

INTISARI

Budidaya kacang tanah (*Arachis hypogaea* L.) pada sistem agroforestri berpotensi meningkatkan produktivitas lahan kering, tetapi keberadaan tegakan dapat menimbulkan cekaman naungan yang memengaruhi pertumbuhan dan hasil tanaman. Selain itu, kondisi tanah pada lahan kering umumnya memiliki kesuburan rendah sehingga memerlukan upaya perbaikan melalui pemberian pembenah tanah. Penelitian ini bertujuan untuk mengkaji pengaruh naungan jati muda serta pemberian pembenah tanah berupa biochar sekam padi dan pupuk kandang kambing terhadap pertumbuhan dan hasil kacang tanah pada lahan tadah hujan di Zona Ledok Wonosari Gunungkidul. Penelitian dilaksanakan pada September 2025 hingga Februari 2026 menggunakan rancangan multilokasi dengan dua faktor, yaitu kondisi naungan (tanpa naungan dan naungan jati muda) serta pembenah tanah (tanpa pembenah, biochar sekam padi 20 ton ha⁻¹, pupuk kandang kambing 20 ton ha⁻¹, dan kombinasi biochar 10 ton ha⁻¹ + pupuk kandang kambing 10 ton ha⁻¹). Hasil penelitian menunjukkan bahwa naungan jati muda pada musim hujan memengaruhi pertumbuhan dan hasil kacang tanah, sedangkan pembenah tanah kombinasi biochar sekam padi dan pupuk kandang kambing menunjukkan potensi terbaik dalam meningkatkan pertumbuhan tanaman melalui perbaikan kondisi tanah. Meskipun belum meningkatkan hasil secara nyata di bawah tegakan jati, pembenah tanah tetap berpotensi mendukung pengembangan sistem agroforestri jati–kacang tanah, terutama pada kondisi lingkungan yang lebih mendukung dan minim genangan pada fase reproduktif.

Kata kunci: agroforestri; kacang tanah; naungan jati; biochar sekam padi; pupuk kandang kambing

ABSTRACT

*Groundnut (*Arachis hypogaea* L.) cultivation in agroforestry systems has the potential to improve land productivity in dryland areas. However, tree stands may create shading stress that affects crop growth and yield. In addition, dryland soils generally have low fertility, requiring improvement through soil amendments. This study aimed to evaluate the effects of young teak shading and soil amendments consisting of rice husk biochar and goat manure on the growth and yield of groundnut under rainfed conditions in Ledok Wonosari Zone, Gunungkidul, Indonesia. The experiment was conducted from September 2025 to February 2026 using a multi location with two-factor design. The first factor was shading condition (no shade and young teak shade), and the second factor was soil amendment (no amendment, rice husk biochar 20 t ha⁻¹, goat manure 20 t ha⁻¹, and a combination of biochar 10 t ha⁻¹ + goat manure 10 t ha⁻¹). The results showed that young teak shade during the rainy season affected the growth and yield of peanut, while the combination of rice husk biochar and goat manure showed the greatest potential to enhance plant growth through improvements in soil conditions. Although it did not significantly increase yield under teak stands, the soil amendment remains a promising strategy for supporting the development of teak–peanut agroforestry systems, particularly under more favorable environmental conditions with minimal flooding during the reproductive stage.*

Keywords: agroforestry; groundnut; teak shade; rice husk biochar; goat manure