

Suplementasi Pakan dengan Peningkat Imunitas Ikan dan Praktik Manajemen Kualitas Air untuk Meningkatkan Produktivitas Benih Lele di Kabupaten Kediri, Jawa Timur

(Feed Supplementation with Fish Immunity Enhancers and Water Quality Management Practices to Improve the Productivity of Catfish Fingerlings in Kediri Regency, East Java)

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ABSTRAK

Kabupaten Kediri, Jawa Timur, merupakan salah satu sentra utama produksi ikan lele di Indonesia dengan produksi benih mencapai 13 miliar ekor dan ikan konsumsi sekitar 17.000 ton per tahun (2024). Namun, pada Januari–Februari 2025 terjadi kematian massal benih lele terutama pada fase larva berumur dua minggu, sehingga menimbulkan kerugian besar bagi pembenih. Permasalahan ini mendorong perlunya inovasi untuk meningkatkan imunitas ikan melalui pendekatan ramah lingkungan. Batang pisang diketahui memiliki kandungan bioaktif yang berfungsi sebagai imunostimulan alami dan potensial dikembangkan sebagai bahan suplementasi pakan. Inovasi ekstrak batang pisang ambon (paten No. S00202212122) menjadi dasar dalam kegiatan pengabdian ini. Program pelatihan dilaksanakan pada 30 Juli 2025 di UPT PBAT Pare, Kediri, melalui kerja sama antara IPB University dan Dinas Perikanan Kabupaten Kediri, serta didanai oleh skema Dosen Pulang Kampung IPB 2025. Kegiatan diikuti oleh 25 kelompok pembudidaya lele dari 13 kecamatan. Pelatihan terdiri atas dua sesi, yaitu: (1) penyampaian materi mengenai suplementasi pakan dengan imunostimulan berbasis herbal, dan (2) praktikum pembuatan serta aplikasi imunostimulan berbahan batang pisang dan ragi tempe dengan metode coating. Evaluasi dilakukan melalui pre-test dan post-test, serta diskusi kelompok bersama pembudidaya. Hasil evaluasi menunjukkan peningkatan pemahaman peserta, dengan rata-rata nilai post-test 34% lebih tinggi dibanding pre-test. Kegiatan ini membekali pembenih dan penyuluh dengan keterampilan praktis dalam pemanfaatan batang pisang sebagai bahan pakan tambahan serta manajemen kualitas air. Pelatihan diharapkan dapat meningkatkan kapasitas sumber daya manusia sekaligus memberikan solusi preventif terhadap mortalitas larva lele berbasis potensi lokal.

Kata kunci: benih, lele, pakan, paten

ABSTRACT

Kediri Regency, East Java, is one of the main centers of catfish production in Indonesia, with fingerling production reaching 13 billion individuals and market-size catfish production of approximately 17,000 tons per year (2024). However, during January–February 2025, mass mortality of catfish fingerlings occurred, particularly at the two-week-old larval stage, resulting in significant losses for hatchery operators. This problem highlights the need for innovation to enhance fish immunity through environmentally friendly approaches. Banana stems are known to contain bioactive compounds that function as natural immunostimulants and have strong potential for development as feed supplementation materials. The innovation of ambon banana stem extract (Patent No. S00202212122) served as the basis for this community service activity. The training program was conducted on July 30, 2025, at the UPT PBAT Pare, Kediri, through collaboration between IPB University and the Kediri Regency Fisheries Office, and was funded by the IPB 2025 *Dosen Pulang Kampung* scheme. The activity was attended by 25 catfish farmer groups from 13 sub-districts. The training consisted of two sessions: (1) delivery of material on feed supplementation using herbal-based immunostimulants, and (2) hands-on practice in the preparation and application of immunostimulants made from banana stems and tempeh yeast using the coating method. Evaluation was conducted through pre-tests and post-tests, as well as group discussions with farmers. The evaluation results showed an increase in participants' understanding, with the average post-test score being 34% higher than the pre-test score. This activity equipped hatchery operators and extension officers with practical skills in utilizing banana stems as supplemental feed ingredients and in managing water quality. The training is expected to enhance human resource capacity while providing a preventive, locally based solution to reduce catfish larval mortality.

Keywords: catfish, feed, patent, seed