

## RINGKASAN

Padi merupakan bahan makanan pokok yang dikonsumsi sebagian besar masyarakat Indonesia. Peningkatan produksi padi yang dilakukan oleh pemerintah lebih terfokus pada lahan sawah baik melalui intensifikasi atau ekstensifikasi. Namun demikian, upaya tersebut masih belum memecahkan masalah penyediaan pangan yang mencukupi kebutuhan nasional. Penurunan luasan lahan sawah mendorong pengembangan padi gogo sebagai alternatif dalam peningkatan ketahanan pangan nasional. Penelitian ini bertujuan untuk (1) mengetahui pengaruh penanaman tanaman refugia kenikir terhadap pertumbuhan dan hasil padi gogo, (2) mengetahui pengaruh pemberian asap cair tempurung kelapa terhadap pertumbuhan dan hasil tanaman padi gogo dan (3) mengetahui pengaruh penanaman tanaman refugia kenikir dan asap cair tempurung kelapa terhadap pertumbuhan dan hasil padi gogo.

Penelitian ini dilaksanakan pada bulan Agustus sampai bulan Desember 2019 di lahan tegalan Desa Suro, Kecamatan Kalibago, Kabupaten Banyumas dengan ketinggian 135 m dpl. Penelitian ini menggunakan rancangan petak terbagi (*split plot design*), dengan petak utama adalah tanaman refugia kenikir (4 dan 8 tanaman/petak utama) dan anak petak berupa konsentrasi asap cair tempurung kelapa (3%, 6%, 9% dan 12%) dengan tiga ulangan. Variabel karakter pertumbuhan yang diamati antara lain tinggi tanaman, jumlah daun per rumpun, jumlah anakan per rumpun, luas daun dan bobot kering tajuk. Variabel komponen hasil dan hasil yang diamati yaitu jumlah malai per rumpun, jumlah bulir isi per rumpun, jumlah bulir hampa per rumpun, bobot bulir isi per rumpun, bobot bulir hampa per rumpun, bobot 1000 biji, bobot biji per petak efektif, bobot gabah kering per hektar dan indeks panen.

Hasil penelitian menunjukkan pemberian asap cair tempurung kelapa konsentrasi 12% mampu meningkatkan karakter pertumbuhan dan hasil padi gogo. Perlakuan penanaman tanaman refugia kenikir belum mampu meningkatkan karakter pertumbuhan dan hasil padi gogo.

## SUMMARY

*Rice is the staple food consumed by most Indonesian people. Increased rice production by the government is more focused on paddy fields through intensification or extensification. However, these efforts have not yet solved the problem of providing food that meets national needs. Decreasing the area of paddy fields encourages the development of upland rice as an alternative in increasing national food security. This study aims to (1) knowing the effect of planting kenikir refugia plants on the growth and yield of upland rice, (2) knowing the effect of giving liquid smoke coconut shell on the growth and yield of upland rice and (3) knowing the effect of planting of kenikir refugia plants and liquid smoke coconut shell on growth and yield of upland rice.*

*This research was conducted in August to December 2019 in the upland area of Suro Village, Kalibago District, Banyumas Regency with a height of 135 m above sea level. This study used a split plot design, with the main plot being the Kenikir refugia plants (4 and 8 main plants / plots) and subplots in the form of concentrations of liquid coconut shell smoke (3%, 6%, 9% and 12%) with three replications. Growth character variables observed were plant height, number of leaves per clump, number of tillers per clump, leaf area and crown dry weight. Variables of yield and yield components observed were number of panicles per clump, number of contents per batch, number of empty grains per clump, weight of grain contents per clump, weight of empty grains per clump, weight of 1000 seeds, weight of seeds per effective plot, weight of dried grain per hectare and harvest index.*

*The results showed that the liquid smoke coconut shell at a concentration of 12% was able to improve growth and yield characters of upland rice. However, refugia of kenikir has not been support the growth and yield characters of upland rice yet.*