

DAFTAR PUSTAKA

- Aminullah, Indrawati, & Haryanta, D. (2025). *Cocopeat* Study with the Addition of NPK Fertilizer and Eco Enzyme as a Planting Medium for Water Spinach Microgreens (*Ipomea aquatica*). *Journal of Applied Plant Technology (JAPT)*, 4, 11–19. <https://doi.org/10.30742/v3ansq16>
- Antonangelo, J. A., Culman, S., & Zhang, H. (2024). Comparative analysis and prediction of cation exchange capacity via summation: influence of biochar type and nutrient ratios. *Frontiers in Soil Science*, 4. <https://doi.org/10.3389/fsoil.2024.1371777>
- Ardiansah, T., Suryanti, S., & Kristalisasi, E. N. (2023). Pemanfaatan Komposisi Pupuk Bokashi dan Tanah Regosol terhadap Pertumbuhan Bibit Kelapa Sawit (*Elaeis guineensis* Jacq) pada Masa *Pre Nursery*. *Agroforetech* (Number 03). <https://jurnal.instiperjogja.ac.id/index.php/JOM/article/view/839>
- Ardila, V., sari, W., Amelia, K., & Larashinda, M. (2026). Pengaruh Media Tanam Berbahan Dasar *Cocopeat* Pada Pembibitan Kakao (*Theobroma cacao* L.). *Jurnal Agroplasma*, 13(1), 44–55. <https://doi.org/10.36987/agroplasma.v13i1.8823>
- Bhagya, H. P., Mathur, R. K., Ravichandran, G., Ramajayam, D., Babu, B. K., Anitha, P., Murugesan, P., Kumar, K. S., Somasundaram, G., & Rahana, S. N. (2021). Identification and selection of elite oil palm (*Elaeis guineensis* Jacq.) genotypes for utilisation in a breeding program. *Journal of Plantation Crops*, 49(3), 162–167. <https://doi.org/10.25081/jpc.2021.v49.i3.7449>
- Fahik, M. A., Kustiani, E., & Moeljianto, B. D. (2021). Efek Dosis dan Frekuensi Aplikasi Pupuk Organik Cair PGPR (*Plant Growth Promoting Rhizobacteria*) terhadap Produktivitas Bayam Merah. *Jurnal Ilmiah Nasional Mahasiswa Pertanian (JINTAN)*, 1(1). <http://ojs.unik-kediri.ac.id/index.php/jintan>

- Ferrol, N., Azcón Aguilar, C., & Pérez Tienda, J. (2019). Review: Arbuscular mycorrhizas as key players in sustainable plant phosphorus acquisition: An overview on the mechanisms involved. *In Plant Science* (Vol. 280, pp. 441–447). Elsevier Ireland Ltd. <https://doi.org/10.1016/j.plantsci.2018.11.011>
- Gunawan, Ariani, E., & Amrul, K. M. (2014). The effect of giving chicken manure and various doses of urea fertilizer to the growth of palm oil (*Elaeis guineensis* Jacq.) Seedsat Main Nursery. *Jurnal Online Mahasiswa (JOM) Bidang Pertanian*, 1(2), 1–12. <https://media.neliti.com/media/publications/203083>
- Hakim, A. (2018). Pengaruh Biaya Produksi terhadap Pendapatan Petani Mandiri Kelapa Sawit di Kecamatan Segah. *Jurnal Ekonomi STIEP* (Vol. 3, no. 2). <https://doi.org/10.54526/jes.v3i2.8>
- Ilahi, W. F. F., & Ahmad, D. (2017). A study on the physical and hydraulic characteristics of cocopeat perlite mixture as a growing media in containerized plant production. *Sains Malaysiana*, 46(6), 975–980. <https://doi.org/10.17576/jsm-2017-4606-17>
- Izni, Aksarah Pas, A., & Jumardin. (2019). Pengaruh Berbagai Dosis Pupuk Organik Cair Limbah Rumah Tangga terhadap Pertumbuhan dan Hasil Tanaman Padi Gogo. *Jurnal Agrotech*, 9(1), 33–38. <https://doi.org/10.31970/agrotech.v9i1.31>
- Janoušková, M., Krak, K., Wagg, C., Štorchová, H., Čaklová, P., & Vosátka, M. (2013). Effects of inoculum additions in the presence of a preestablished arbuscular mycorrhizal fungal community. *Applied and Environmental Microbiology*, 79(20), 6507–6515. <https://doi.org/10.1128/AEM.02135-13>
- Laksono, J. B., Armando, R., Sophia, & Jatmiko, H. (2026). “The Effectiveness of Mycorrhiza (Mycovir) in Improving the Adaptation of Root Systems of Pre-Nursery Oil Palm Seedlings in Marginal Environments.” *ISRG Journal of*

Agriculture and Veterinary Sciences (ISRGJAVS), 3.
<https://doi.org/10.5281/zenodo.20230557>

Lukita, S. Y., Rahayu, E., & Parwati, W. D. U. (2023). Pengaruh Aplikasi *Cocopeat* pada Media Tanam dan Penyiraman Air Leri terhadap Pertumbuhan Bibit Kelapa Sawit (*Elaeis guineensis* Jacq) di *Pre Nursery*. *Agroforetech*, 1(1).
<https://jurnal.instiperjogja.ac.id/index.php/JOM/article/view/520>

Malau, L. R. E., & Rambe, K. R. (2022). Efek sertifikasi RSPO dan determinan lainnya terhadap kinerja keuangan perusahaan perkebunan kelapa sawit di Indonesia. *Jurnal Ekonomi Modernisasi*, 18(2), 184–198.
<https://doi.org/10.21067/jem.v18i2.7270>

Miller, S. P., & Sharitz, R. R. (2000). Manipulation of flooding and arbuscular mycorrhiza formation influences growth and nutrition of two semiaquatic grass species. *Functional Ecology*, 14(6), 738–748. <https://doi.org/10.1046/j.1365-2435.2000.00481.x>

Mintah, L. O., Ofosu-Budu, G. K., Osei-Bonsu, N. O., Ulzen, J., & Danso, E. O. (2022). Growing media, water stress and re-watering effects on the growth and dry matter production of cocoa seedlings. *Acta Universitatis Sapientiae, Agriculture and Environment*, 14(1), 45–61. <https://doi.org/10.2478/ausae-2022-0004>

Noviana, G., Sembiring, M., Wahyuni, M., & Guntaro. (2018). Pengaruh Aplikasi Mikoriza terhadap Agroista Jurnal Agroteknologi Pertumbuhan Bibit Kelapa Sawit (*Elaeis guineensis* Jacq.) pada Pembibitan *Main Nursery*. *AGROISTA Jurnal Agroteknologi*, 2. <https://doi.org/10.55180/agi.v2i2.39>

Passioura, J. B. (2002). Soil conditions and plant growth. *Plant. Cell and Environment*, 25(2), 311–318. <https://doi.org/10.1046/j.0016-8025.2001.00802.x>

- Pratomo, G., & Saputra, O. C. C. (2022). Analisis Determinan Ekspor Minyak Kelapa Sawit Indonesia pada Negara Asia-6 Tahun 2011-2020. *Economie: Jurnal Ilmu Ekonomi* (Vol. 04, Number 2). <https://doi.org/10.30742/economie.v4i1.2463>
- Putinella, J. A. (2014). Perubahan Distribusi Pori Tanah Regosol Akibat Pemberian Kompos Ela Sagu dan Pupuk Organik Cair. *In Buana Sains* (Vol. 14, Number 2). <https://doi.org/10.33366/bs.v14i2.354>
- Sodikin, E., Sulaiman, F., Amar, M., Achadi, T., Yakup, Sefrila, M., & Apria. (2022). Pengaruh Pemberian Dosis Pupuk Hayati Mikoriza pada Pertumbuhan Bibit Dua Varietas Kelapa Sawit di Pembibitan Awal. *Jurnal Agro Industri Perkebunan*, 141–152. <https://doi.org/10.25181/jaip.v10i2.2629>
- Woittiez, L. S., Wijk van, M. T., Slingerland, M., Noordwijk van, M., & Giller, K. E. (2017). Yield gaps in oil palm: A quantitative review of contributing factors. *In European Journal of Agronomy* (Vol. 83, pp. 57–77). Elsevier B.V. <https://doi.org/10.1016/j.eja.2016.11.002>
- Yuliani, F. (2019). Implementasi Kebijakan Penguatan Kelembagaan Perkebunan Sawit Rakyat pada Lahan Gambut. *Jurnal Kebijakan Publik* (Vol. 10, 1-58). <https://jkp.ejournal.unri.ac.id/index.php/JKP/article/view/7428>

LAMPIRAN

Lampiran 1. Pertambahan tinggi tanaman

Tests of Between-Subjects Effects						
Dependent Variable: pertambahan tinggi						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	318.465 ^a	8	39.808	3.651	.013	.646
Intercept	966.736	1	966.736	88.674	<.001	.847
cocopeat	208.240	2	104.120	9.550	.002	.544
mikoriza	8.278	2	4.139	.380	.690	.045
cocopeat * mikoriza	72.541	4	18.135	1.663	.207	.294
Error	174.433	16	10.902			
Total	1546.550	25				
Corrected Total	492.898	24				
a. R Squared = .646 (Adjusted R Squared = .469)						

Lampiran 2. Pertambahan jumlah daun

Tests of Between-Subjects Effects						
Dependent Variable: pertambahan daun						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	2.833 ^a	8	.354	.296	.957	.129
Intercept	216.008	1	216.008	180.320	<.001	.919
cocopeat	1.039	2	.519	.434	.656	.051
mikoriza	1.039	2	.519	.434	.656	.051
cocopeat * mikoriza	.813	4	.203	.170	.951	.041
Error	19.167	16	1.198			
Total	247.000	25				
Corrected Total	22.000	24				
a. R Squared = .129 (Adjusted R Squared = -.307)						

Lampiran 3. Pertambahan diameter batang

Tests of Between-Subjects Effects						
Dependent Variable: pertambahan diameter						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	45.811 ^a	8	5.726	1.231	.343	.381
Intercept	711.020	1	711.020	152.801	<.001	.905
cocopeat	28.455	2	14.227	3.058	.075	.277
mikoriza	3.857	2	1.928	.414	.668	.049
cocopeat * mikoriza	12.131	4	3.033	.652	.634	.140
Error	74.452	16	4.653			
Total	835.290	25				
Corrected Total	120.262	24				
a. R Squared = .381 (Adjusted R Squared = .071)						

Lampiran 4. Pertambahan berat segar tajuk

Tests of Between-Subjects Effects						
Dependent Variable: pertambahan berat basah tajuk						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	403.111 ^a	8	50.389	.707	.682	.261
Intercept	20054.431	1	20054.431	281.259	<.001	.946
cocopeat	117.104	2	58.552	.821	.458	.093
mikoriza	140.007	2	70.003	.982	.396	.109
cocopeat * mikoriza	115.390	4	28.847	.405	.803	.092
Error	1140.838	16	71.302			
Total	21855.900	25				
Corrected Total	1543.950	24				
a. R Squared = .261 (Adjusted R Squared = -.108)						

Lampiran 5. Pertambahan berat segar akar

Tests of Between-Subjects Effects						
Dependent Variable: pertambahan berat basah akar						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	352.407 ^a	8	44.051	.711	.679	.262
Intercept	8687.008	1	8687.008	140.137	<.001	.898
cocopeat	49.284	2	24.642	.398	.678	.047
mikoriza	220.051	2	110.026	1.775	.201	.182
cocopeat * mikoriza	110.850	4	27.712	.447	.773	.101
Error	991.833	16	61.990			
Total	9882.000	25				
Corrected Total	1344.240	24				
a. R Squared = .262 (Adjusted R Squared = -.107)						

Lampiran 6. Pertambahan panjang akar

Tests of Between-Subjects Effects						
Dependent Variable: pertambahan panjang akar						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	362.199 ^a	8	45.275	.985	.482	.330
Intercept	18103.177	1	18103.177	393.744	<.001	.961
cocopeat	.551	2	.275	.006	.994	.001
mikoriza	280.546	2	140.273	3.051	.075	.276
cocopeat * mikoriza	96.224	4	24.056	.523	.720	.116
Error	735.632	16	45.977			
Total	19225.760	25				
Corrected Total	1097.830	24				
a. R Squared = .330 (Adjusted R Squared = -.005)						

Lampiran 7. Pertambahan berat kering tajuk

Tests of Between-Subjects Effects						
Dependent Variable: pertambahan berat kering tajuk						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	61.560 ^a	8	7.695	.849	.575	.298
Intercept	700.833	1	700.833	77.333	<.001	.829
cocopeat	22.253	2	11.127	1.228	.319	.133
mikoriza	23.717	2	11.858	1.309	.298	.141
cocopeat * mikoriza	25.963	4	6.491	.716	.593	.152
Error	145.000	16	9.062			
Total	893.000	25				
Corrected Total	206.560	24				
a. R Squared = .298 (Adjusted R Squared = -.053)						

Lampiran 8. Pertambahan berat kering akar

Tests of Between-Subjects Effects						
Dependent Variable: pertambahan berat kering akar						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	33.305 ^a	8	4.163	.258	.971	.114
Intercept	1581.954	1	1581.954	98.005	<.001	.860
cocopeat	6.916	2	3.458	.214	.809	.026
mikoriza	9.004	2	4.502	.279	.760	.034
cocopeat * mikoriza	16.218	4	4.054	.251	.905	.059
Error	258.265	16	16.142			
Total	1889.970	25				
Corrected Total	291.570	24				
a. R Squared = .114 (Adjusted R Squared = -.329)						



Lampiran 9. Pengayakan tanah



Lampiran 10. Penanaman bibit



Lampiran 12. Pengukuran diameter batang



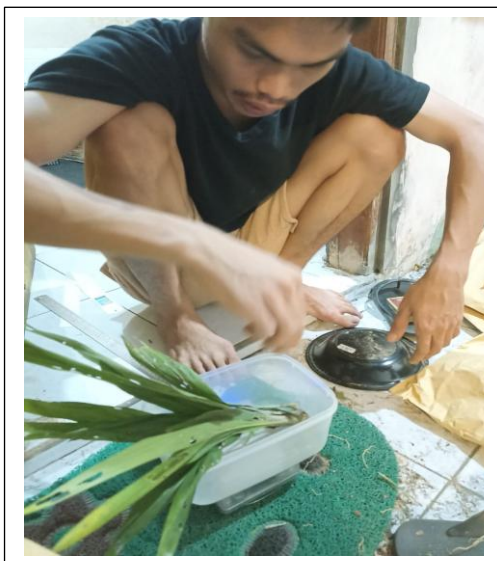
Lampiran 11. Pengukuran tinggi tanaman



Lampiran 14. Proses pemanenan



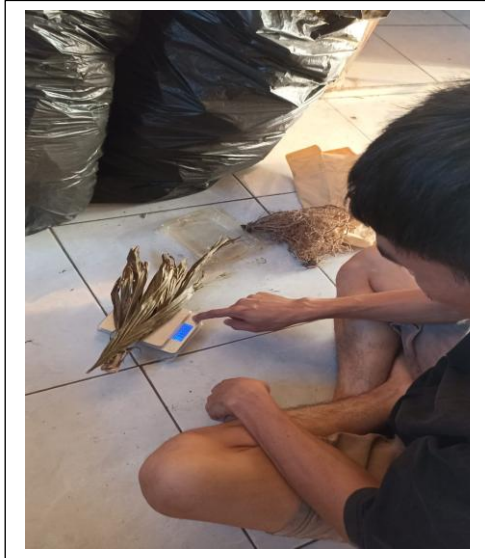
Lampiran 13. Berat basah akar



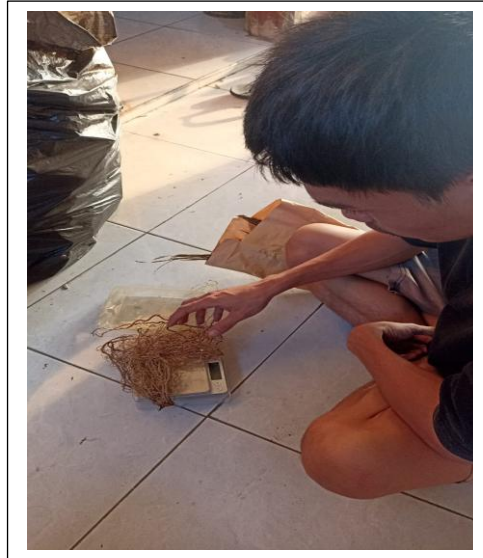
Lampiran 16. Berat basah tajuk



Lampiran 15. Panjang akar



Lampiran 18. Berat kering tajuk



Lampiran 17. Berat kering akar

Lampiran 19. Layout penelitian

ULANGAN 1		ULANGAN 2		ULANGAN 3	
M2C2	M2C2	M3C2	M3C2	M1C3	M1C3
M1C2	M1C2	M3C1	M3C1	M3C1	M3C1
M1C3	M1C3	M1C3	M1C3	M2C3	M2C3
M2C3	M2C3	M1C2	M1C2	M3C3	M3C3
M3C1	M3C1	M2C3	M2C3	M2C2	M2C2
M2C1	M2C1	M1C2	M1C2	M1C2	M1C2
M3C2	M3C2	M2C2	M2C2	M2C1	M2C1
M3C3	M3C3	M3C3	M3C3	M3C2	M3C2
M1C1	M1C1	M2C1	M2C1	M1C1	M1C1

Mikoriza : M1 = 25 25 gr/polibag gr (kontrol)

M2 = 50 gr/polibag

M3 = 0 gr

Cocopeat : C1 = 25 %

C2 = 50 %

C3 = 0 %