

# **Penerapan Teknologi Budidaya Jenuh Air dan Asam Humat pada Padi Toleran Salinitas di Lahan Terdampak Rob di Pekalongan**

## **Application of Saturated Soil Culture Technology and Humic Acid to Salinity-Tolerant Rice in Land Affected by Tidal Floods in Pekalongan**

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### **ABSTRAK**

Tujuan kegiatan ini adalah 1) mendesiminasikan teknologi BJA dan asam humat ke petani di lahan terdampak rob, 2) meningkatkan indeks pertanaman di lahan terdampak rob. Kegiatan ini dilaksanakan di Kelurahan Degayu, Kecamatan Pekalongan Utara, Kota Pekalongan. Kegiatan berlangsung dari bulan Juni sampai Desember 2025. Metode pelaksanaan dilakukan dengan cara: 1) koordinasi dengan Staf Dinas Pertanian dan Pangan Kota Pekalongan, dan Staf Pengajar Agroteknologi Universitas Pekalongan; 2) survey lapangan, 3) sosialisasi penerapan teknologi budidaya jenuh air dan asam humat melalui pelatihan, 4) pembuatan demplot penanaman padi, dan 5) pemanen hasil padi. Hasil menunjukkan bahwa Kelurahan Degayu, Kota Pekalongan telah mengalami dampak rob sejak tahun 2012-2024, sehingga lahan sawah yang awalnya kelas I, menjadi tidak dapat dimanfaatkan untuk padi, karena tekanan salinitas yang tinggi. Pada tahun 2024 pembangunan tanggul di pinggir Pantai Kelurahan Degayu telah selesai, sehingga pada musim kemarau I antara Februari-Juni 2025 telah ditanami kembali dan dapat menghasilkan padi 5,2 ton GKP per hektar menggunakan varietas Biosalin 1. Persoalan salinitas masih muncul pada musim kemarau II antara Juni-September 2025, karena kemarau yang tinggi menyebabkan DHL (Daya Hantar Listrik) air sawah dapat mencapai 7-9 ds/m, padahal padi menghendaki DHL air sawah di bawah 3 ds/m. Penanaman padi varietas Biosalin dengan Teknik Budidaya Jenuh Air (BJA) dan pemberian asam humat menunjukkan pertumbuhan yang normal, dan hasil masih dapat mencapai 3 ton GKP per Ha. Penanaman padi yang dilakukan dengan cara konvensional (tergenang) menyebabkan tanaman padi mati.

Kata kunci: asam humat, BJA, padi, sosialisasi

### **ABSTRACT**

The objectives of this activity are: 1) disseminating saturated soil culture technology and humic acid to farmers in tidal flood-affected lands, 2) increasing the cropping intensity in tidal flood-affected lands. This activity was carried out in Degayu Village, North Pekalongan District, Pekalongan City. The activity took place from June to December 2025. The implementation method was carried out by: 1) coordinating with the Staff of the Pekalongan City Agriculture and Food Service, and the Agrotechnology Lecturers of Pekalongan University; 2) field surveys, 3) socializing the application of saturated soil culture technology and humic acid through training, 4) making rice planting demonstration plots, and 5) harvesting rice yields. The results show that Degayu Village, Pekalongan City has experienced the impact of tidal flooding since 2012-2024, so that the rice fields that were originally class I, became unusable for rice, due to high salinity pressure. In 2024, the construction of the embankment on the coast of Degayu Village was completed, so that in the first dry season between February and June 2025, it was replanted and able to produce 5.2 tons of HDG (Harvest Dry Grain) rice per hectare using the Biosalin 1 variety. Salinity issues still arise in the second dry season between June and September 2025, because the high dry season causes the EC (Electrical Conductivity) of rice fields to reach 7-9 ds/m, even though rice requires a EC of rice fields below 3 ds/m. Planting the Biosalin variety of rice using the Saturated Soil Culture Technique (SSC) and the application of humic acid showed normal growth, and yields can still reach 3 tons of HDG per hectare. Conventional rice planting (flooding) causes rice plants to die.

Keywords: humic acid, rice, socialization, SSC