

ABSTRAK

Penelitian ini bertujuan untuk mengevaluasi keragaman vegetasi *cover crop* di lahan *grazing* dan *non-grazing* pada program integrasi sapi dan kelapa sawit (SISKA). Metode survei *purposive sampling*, digunakan untuk mengumpulkan data dari area perkebunan sawit dengan dan tanpa penggembalaan. Variabel yang diamati termasuk jenis vegetasi, frekuensi relatif, kerapatan relatif, dan indeks nilai penting. Data dianalisis secara deskriptif dan dibandingkan menggunakan uji t-test. Hasil penelitian menunjukkan perbedaan signifikan antara lahan *grazing* dan *non-grazing* dalam hal produksi hijauan *cover crop*. Produksi hijauan di lahan *non-grazing* lebih tinggi ($2.405,2 \pm 354,65$ kg/ha/tahun) dibandingkan dengan lahan *grazing* ($1.187,40 \pm 952,68$ kg/ha/tahun). Keragaman vegetasi *cover crop* juga berbeda di kedua tipe lahan. Di lahan *grazing*, spesies yang dominan antara lain *Ageratum conyzoides*, *Melustoma malabathricum*, dan *Cyperus iria*, sedangkan di lahan *non-grazing*, dominan antara lain *Brachiaria decumbens*, *Nephrulepis biserrata*, dan *Mikania micrantra*. Pengembangan program integrasi sapi dan kelapa sawit menawarkan potensi yang signifikan dalam memenuhi permintaan daging sapi nasional. Namun, strategi pengelolaan penggembalaan perlu memperhatikan dampak lingkungan dan tanaman pokoknya, kelapa sawit. Penelitian ini memberikan wawasan tentang potensi dan perbedaan vegetasi *cover crop* di lahan *grazing* dan *non-grazing*, serta memberikan informasi penting untuk pengelolaan lebih lanjut dari program integrasi ini. Dengan daya tampung yang berbeda, pemilihan antara lahan *grazing* dan *non-grazing* dapat mempengaruhi efisiensi dan hasil dari program integrasi sapi dan kelapa sawit.

Kata Kunci : Estimasi produksi, Keragaman vegetasi *cover crop*, Lahan *grazing* dan *Non-grazing*, Integrasi sapi dan kelapa sawit

ABSTRACT

*This study aims to evaluate the vegetation diversity of cover crops in grazing and non-grazing land within the cattle and oil palm integration program (SISKA). The purposive sampling survey method was utilized to collect data from oil palm plantations with and without grazing. Observed variables included vegetation types, relative frequency, relative density, and importance value index. Data were analyzed descriptively and compared using t-tests. Results indicate significant differences between grazing and non-grazing land in terms of cover crop production. Production was higher in non-grazing land (2,405.2±354.65 kg/ha/year) compared to grazing land (1,187.40±952.68 kg/ha/year). Additionally, vegetation diversity of cover crops varied between the two land types. Dominant species in grazing land included *Ageratum conyzoides*, *Melastoma malabathricum*, and *Cyperus iria*, while dominant species in non-grazing land included *Brachiaria decumbens*, *Nephrolepis biserrata*, and *Mikania micrantha*. The development of cattle and oil palm integration programs presents significant potential in meeting national beef demand. However, grazing management strategies must consider environmental impacts on oil palm plantations. This study provides insights into the potential and differences in cover crop vegetation between grazing and non-grazing land, offering important information for the further management of this integration program. With differing carrying capacities, the selection between grazing and non-grazing land can impact the efficiency and outcomes of cattle and oil palm integration.*

Keywords: *Production estimation, Cover crop vegetation diversity, Grazing and non-grazing land, Cattle and oil palm integration*