

ABSTRAK

Perikanan merupakan salah satu komoditas perdagangan yang banyak digemari untuk dikonsumsi, baik itu ikan air tawar maupun ikan air laut. Ikan banyak digemari oleh masyarakat selain memiliki rasa yang enak juga harganya yang terjangkau. Dari tingginya minat konsumsi ikan maka di pasar tradisional menimbulkan pencemaran pada lingkungan. Pencemaran tersebut berupa limbah ikan. Penelitian ini dilakukan sebagai solusi mengatasi permasalahan limbah cair pasar ikan yang mampu dijadikan bahan baku pembuatan pupuk organik cair. Dalam penelitian ini dilakukan dengan perlakuan 1 kontrol dan 5 perlakuan serta 3 kali ulangan. P1 dengan variasi formula 3 isolat, P2 dengan variasi formula 6 isolat, P3 dengan variasi formula 9 isolat, P4 dengan variasi formula 12 isolat, dan P5 dengan variasi formula 15 isolat. Dari hasil penelitian ini diketahui bahwa untuk kadar N+P+K memenuhi standar mutu yang ditetapkan pemerintah (2-6%). Perlakuan P0 persentase N+P+K sebesar 5.685%. Lalu perlakuan P1 persentase N+P+K sebesar 6.998%. Kemudian perlakuan P2 persentase N+P+K sebesar 7.727%. Lalu perlakuan P3 persentase N+P+K sebesar 8.430%. Selanjutnya perlakuan P4 persentase N+P+K sebesar 8.284%. Sedangkan untuk perlakuan P5 persentase N+P+K sebesar 9.658%. Kadar C-Organik mempunyai standar mutu (minimum 10) dengan persentase 18.208%. Untuk C-Organik dengan persentase 18.208% telah memenuhi ketetapan SNI. Kadar $N+P_2O_5+K_2O$ dengan persentase 12.239%. Untuk kadar pH yang diukur memiliki nilai sebesar 6. Maka pupuk organik cair limbah pasar ikan dikatakan layak karena memenuhi kriteria SNI atau Peraturan Menteri Pertanian No. 261/KTPS/SR. 310/M4/2019. Hasil validasi Lembar Kerja Peserta Didik (LKPD) menunjukkan bahwa bahan ajar tersebut layak digunakan dalam proses pembelajaran pada materi Bioteknologi Kelas XII

Kata Kunci : limbah pasar ikan pupuk organik cair pumakkal

ABSTRACT

Fisheries are one of the trade commodities that are favored by the public for consumption, both freshwater fish and seawater fish. Fish is much favored by the community in addition to having a good taste as well as an affordable price. From the high interest in fish consumption, traditional markets cause pollution to the environment. The pollution is in the form of waste fish. This research was conducted as a solution to overcome the problem of fish market liquid waste that can be used as raw material for making liquid organic fertilizer by optimizing the utilization of the Pumakkal starter. In this study, treatment was carried out with 1 control and 5 treatments and 3 replications. P1 with a varied formula of 3 isolates, P2 with a variety of formula 6 isolates, P3 with a variety of formula 9 isolates, P4 with a variation of formula 12 isolates, and P5 with a variation of formula 15 isolates. From the research results show that for levels of N + P + K has a quality standard set by the government (2-6%). In the P0 treatment the percentage of N+P+K was 5.685%. Then in the P1 treatment the percentage of N+P+K was 6.998%. Then in the P2 treatment the percentage of N+P+K was 7.727%. Then in the P3 treatment the percentage of N+P+K was 8.430%. Furthermore, in the P4 treatment the percentage of N+P+K was 8.284%. Meanwhile, for the P5 treatment the percentage of N+P+K was 9.658%. At levels of C-Organic it has a quality standard (minimum 10) with a percentage of 18.208%. For the value of C-Organic with a percentage of already complied with the provisions of SNI. For the levels of $N+P_2O_5+K_2O$ with a percentage of 12,239%. For the measured pH level, it has a value of 6. Then the liquid organic fertilizer from fish market waste is said to be feasible because it meets the criteria of SNI or Regulation of the Minister of Agriculture no. 261/KTPS/SR. 310/M4/2019. The results of the validation of the Student Worksheet (LKPD) show that the teaching materials are suitable for use in the learning process for Class XII Biotechnology materials.

Keywords: fish market waste liquid organic fertilizer pumakkal