampung yang bertujuan untuk mempelajari pengaruh pemberian minyak pala dengan lama waktu trans-portasi yang berbeda terhadap respon benih gurami dalam transportasi sistem kering dan untuk mengetahui kefektifan dosis minyak pala dan waktu transportasi terbaik pada transportasi sistem kering benih gurami. Penelitian ini menggunakan rancangan acak lengkap (RAL) faktorial dengan faktor A dosis minyak pala yaitu 1 ml/l dan 2 ml/l. faktor B lama waktu transportasi yaitu 1 jam, 2 jam, dan 4 jam. Parameter uji yang diamati yaitu waktu hilang sadar, waktu pulih sadar, sintasan, histologi insang, dan kualitas air. Hasil penelitian menunjukkan bahwa setelah dialakukan uji histologi pada ikan uji, minyak pala aman digunakan dalam proses anestesi ikan. Dosis 1 ml/l minyak pala merupakan dosis efektif dalam kegiatan transportasi ikan dan kisaran waktu optimum untuk transportasi sistem kering benih gurami berkisar antara 1-2 jam.

**Kata kunci :** Minyak pala, anestesi, transportasi kering, benih gurami.

## **ABSTRACT**

### **THE UTILIZATION OF NUTMEG OIL *Myristica fragrans* (Houtt, 1774) AS A NATURAL ANESTHETIC IN THE DRY SYSTEM TRANSPORTASION OF GOURAMY FRY *Oosphronemus goramy* (Lacepede, 1801)**

**By**

**IMADUDDIN KHOLISH**

The nutmeg contains myristicin compound which is an anesthetic so that it has the potential to be used as an anesthetic in fish transportation. This study aimed to analyze the effect of administration and effective dose of nutmeg oil on the response of gouramy fry in dry transportation systems. The research was carried out in May-September 2021 at the Fisheries Culture Laboratory, Faculty of Agriculture, University of Lampung. This study used a factorial completely randomized design (CRD) with factor A dose of nutmeg oil that 1 ml/l and 2 ml/l. factor B is the length of transportation time, namely 1 hour, 2 hours, and 4 hours. The test parameters observed were loss of consciousness, recovery time, survival rate, gill histology, and water quality. The results showed that after histological tests were carried out on the test fish, nutmeg oil was safe to use in the fish anesthetic process. The results showed that a dose of 1 ml/l of nutmeg oil was an effective dose in fish transportation activities and the optimum time for transportation of gouramy fry dry system was 1-2 hours. This research could be used as a problem solver in the delivery of gouramy fry via dry system transportation.

**Keywords :** anesthesia, gourami fry, nutmeg oil, dry transportation.