

# Specified Technological Study of Paddy Location for Altered Function of Agricultural Land to Palm Oil Plantation in Type B Tidal Land in Kuala Cenaku.

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## ABSTRACT

The low production rice field paddy which is planted by palm oil trees (*Elaeis guineensis*. Jaq) on Kuala Cenaku tidal land, were caused by difficulty in irrigation system, limited exposure to sun light, and degradation of soil after reclamation. The planting of IR 42 and Senapi with SRI method using 3 combinations of fertilizer on full exposure and half exposure (50%) to sun lights was hoped to be the solution of these problems. The method of this study was split plot design with the primary plot is variety, and fertilizer as secondary plot. The best soil quality improvement was from K3. IR 42 variety is better than Senapi for its growing and production in condition full and half exposure to sun light. There was decreasing in production of IR 42 for 32 % and decreasing in weight of IR 42 for 1000 seeds as much 12 %, while Senapi 31 % and 24 % respectively, both in half exposure area to sunlight. In order to get optimal production of paddy (*Oryza Sativa*. L), it is recommended not to do intercropping between palm oil tree and paddy unless it needs to investigate a tolerable variety if intercropping keeps done.

**Key words:** land, variety, degradation, fertilizer, light intensity

## Kajian Teknologi Spesifik Lokasi Tanaman Padi (*Oryza Sativa* L) Untuk Lokasi Alih Fungsi Lahan Pangan ke Kebun Sawit di Kawasan Pasang Surut Type B Kuala Cenaku.

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## ABSTRAK

Rendahnya produksi padi sawah yang ditanami sawit di lahan pasang surut Kuala Cenaku, disebabkan kesulitan pengaturan tata air, penyirinan terbatas, dan kerusakan lahan setelah reklamasi. Penanaman IR 42 dan Senapi secara SRI dengan 3 kombinasi pupuk pada kondisi terbuka dan terlindung 50 % diharapkan menjadi solusi permasalahan. Metoda yang digunakan Split plot desain, petak utama adalah varietas dan pupuk sebagai anak petak. Peningkatan kualitas tanah terbaik diperoleh dari K3, dan Var IR 42 lebih baik pertumbuhan dan produksinya dibanding Senapi, pada kondisi tanpa naungan dan terlindung. Terjadi penurunan produksi dan berat 1000 biji IR 42 sebesar 32 % dan 12 %, Senapi 31% dan 24 % pada lahan terlindung. Untuk mendapatkan produksi padi optimal dianjurkan tidak melakukan tumpang sari sawit dan padi, serta perlu penelusuran Var toleran jika tumpangsari sawit dan padi tetap dipertahankan.

**Kata Kunci:** lahan, degradasi, varitas, pemupukan, intensitas cahaya