

MODEL PENGEMBANGAN USAHATANI PADI DALAM SISTEM INTEGRASI TANAMAN – TERNAK - IKAN (SITTI)

INTISARI

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Sistem Integrasi Tanaman – Ternak – Ikan (SITTI) merupakan upaya untuk meningkatkan produktivitas sehingga dapat menjadi alternatif solusi untuk permasalahan ketersediaan pangan, kebutuhan energi, ketersediaan air, dan kestabilan lingkungan. Tujuan penelitian ini dimaksudkan untuk menganalisis kembali produksi usahatani padi dalam SITTI agar terus bermanfaat dan dapat dikembangkan.

Usahatani padi dengan metode SRI (*System of Rice Intensification*) dikombinasikan bersama budidaya ikan nila dalam suatu demplot tertentu kemudian dibandingkan anantara pemberian tiga jenis pupuk yang berbeda, yaitu pupuk organik (hasil olahan dari kotoran ternak sapi), pupuk semi-organik (campuran pupuk kimia dan organik), dan pupuk non-organik. Pengamatan dilakukan terhadap laju pertumbuhan padi dan pertambahan jumlah anakan padi. Analisa produktivitas dan ekonomi dilakukan terhadap hasil produksi usahatani padi dan budidaya ikan nila.

Hasil penelitian menunjukkan bahwa produksi padi pada demplot tanpa ikan masih lebih tinggi dibandingkan produksi padi dengan demplot ikan. Penambahan ikan dalam metode tanam padi SRI untuk SITTI belum menunjukkan produktivitas yang maksimal. Berdasarkan analisa laju pertumbuhan, diperoleh Koefisien Laju Pertumbuhan (k) yang menerangkan bahwa penggunaan pupuk organik ($k=4.31$) masih dibawah pupuk kimia ($k=4.69$) dan semi-organik ($k=4.78$). Pupuk semi-organik menunjukkan laju pertumbuhan terbaik. Integrasi padi dan ikan tidak berpengaruh terhadap pertumbuhan padi dengan metode SRI. Integrasi padi dan ikan berpengaruh terhadap kenaikan jumlah anakan padi.

Kata Kunci: SITTI, integrasi, SRI, padi, laju pertumbuhan

**PADDY CROPS ENTERPRISE MODEL DEVELOPMENT MODEL IN
INTEGRATED CROPS – LIVESTOCK – FISH FARMING SYSTEM
(ICLFFS)**

ABSTRACT

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Integrated Crops - Livestock - Fish Farming System (ICLFFS) is an effort to increase productivity so that it can be an alternative solution to problems of food availability, energy needs, water availability, and environmental stability. The purpose of this study is to re-analyze rice production in ICLFFS to continue to be useful and can be developed.

Crops using the SRI method (System of Rice Intensification) combined with tilapia cultivation in a particular demonstration plot is then compared between giving three different types of fertilizers, namely organic fertilizer (processed from cow manure), semi-organic fertilizer (chemical fertilizer mixture and organic), and non-organic fertilizers. Observations were made on rice growth rate and an increase in the number of paddy tillers. Productivity and economic analysis are carried out on the results of rice farming and tilapia cultivation.

The results showed that rice production in demonstration plots without fish was still higher than rice production with fish demonstration plots. The addition of fish in the SRI rice planting method for ICLFFS has not shown maximum productivity. Based on growth rate analysis, the Growth Rate Coefficient (k) was obtained which explained that the use of organic fertilizer ($k = 4.31$) was still below chemical fertilizer ($k = 4.69$) and semi-organic ($k = 4.78$). Semi-organic fertilizer shows the best growth rate. The integration of rice and fish did not affect rice growth by the SRI method. The integration of rice and fish affects the increase in the number of rice tillers.

Keywords: ICLFFS, SRI, integrated farming, growth rate coefficient