

## **Kajian Lapang Kualitas Fisik Air dan Pertumbuhan Lele (*Clarias Sp.*) pada Budidaya Intensif dalam Kolam Terpal Bundar dengan Padat Tebar Yang Berbeda**

### **Intisari**

Penelitian telah dilakukan terhadap kualitas fisik air dan pertumbuhan lele (*Clarias sp.*) pada budidaya intensif dalam kolam terpal bundar dengan padat tebar berbeda. Diameter kolam 3 m, kedalaman air 1 m dan volume air kolam  $\pm 7 \text{ m}^3$ . Pengamatan langsung dilakukan terhadap kolam budidaya lele dengan padat tebar lele 5.000 ekor/kolam ( $714 \text{ ekor/m}^3$ ) dan 3.000 ekor/kolam ( $428 \text{ ekor/m}^3$ ), masing-masing perlakuan 3 kolam. Benih lele yang ditebar dengan berat  $\pm 3,5 \text{ g}$  dan selama pemeliharaan lele 85 hari jumlah pakan yang diberikan sama sebanyak 2 kg/hari/kolam. Pengamatan kualitas fisik air dan pertumbuhan lele dilakukan setiap 15 hari pada pemeliharaan lele hari ke 25 sampai 85. Hasil penelitian menunjukkan bahwa kualitas fisik air kolam budidaya lele dengan kepadatan ikan  $714 \text{ ekor/m}^3$  lebih cerah; kandungan bahan organik, TSS, TDS dan endapan lebih sedikit dibandingkan air kolam lele dengan kepadatan  $428 \text{ ekor/m}^3$ . Pertumbuhan lele dengan kepadatan  $714 \text{ ekor/m}^3$  lebih cepat daripada kepadatan  $428 \text{ ekor/m}^3$ . Jumlah pakan ikan yang diberikan sama sebanyak 2 kg/hari/kolam selama 85 hari pemeliharaan (budidaya) lele pada kepadatan  $714 \text{ ekor/m}^3$  termasuk kurang mencukupi, sedangkan pada kepadatan  $428 \text{ ekor/m}^3$  termasuk berlebihan.

Kata Kunci: budidaya intensif, kepadatan, kualitas air fisik, lele, pertumbuhan

**Field Study of Water Physical Quality and Catfish (*Clarias Sp.*) Growth in the Round Plastic Ponds of Intensive Cultivation with Different Stocking Densities**

**Abstract**

Research has been carried out on the physical quality of water and growth of catfish (*Clarias sp.*) in the round plastic ponds of intensive cultivation with different stocking densities. The pond diameter was 3 m, water depth of 1 m and pond water volume was  $\pm 7 \text{ m}^3$ . Direct research was carried out on the ponds with stocking density of catfish seeds of 5,000 fishes/ pond ( $714 \text{ fishes/m}^3$ ) and 3 and 3,000 h fishes/pond ( $428 \text{ fishes/m}^3$ ), each stocking density treatment there were 3 ponds. Catfish seeds with an average weight of  $\pm 3.5 \text{ g/fish}$  were stocked and maintained for 85 days. The amount of feed given to each was the same as much as 2 kg/day/pond. Observation of physical water quality and catfish growth were carried out every 15 days on catfish rearing days 25 to 85. The results showed that the physical water quality of ponds with a fish density of  $714 \text{ fishes/m}^3$  was brighter; while organic matter content, TSS (total suspended solid), TDS (total dissolved solid) and sediment less than a fish density of  $428 \text{ fishes/m}^3$ . The growth of catfish with a density of  $714 \text{ fishes/m}^3$  was faster than a density of  $428 \text{ fishes/m}^3$ . The amount of fish feed given was the same as 2 kg/day/pond for 85 days of catfish farming at a density of  $714 \text{ fishes/m}^3$ , which was considered insufficient, while at a density of  $428 \text{ fishes/m}^3$ , it was considered excessive.

Keywords: catfish, growth, intensive cultivation, physical water quality, stocking density.