

## RINGKASAN

Pohon aren (*Arenga pinnata* Merr) adalah pohon yang banyak dijumpai di daerah tropis dan merupakan salah satu sumber daya alam yang berkesinambungan karena tersebar luas. Pada umumnya semua bagian dari pohon aren dapat dimanfaatkan oleh manusia, pohon aren sebagian besar dapat digunakan sebagai bahan bangunan, keranjang, kerajinan tangan, atap rumah dan hasil lainnya seperti nira, gula merah.

Tujuan penelitian untuk mengetahui pertumbuhan bibit tanaman aren terhadap pemberian pupuk organik dan air kelapa di kebun bumi lestari. Penelitian dilaksanakan di perkebunan Jeruk Lemon, Pusat Pelatihan Pertanian Pedesaan Swadaya Bumi Lestari, Desa Kutabelin, Tanjung Anom Sumatera Utara. Pada bulan Maret hingga Juni 2019. Penelitian Menggunakan Rancangan Acak Kelompok 2 Faktorial yang terdiri dari 4 Perlakuan dan 3 ulangan, yaitu pupuk organik  $P_0 = \text{Kontrol}$   $P_1 = 200 \text{ g}$   $P_2 = 400 \text{ g}$   $P_3 = 600 \text{ g}$  dan air kelapa  $A_0 = \text{Kontrol}$   $A_1 = 100 \text{ ml}$   $A_2 = 300 \text{ ml}$   $A_3 = 500 \text{ ml}$ . Parameter yang diamati adalah Tinggi Tanaman, Jumlah Daun, Diameter batang, dan Klorofil Daun.

Hasil penelitian menunjukkan bahwa jumlah daun berpengaruh nyata pada perlakuan pupuk organik padat sedangkan pada klorofil daun, diameter batang dan tinggi tanaman tidak berbeda nyata. Untuk perlakuan air kelapa tidak berpengaruh nyata pada tinggi tanaman, jumlah daun, klorofil daun maupun diameter batang.

Semua parameter perlakuan menunjukkan hasil pengamatan tidak berpengaruh nyata terhadap pertumbuhan bibit tanaman aren.

**Kata kunci :** *A.pinanta, Pertumbuhan, Pupuk Organik, Air Kelapa.*

## SUMMARY

Palm tree (*Arenga pinnata* Merr) is a tree that is often found in the tropics and is one of the natural resources that is sustainable because it is widespread. In general, all parts of the palm tree can be used by humans, palm trees can mostly be used as building materials, baskets, handicrafts, roofs and other products such as palm juice, brown sugar.

The purpose of the study was to determine the growth of palm sugar seedlings against the provision of organic fertilizer and coconut water in sustainable earth gardens. The study was conducted at a lemon plantation, Rural Agriculture Training Center, Bumi Lestari, Kutabelin Village, Tanjung Anom, North Sumatra. In March to June 2019. The 2 factorial randomized block design (RBD) study consisted of 4 treatments and 3 replications, namely organic fertilizer P0 = Control P1 = 200 g P2 = 400 g P3 = 600 g and coconut water A0 = Control A1 = 100 ml A2 = 300 ml A3 = 500 ml. The parameters observed were Plant Height, Number of Leaves, Stem Diameter, and Leaf Chlorophyll.

The results showed that the number of leaves significantly affected the treatment of solid organic fertilizer while the leaf chlorophyll, stem diameter and plant height were not significantly different. For coconut water treatment, there was no significant effect on plant height, number of leaves, leaf chlorophyll and stem diameter.

All treatment parameters showed that the observations had no significant effect on the growth of palm sugar seedlings.

**Keywords:** *A. pinanta, Growth, Organic Fertilizer, Coconut Water.*