

## ABSTRAK

### **Yunisa Karunia Lidia Sinaga, NIM 420322013 (2024). Eksplorasi Keragaman Plasma Nutfah Tanaman Alpukat (*Persea americana*) di Kabupaten Samosir.**

Penelitian ini bertujuan untuk mengetahui keragaman, kekerabatan plasma nutfah dan varietas tanaman alpukat (*Persea americana*) berdasarkan ciri morfologinya. Penelitian ini menggunakan desain penelitian deskriptif dengan cara observasi, kusioner dan wawancara. Data yang akan dianalisis terdiri dari gabungan data kualitatif dan kuantitatif. Penghitungan analisis gerombol dilakukan dengan menggunakan program NTSYS-pc versi 2.02i (*Software Numerical Taxonomy and Multivariate Analysis System*) berdasarkan metode UPGMA (*Unweighted Pair Group Method with Arithmetic Mean*). Keragaman plasma nutfah alpukat (*Persea americana*) di Kabupaten Samosir berdasarkan ciri morfologinya diketahui terbagi menjadi 9 gerombol. Gerombol I (M1, M8, M10, H3, H9 dan M15), gerombol II (M11, S5, H15, H2, H10 dan H1). Gerombol III (M2, M12, H16, M16, M9, M6, H8, M17), Gerombol IV (M4, S1, H12, H11, M5, dan H5), gerombol V (M7, H17, S6, S2 dan S4), gerombol VI (S2 dan S4), gerombol VII (M3, S3 dan H14), gerombol VIII (M14 dan H7) dan gerombol IX ( M13, H13, H6 dan H4). Hubungan kekerabatan plasma nutfah tanaman alpukat (*Persea americana*) yang terdapat di Kabupaten Samosir, terbagi menjadi 9 gerombol dengan nilai koefisien kemiripan antara plasma nutfah antar 0,47 - 0,71 atau 47% sampai dengan 71%. Adapun varietas alpukat yang ditemukan di Kabupaten Samosir terdiri dari 8 jenis varietas, yaitu alpukat alpukat ijo panjang, alpukat miki, alpukat kelud, alpukat mega murapi, alpukat wina, alpukat kendil, alpukat pangeran dan alpukat mentega.

**Kata kunci:** Alpukat, morfologi, plasma nutfah, samosir.



## ABSTRACT

**Yunisa Karunia Lidia Sinaga, NIM 4203220013 (2024). Exploration of Avocado (*Persea americana*) Germplasm Diversity in Samosir Regency.**

This study aims to determine the diversity, kinship of germplasm and avocado plant varieties (*Persea americana*) based on morphological characteristics. This research uses a descriptive research design by means of observation, questionnaires and interviews. The data to be analyzed consists of a combination of qualitative and quantitative data. Cluster analysis calculations were carried out using the NTSYS-pc version 2.02i program (Software Numerical Taxonomy and Multivariate Analysis System) based on the UPGMA method (Unweighted Pair Group Method with Arithmetic Mean). Avocado (*Persea americana*) germplasm diversity in Samosir Regency based on morphological characteristics is known to be divided into 9 clusters. Cluster I (M1, M8, M10, H3, H9 and M15), cluster II (M11, S5, H15, H2, H10 and H1). Cluster III (M2, M12, H16, M16, M9, M6, H8, M17), Cluster IV (M4, S1, H12, H11, M5, and H5), Cluster V (M7, H17, S6, S2 and S4), Cluster VI (S2 and S4), Cluster VII (M3, S3 and H14), Cluster VIII (M14 and H7) and Cluster IX (M13, H13, H6 and H4). The kinship relationship of avocado plant germplasm (*Persea americana*) found in Samosir Regency is divided into 9 clusters with a similarity coefficient value between germplasm between 0.47 - 0.71 or 47% to 71%. The avocado varieties found in Samosir Regency consist of 8 types of varieties, namely long ijo avocado, miki avocado, kelud avocado, mega murapi avocado, wina avocado, kendil avocado, prince avocado and butter avocado.

**Key words:** Avocado, morphology, germplasm, samosir.

