

## RINGKASAN

Kelapa sawit berasal dari *famili Poaceae* dengan nama latin *Elaeis guineensis* Jacq. Yang berasal dari Afrika Barat. Kelapa sawit ini merupakan salah satu tanaman primadona karena dapat menjadi penghasil minyak CPO (*Crude Palm Oil*) sebagai penyumbang devisa Negara. Pada buah kelapa sawit terdapat CPO (*Crude Palm Oil*) yang dapat menghasilkan minyak inti, yang dimana minyak inti inilah yang dapat menghasilkan keuntungan yang besar bagi perusahaan yang membudidayakannya. Selain dapat menyumbangkan devisa terbesar bagi Indonesia juga dapat menciptakan lapangan pekerjaan bagi masyarakat Indonesia.

Tujuan Penelitian ini untuk mengetahui nilai summed dominance ratio (SDR) dan keaneka ragaman jenis tumbuhan pada lokasi arah barat, timur, utara dan selatan yang berada dibawah tegakan kelapa sawit telah menghasilkan ( TM ) di perkebunan kelapa sawit rakyat pada umur 10 tahun. Penelitian ini dilaksanakan di perkebunan kelapa sawit rakyat TM umur 10 tahun. Perkebunan kelapa sawit rakyat, desa Nogo Rejo, kecamatan Galang, Kabupaten Deli Serdang, ketinggian tempat  $\pm 25$  mdpl dengan topografi datar, titik kordinat  $3^{\circ}30'8''$ ,  $98^{\circ}50'21''$ ,  $-17m$ ,  $181^{\circ}$  jenis tanah inceptisol dan di Laboratorium Fakultas Pertanian Universitas Islam Sumatera Utara untuk menimbang bobot kering tanaman. Penempatan petak contoh dilakukan secara sistematis dengan cara membuat masing-masing transek ke arah Utara, Selatan, Barat, dan Timur. Setiap stasiun pengamatan diletakkan sebanyak 4 buah transek kuadrat. Setiap tumbuhan yang teramati di setiap plot di beri label agar mudah untuk pendataan.

Hasil penelitian menunjukkan bahwa tanaman di bawah tumbuhan di bawah tegakan kelapa sawit pada kebun kelapa sawit rakyat usia 10 tahun desa Nogo Rejo, Kecamatan Galang, Kabupaten Deli Serdang, ditemukan 9 jenis tumbuhan bawah di Stasiun Timur, 6 jenis tumbuhan bawah di Stasiun Barat, 5 jenis tumbuhan bawah di Stasiun Selatan, dan 3 jenis tumbuhan bawah di Stasiun Utara. Tumbuhan di bawah tegakan pada kebun sawit rakyat ini tergolong rendah. Menunjukkan bahwa arah mata angin mempengaruhi komposisi tumbuhan di bawah tegakan kelapa sawit rakyat. Pada Stasiun Timur terlihat bahwa jumlah jenis dan total jumlah seluruh jenis tumbuhan di bawah tegakan sawit rakyat lebih banyak dibandingkan dengan jumlah jenis dan total jumlah seluruh jenis tumbuhan di Stasiun Barat, Selatan, dan Utara.

Pada Stasiun Timur, dan Barat, nilai SDR tertinggi terdapat pada suplir (*Adiantum trapeziforme*), yaitu berturut-turut sebesar 44,01% dan 36,41%. Sedangkan pada Stasiun Selatan dan Utara, nilai SDR tertinggi terdapat pada rumput Israel (*Asystasia gangetica*) dan rumput emprit (*Cyrtococcum acrescens*), yaitu berturut-turut sebesar 37,89% dan 34,38%. Data SDR gulma memperlihatkan bahwa pada setiap Stasiun terdapat perbedaan dominansi gulma.

**Key word:** kelapa sawit, tumbuhan di bawah tegakan kelapa sawit, perkebunan kelapa sawit, *A. ganetica*, *N. Biserrata*, *A. trapeziforme*, *C. acrescens*

## SUMMARY

Oil palm comes from the Poaceae family with the Latin name *Elaeis guineensis* Jacq. originating from West Africa. Palm oil is one of the prima donna plants because it can be a producer of CPO (Crude Palm Oil) as a contributor to the country's foreign exchange. In oil palm fruit there is CPO (Crude Palm Oil) which can produce kernel oil, which is where this core oil can generate huge profits for the company that cultivates it. Besides being able to contribute the largest foreign exchange for Indonesia, it can also create jobs for the people of Indonesia.

The purpose of this study was to determine the value of the summed dominance ratio (SDR) and the diversity of plant species in the west, east, north and south directions under oil palm stands that have produced (TM) in smallholder oil palm plantations at the age of 10 years. This research was carried out in a 10-year-old smallholder TM oil palm plantation. Smallholder oil palm plantation, Nogo Rejo village, Galang sub-district, Deli Serdang regency, altitude  $\pm 25$  mdpl with flat topography, coordinates point 3030'8", 98050'21", -17m, 1810 soil types inceptisol and in the Laboratory of the Faculty of Agriculture, University Islam North Sumatra to weigh the dry weight of plants. The placement of sample plots was carried out systematically by making each transect to the North, South, West, and East. Each observation station is placed as many as 4 quadratic transects. Each plant observed in each plot was labeled for easy data collection.

The results showed that the plants under plants under oil palm stands in smallholder oil palm plantations aged 10 years in the village of Nogo Rejo, Galang District, Deli Serdang Regency, were found 9 species of understorey at the East Station, 6 species of understorey at the West Station, 5 understorey species at South Station, and 3 understorey species at North Station. Plants under stands in this smallholder oil palm plantation are classified as low. Shows that the direction of the wind affects the composition of the plants under the smallholders' oil palm stands. At the East Station, it can be seen that the number of species and the total number of all plant species under community oil palm stands is more than the number of species and the total number of all plant species in the West, South, and North Stations.

At the East and West Stations, the highest SDR values were found in suppliers (*Adiantum trapeziforme*), which were 44.01% and 36.41%, respectively. While at the South and North Stations, the highest SDR values were found in Israeli grass (*Asystasia gangetica*) and empritran grass (*Cyrtococcum acrescens*), which were 37.89% and 34.38%, respectively. Weed SDR data shows that at each station there are differences in weed dominance.

**Key word** : oil palm, plantations under oil palm stands, oil palm plantations, *A. gangetica*, *N. Biserrata*, *A. trapeziforme*, *C. acrescens*