

ABSTRACT

ANDINI ISMA SILVIYAH, 2024. **"THE EFFECT OF FEEDING A COMBINATION OF PELLETS AND LEMNA (*Lemna perpusilla*) ON THE GROWTH OF TILA FISH (*Oreochromis niloticus*) IN THE UJUNG MENTEN FISH SEED HALL"**. Department of Biology Education, Faculty of Teacher Training and Education, Siliwangi University Tasikmalaya.

*Tilapia (*Oreochromis niloticus*) is a type of fish that is often cultivated because it has fast growth and good adaptation to the environment. This research aims to test the effect of feeding a combination of pellets and lemna on the growth of tilapia at the Ujung Menteng Fish Seed Center. Some tilapia fry experienced reduced reproduction and death due to uneaten and rotting fish pellets remaining at the bottom of the pond. This decay process can affect water quality and cause stress, reduced growth and death in fish. This research uses quantitative research methods with a research design in the form of a Completely Randomized Design (CRD) with 5 treatments with 3 repetitions. For one day, eat 150 grams of tilapia fish. There is a control group, as well as an experimental group with variations in feed composition. The parameters measured include body length and weight of tilapia, as well as water quality such as temperature, pH, nitrate and ammonia. The results showed that feeding a combination of pellets and lemna had a significant effect on the growth of tilapia. Treatment with a combination of 50% pellets and 50% lemna gave the most optimal results in all growth parameters. In addition, the survival rate of tilapia reached 100% during the study period. Overall, this research shows that feeding a combination of pellets and lemna can significantly increase the growth of tilapia and provide a more economical and environmentally friendly alternative feed.*

Key words: *tilapia, combination feed, pellets, lemna, growth, water quality*