

DAFTAR PUSTAKA

- Anonim. 2014. Juknis Pembimbing Kelapa Sawit, Medan : Indonesia
- Cerda A (2000). Aggregate stability against water forces under different climates on agriculture land and scrubland in southern Bolivia. *Soil Till Res* 57, 159-166.
- Darmajaya, M, I. 1990. Klasifikasi Tanah. Gadjah Mada University Press. Yogyakarta.
- Ditjen Perkebunan. 2007. Fokus Pembangunan Perkebunan. Departemen Pertanian. Jakarta.
- Djoko Eko Hadi Susilo, Identifikasi Nilai Konstan Bentuk Daun Untuk Pengukuran Luas Daun.
- Dou, L, M. Komatsuzaki, dan M. Nakagawa 2012. Effects of Biochar, Mokusakueki and Bokashi Application on Soil Nutrients, Yield and Qualities of Sweet Potato. *J. Agriculture Science and Soil Science*. 2: 18-327.
- Gani, A. 2009. Biochar Penyelamat Lingkungan Balai Besar Penelitian Tanaman Padi. *Warta Penelitian dan Pengembangan Pertanian*. Vol.31. No.6. 2009.
- Grabel, E.R. Y. M. Harel, M. Kolton, E. Crtry, A. Silber, D.r. David, L, Tsechanky, M. Borenshtein, and Y. Elad, 2010. Biochar Impact on Development and Productivity of Pepper and Tomato grown in Fertigate Soilless Media. *Plant Soil* 337 481496.
- Gunadi, Soenarto dan Tri Sudyasti. 2005. Dinamika Ketersediaan Bahan Organik Dari Residu Pupuk Hijau Daun Dan Kompos. Dalam Kaitannya Dengan Fisik Tanah Pasiran Di Lahan Pantai.
- Maguire, R. O dan F, A, Agblevor 2010. Biochar in Agricultural Systems. College of Agriculture and Life sciences, Virginia Polytechnic Institute and State University.
- Mukhlid, S, 2007.. Pengaruh Pemberian Lapisan Lempung Terhadap Peningkatan Lema Tanah pada Tanah Berpasir. *Jurnal penelitian Dedi Erawan Dkk*, 2018 Vol 5 (2). Hal: 788-795

- Najiyati, S., dan Danarti, 1997. Kopi, Budidaya dan Penanganan Lepas Panen. Penebar Swadaya, Jakarta.
- Nurida, N. L, A. Dariah dan A Rachman, 2013. Peningkatan kualitas tanag dengan bahan baku pembenah tanah biochar limbah pertanian . Jurnal tanah dan iklim 37(2)69-78.
- Nurida, N, L, A. Dariah dan A, Rachman. 2009. Kualitas limbah pertanian sebagai bahan baku pembenah beupa biochar untuk rehabilitasi lahan. Prosiding Seminar Nasional dan dialog Sumberdaya Lahan Pertanian. Tahun 2009. Hal 209215.
- Rhaisa, A. 2011. Pengaruh Pemberian Abu Janjang Kelapa Sawit Terhadap Perubahan Ciri Kimia Tanah Regusol dan Serapan K Tanaman Jagung (*Zea mays* L). [Skripsi]. Fakultas Pertanian Universitas Andalas. Padang. 55 hal.
- Saito, M. And Marumoto, T. 2002. Inoculation with arbuscular mycorrhizal fungsi: The status quo in japan and the future prospect. Plan and Soil 244 273-279.
- Sanchez, P.A. 1976. Sifat dan pengelolaan Tanah Tropika. Terjemahan J.. Jayadinata. 1992. ITB. Bandung.
- Shanti, L P. Dan D. H. Goenadi. 2012 Pemanfaatan Biochar Cangkang Kelapa Sawit sebagai Substitusi Pupuk NPK Dalam Peningkatan Kualita Lahan Pertanian Fakultas Pertanian. Universitas Andalas. Padang.
- Solicin, M 2009. Twknologi asap cair “deorub” dalam industri karet alam. Techonology Indonesia .<http://www.technologyindonesia.com>. (28 Jan2010).
- Sonbai, J.H.H., D. Prajitno, dan A. Syukur. 2013. Pertumbuhan dan hasil jagung pada berbagai pemberian pupuk nitrogen di lahan kering regosol. Ilmu Pertanian 16: 77-89. DOI: <https://doi.org/10.22146/ipas.2527>

LAMPIRAN

- Data Siat Fisik TanahBulan Pertama

1. Kadar Lemas

TANAH	Kadar Lemas (Gram)						Kadar Lemas (Gram)						Kadar Lemas (Gram)						Tanpa Biochar (Gram)						
	15%						35%						50%												
	A	B	C	b-c	c-a	hasil	A	B	C	b-c	c-a	hasil	A	B	C	b-c	c-a		A	B	C	b-c	c-a		
Pot 1	54,212	57,647	57,132	0,515	2,92	17,637	26,882	30,275	29,899	0,376	3,017	12,463	64,543	67,825	67,435	0,39	2,882	13,485	Pot 1	50,76	56,611	56,278	0,333	5,518	6,0348
	30,627	35,523	34,804	0,719	4,177	17,213	Pot 1	53,038	57,028	56,583	0,445	3,545	12,553	Pot 1	25,391	30	29,609	0,513	4,218	12,162					
	53,038	57,028	56,583	0,445	3,545	12,553		25,391	30,12	29,609	0,511	4,218	12,115		30,627	35,523	34,804	0,719	4,177	17,213					
Pot 2	52,331	55,615	55,096	0,519	2,765	18,770	48,091	51,809	51,399	0,41	3,308	12,394	50,777	55,138	54,558	0,58	3,781	15,34							
	27,315	31,617	30,946	0,671	3,631	18,480	Pot 2	33,269	36,953	36,575	0,378	3,306	11,434	Pot 2	51,114	55,391	54,994	0,397	3,88	10,232					
	33,269	36,953	36,575	0,378	3,306	11,434		51,114	55,391	54,994	0,397	3,88	10,232		27,315	31,117	30,746	0,371	3,431	10,813					
Pot 3	33,096	36,189	35,747	0,442	2,651	16,673	43,609	44,848	44,686	0,162	1,077	15,042	28,828	34,619	33,855	0,764	5,027	15,198							
	26,627	30,141	29,575	0,566	2,948	19,199	Pot 3	37,309	41,294	40,783	0,511	3,474	14,709	Pot 3	35,622	40,061	39,528	0,533	3,906	13,646					
	37,309	39,294	38,983	0,311	1,674	18,578		35,622	40,061	39,541	0,52	3,919	13,269		26,627	30,141	29,575	0,566	2,948	19,199					
BONGKARA																									
TANAH	Kadar Lemas (Gram) 15%						Kadar Lemas (Gram) 35%						Kadar Lemas (Gram) 50%						Tanpa Biochar (Gram)						
	A	B	C	b-c	c-a		A	B	C	b-c	c-a		A	B	C	b-c	c-a		A	B	C	b-c	c-a		
	Pot 1	52,161	55,232	54,803	0,429	2,642	16,238	28,349	32,336	31,805	0,531	3,456	15,365												
	52,073	55,533	54,982	0,551	2,909	18,941	Pot 1	51,169	55,787	55,194	0,593	4,025	14,733		27,565	31,751	31,281	0,47	3,716	12,648					
	51,169	55,787	55,194	0,593	4,025	14,733		56,691	60,274	59,846	0,428	3,155	13,566	Pot 1	56,691	60,274	59,786	0,488	3,095	15,767					
Pot 2	65,532	68,833	68,412	0,421	2,88	14,618	28,275	33,8	33,159	0,641	4,884	13,124		51,627	55,533	54,929	0,604	3,302	18,292						
	28,321	31,111	30,729	0,382	2,208	17,301	Pot 2	49,769	54,004	53,551	0,453	3,782	11,978		72,202	75,753	75,344	0,409	3,142	13,017					
	50,679	54,004	53,598	0,406	2,919	13,909		52,78	55,931	55,451	0,48	2,671	17,971	Pot 2	52,78	55,931	55,467	0,464	2,687	17,268					
Pot 3	61,209	63,544	63,228	0,316	2,019	15,651	29,176	34,123	33,533	0,59	4,357	13,541		28,52	31,471	31,136	0,335	2,616	12,806						
	27,244	30,048	29,672	0,376	2,428	15,466	Pot 3	29,779	34,209	33,736	0,473	3,957	11,954		56,669	60,601	59,974	0,627	3,305	18,971					
	32,432	34,209	33,936	0,273	1,504	18,152		27,087	32,924	32,197	0,727	5,1	14,255	Pot 3	27,087	32,924	31,996	0,928	4,899	18,943					

2. Kadar Lengas Maksimum

Ulangan 1												Ulangan 2											
Dosis	Pot	Kadar Lengas Max (Gram)				klm	c-d	b-a	D	C	B	A	ngas Max (Gram)		D	b-a	c-d	klm					
		A	B	C	D								Pot	Dosis									
Pot (15%)	1	15,884	53,585	30,327	15,893	37,701	14,434	1,612	161,2				1	20,882	56,177	34,661	20,89	35,295	13,771	1,562995	156,3		
	2	20,828	56,077	33,941	20,84	35,249	13,101	1,6906	169,06				2	20,858	50,631	31,449	20,865	29,773	10,584	1,81302	181,3		
	3	24,202	65,848	40,354	24,213	41,646	16,141	1,5801	158,01				3	21,156	52,199	33,113	21,16	31,043	11,953	1,597089	159,71		
Pot (35%)	1	16	50,635	29,672	15,504	35,135	14,168	1,4799	147,99				1	16,147	53,556	31,201	16,183	37,409	15,018	1,490944	149,09		
	2	22,469	53,67	35,693	22,479	31,201	13,214	1,3612	136,12				2	20,932	57,003	35,867	20,941	36,071	14,926	1,416656	141,67		
	3	15,634	53,847	32,405	15,504	38,213	16,901	1,261	126,1				3	16,095	54,314	32,331	16,11	38,219	16,221	1,356143	135,61		
Pot (50%)	1	22,621	55,656	36,151	22,642	33,035	13,509	1,4454	144,54				1	25,973	63,871	42,329	25,989	37,898	16,34	1,319339	131,93		
	2	15,49	53,415	31,006	15,469	37,925	15,537	1,4409	144,09				2	15,999	52,625	31,245	16,011	36,626	15,234	1,404227	140,42		
	3	16,524	49,758	29,706	16,543	33,234	13,163	1,5248	152,48				3	23,126	59,766	38,137	23,151	36,64	14,986	1,444949	144,49		
T. Bioc	1	20,729	62,368	46,364	20,737	41,639	25,627	0,6248	62,481				1	24,118	49,821	37,917	24,132	25,703	13,785	0,864563	86,456		
ulangan 3																							
Dosis	Pot	Kadar Lengas Max (Gram)				b-a	c-d	klm															
		A	B	C	D				Pot	Dosis	b-a	c-d	klm										
Pot (15%)	1	16,984	54,293	31,437	17,011	37,309	14,426	1,5862	158,62				1	20,882	56,177	34,661	20,89	35,295	13,771	1,562995	156,3		
	2	21,778	57,244	34,345	21,623	35,466	12,722	1,7878	178,78				2	20,858	50,631	31,449	20,865	29,773	10,584	1,81302	181,3		
	3	25,356	66,299	41,671	25,677	40,943	15,994	1,5599	155,99				3	21,156	52,199	33,113	21,16	31,043	11,953	1,597089	159,71		
Pot (35%)	1	16,567	51,122	30,676	16,317	34,555	14,359	1,4065	140,65				1	16,147	53,556	31,201	16,183	37,409	15,018	1,490944	149,09		
	2	23,781	54,99	36,781	23,513	31,209	13,268	1,3522	135,22				2	20,932	57,003	35,867	20,941	36,071	14,926	1,416656	141,67		
	3	16,723	54,477	33,504	25,996	37,754	7,508	4,0285	402,85				3	16,095	54,314	32,331	16,11	38,219	16,221	1,356143	135,61		
Pot (50%)	1	23,435	56,788	37,383	23,202	33,353	14,181	1,3519	135,19				1	25,973	63,871	42,329	25,989	37,898	16,34	1,319339	131,93		
	2	16,367	54,634	32,056	16,556	38,267	15,5	1,4688	146,88				2	15,999	52,625	31,245	16,011	36,626	15,234	1,404227	140,42		
	3	17,466	50,833	30,811	17,607	33,367	13,204	1,527	152,7				3	23,126	59,766	38,137	23,151	36,64	14,986	1,444949	144,49		
T. Bioc	1	21,835	63,491	47,408	22,115	41,656	25,293	0,6469	64,694				1	24,118	49,821	37,917	24,132	25,703	13,785	0,864563	86,456		

3. Porositas

ulangan 1					ulangan 2					ulangan 3					
dosisi	pot	bv	bj	porositas	dosisi	pot	bv	bj	porositas	dosisi	pot	bv	bj	porosita	
	1	0,6355	0,9579	0,6635			1	1,0211	0,9188			1	0,6927	0,9822	0,7052
15%	2	0,5782	0,9687	0,5969	15%	2	0,7318	0,9624	0,7604	15%	2	0,6775	0,9814	0,6903	
	3	0,5919	0,9596	0,6168		3	0,6748	0,9418	0,7165		3	0,6758	0,9303	0,7265	
	1	1,0495	0,9084	1,1553		1	1,238	0,9693	1,2773		1	0,6816	0,7624	0,894	
35%	2	1,0666	0,9383	1,1367	35%	2	1,3199	0,8512	1,5506	35%	2	0,9042	0,919	0,9839	
	3	1,0202	0,8313	1,2272		3	1,2538	0,9549	1,313		3	0,8552	0,9522	0,8981	
	1	1,34	0,7959	1,6837		1	0,8367	0,9254	0,9042		1	0,8665	0,7869	1,1011	
50%	2	2,4782	0,9512	2,6052	50%	2	1,3167	0,9711	1,3558	50%	2	1,0625	0,9215	1,1531	
	3	1,8149	0,9417	1,9272		3	1,3987	0,9642	1,4506		3	0,7801	0,9274	0,8412	
t.biocar	1	0,8957	0,9618	0,9313	t.biocar	1	0,8957	0,9486	0,9442	t.biocar	1	0,8898	0,8384	1,0612	

5. Berat Volume

Ulangan 1																
Dosis	Pot	Berat Volum (Gram/cm3)						Q-P	100/(100+KL)	BTM	(B-A)/0,8	VBT	HASIL			
		A	B	P	Q	KL	KL									
Pot (15%)	1	3,327	4,87	70	77	16,238	0,1624	7	0,998379	3,3216	1,7736	5,2264	0,6355			
	2	3,592	5,157	70	78	18,941	0,1894	8	0,998109	3,5852	1,7989	6,2011	0,5782			
	3	4,295	4,951	70	78	14,733	0,1473	8	0,998529	4,2887	0,754	7,246	0,5919			
Pot (35%)	1	5,131	5,234	70	75	15,365	0,1536	5	0,998466	5,1231	0,1184	4,8816	1,0495			
	2	3,299	4,092	70	74	14,733	0,1473	4	0,998529	3,2941	0,9115	3,0885	1,0666			
	3	4,238	4,979	70	75	13,566	0,1357	5	0,998645	4,2323	0,8517	4,1483	1,0202			
Pot (50%)	1	6,209	6,533	70	75	12,648	0,1265	5	0,998737	6,2012	0,3724	4,6276	1,34			
	2	5,435	7,88	70	75	15,767	0,1577	5	0,998426	5,4264	2,8103	2,1897	2,4782			
	3	6,834	7,914	70	75	18,292	0,1829	5	0,998174	6,8215	1,2414	3,7586	1,8149			
T. Bioc	1	4,222	5	70	76	6,5826	0,0658	6	0,999342	4,2192	1,2897	4,7103	0,8957			

Ulangan 2														
Dosis	Pot	lum (Gram/cm3)					KL	KL	Q-P	100/(100+KL)	BTM	(B-A)/0,87	VBT	HASIL
		A	B	P	Q	KL								
ot (15%	1	5,179	5,993	70	76	14,618	0,1462	6	0,9985403	5,17144	0,935632	5,0644	1,0211	
	2	5,172	5,994	70	78	17,301	0,173	8	0,9982729	5,16307	0,944828	7,0552	0,7318	
	3	5,153	6,349	70	79	13,909	0,1391	9	0,998611	5,14584	1,374713	7,6253	0,6748	
ot (35%	1	5,131	6,75	70	76	13,124	0,1312	6	0,9986893	5,12427	1,86092	4,1391	1,238	
	2	5,939	7,249	70	76	11,978	0,1198	6	0,9988037	5,93189	1,505747	4,4943	1,3199	
	3	5,121	6,794	70	76	17,971	0,1797	6	0,9982061	5,11181	1,922989	4,077	1,2538	
ot (50%	1	4,064	5,064	70	76	13,017	0,1302	6	0,9987	4,05872	1,149425	4,8506	0,8367	
	2	5,72	7,167	70	76	17,268	0,1727	6	0,9982761	5,71014	1,663218	4,3368	1,3167	
	3	6,616	7,726	70	76	12,806	0,1281	6	0,9987211	6,60754	1,275862	4,7241	1,3987	
T. Bioc	1	4,222	5,344	70	76	7,0371	0,0704	6	0,9992968	4,21903	1,289655	4,7103	0,8957	

Ulangan 3													
Dosis	Pot	lum (Gram/cm3)					Q-P	00/(100+KL)	BTKM	B-A)/0,8	VBT	HASIL	
		A	B	P	Q	KL							
ot (15%	1	6,243	7,114	70	80	15,651	0,1565	10	0,9984373	6,2332442	1,00115	8,9989	0,6927
	2	5,232	6,354	70	79	15,486	0,1549	9	0,9984538	5,2239103	1,28966	7,7103	0,6775
	3	5,645	6,221	70	79	18,152	0,1815	9	0,9981881	5,634772	0,66207	8,3379	0,6758
ot (35%	1	6,112	7,021	70	80	13,541	0,1354	10	0,9986477	6,1037347	1,04483	8,9552	0,6816
	2	4,567	5,398	70	76	11,954	0,1195	6	0,9988061	4,5615474	0,95517	5,0448	0,9042
	3	5,544	6,002	70	77	14,255	0,1425	7	0,9985765	5,5361083	0,52644	6,4736	0,8552
ot (50%	1	4,666	5,21	70	76	18,971	0,1897	6	0,9981065	4,6571648	0,62529	5,3747	0,8665
	2	4,132	5,975	70	76	18,943	0,1894	6	0,9981093	4,1241877	2,11839	3,8816	1,0625
	3	6,342	7,109	70	79	14,497	0,145	9	0,9985524	6,3328192	0,88161	8,1184	0,7801
T. Bioc	1	4,131	5,314	70	76	5,6168	0,0562	6	0,9994386	4,128681	1,35977	4,6402	0,8898

- **Data Bulan Ketiga**

1. Kadar Lengas

TANAH	Kadar Lengas (Gram)						Kadar Lengas (Gram)						Kadar Lengas (Gram)						Tanpa Biochar (Gram)									
	15%			35%			50%			50 ^o			50 ^o			50 ^o			Tanpa Biochar (Gram)			Tanpa Biochar (Gram)						
	A	B	C	b-c	c-a	hasil	A	B	C	b-c	c-a	hasil	A	B	C	b-c	c-a	hasil	A	B	C	b-c	c-a					
Pot 1	Pot 1	45,12	51,31	49,11	2,204	3,984	55,321	31,41	37,03	35,09	1,943	3,681	52,78	34,09	40,79	38,75	2,039	4,662	43,74	Pot 1	35,93	43,52	41,88	1,64	5,952	27,55		
		28,71	35,13	33,35	1,777	4,636	38,330	Pot 1	48,29	55,04	53,07	1,966	4,783	41,1	Pot 1	52,07	58	56,59	1,424	4,516	31,53	50,72	56,49	55,28	1,209	4,56	26,51	
		48,29	55,04	52,67	2,366	4,383	53,981	25,39	30,12	28,61	1,511	3,218	46,95	31,63	36,82	34,8	2,019	3,177	63,55		44,21	49,34	48,33	1,016	4,116	24,68		
Pot 2	Pot 2	27,86	35,85	32,74	3,107	4,88	63,668	64,21	70,53	68,32	2,216	4,109	53,93	27,36	34,24	32,09	2,15	4,735	45,41									
		53,01	58,59	56,76	1,833	3,75	51,352	Pot 2	24,96	30,37	28,11	2,264	3,142	72,06	Pot 2	54,2	60,19	58,21	1,977	4,007	49,34							
		24,96	31,23	29,11	2,127	4,142	51,352	51,11	55,39	54,11	1,277	3	42,57	47,32	52,12	50,22	1,901	2,901	65,53									
Pot 3	Pot 3	54,96	60,59	58,66	1,935	3,698	52,326	55,55	61,09	59,31	1,787	3,757	47,56	52,45	57,66	56,11	1,547	3,665	42,21									
		51,89	57,08	55,32	1,76	3,427	51,357	Pot 3	54,12	60,62	57,96	2,655	3,843	69,09	Pot 3	37,91	44,2	42,28	1,919	4,364	43,97							
		54,32	60,62	58,76	1,855	4,443	41,751	35,62	40,06	38,54	1,52	2,919	52,07	46,63	52,14	50,14	2,006	3,508	57,18									
BONGKARAH	Kadar Lengas (Gram) 15%						Kadar Lengas (Gram) 35%						Kadar Lengas (Gram) 50 ^o						Tanpa Biochar (Gram)									
	A	B	C	b-c	c-a		A	B	C	b-c	c-a		A	B	C	b-c	c-a		A	B	C	b-c	c-a					
	Pot 1	29,29	35,85	32,88	2,968	3,595	82,56	25,27	30,96	28,69	2,269	3,422	66,31	52,26	58,9	56,19	2,711	3,934	68,91		34,21	40,42	38,17	2,245	3,964	56,63		
Pot 2		29,58	36,39	33,66	2,731	4,074	67,03	Pot 1	57,31	61,18	59,68	1,507	2,364	63,75	46,64	51,83	49,93	1,896	3,292	57,59	Pot 1	36,83	42,03	40,08	1,946	3,251	59,86	
		52,17	56,79	54,89	1,898	2,72	69,78	56,69	60,27	58,85	1,428	2,155	66,26	Pot 1	51,63	56,53	54,53	2,004	2,902	69,06		40,16	45,22	43,35	1,87	3,186	58,69	
		50,45	56,15	54,03	2,125	3,575	59,44	35,05	41,26	38,74	2,518	3,687	68,29	49,88	55,97	53,47	2,499	3,589	69,63									
Pot 3		53,01	58,65	56,52	2,126	3,513	60,52	Pot 2	32,82	38,74	36,51	2,229	3,686	60,47	51,43	57,18	54,87	2,304	3,438	67,02								
		50,68	54	52,7	1,306	2,019	64,69	52,78	57,93	55,85	2,08	3,071	67,73	Pot 2	48,52	53,99	52,02	1,97	3,494	56,38								
		53,04	59,14	56,85	2,292	3,809	60,17	50,47	55,9	53,82	2,076	3,352	61,93	59,1	66,28	63,57	2,709	4,464	60,69									
		28,35	34,03	31,83	2,202	3,48	63,28	Pot 3	50,81	56,59	54,38	2,208	3,571	61,83	52,45	57,49	55,51	1,972	3,06	64,44								
		42,43	47,21	45,44	1,773	3,004	59,02	37,1	42,92	40,6	2,327	3,5	66,49	Pot 3	47,24	52,65	50,52	2,131	3,273	65,11								

2. Kadar Lengas Maksimum

Ulangan 1									
Dosis	Pot	Kadar Lengas Max (Gram)					c-d		klm
		A	B	C	D	b-a			
Pot (15%)	1	20,88	52,702	33,516	20,875	31,822	12,641	1,5174	151,74
	2	16,525	60,908	34,914	16,515	44,383	18,399	1,4123	141,23
	3	15,5	52,965	31,42	15,493	37,465	15,927	1,3523	135,23
Pot (35%)	1	21	64,159	40,157	20,718	43,429	19,439	1,2341	123,41
	2	15,46	59,484	34,221	15,451	44,024	18,77	1,3454	134,54
	3	15,916	62,387	36,779	15,897	46,471	20,882	1,2254	122,54
Pot (50%)	1	20,933	59,206	37,218	20,917	38,273	16,301	1,3479	134,79
	2	24,209	68,473	42,865	24,195	44,264	18,67	1,3709	137,09
	3	20,842	57,979	36,827	20,822	37,137	16,005	1,3203	132,03
T. Bioc	1	20,854	64,262	44,852	20,835	43,408	24,017	0,8074	80,739

Ulangan 2									
Dosis	Pot	Kadar Lengas Max (Gram)					c-d		klm
		A	B	C	D	b-a			
Pot (15%)	1	21,152	55,471	35,604	21,139	34,319	14,465	1,372554	137,26
	2	15	57,567	33,169	15,989	42,567	17,18	1,477707	147,77
	3	24,123	62,499	39,817	24,115	38,376	15,702	1,44402	144,4
Pot (35%)	1	23,129	63,608	41,325	23,117	40,479	18,208	1,223144	122,31
	2	22,616	63,304	40,298	22,6	40,688	17,698	1,299017	129,9
	3	25,98	74,925	47,485	25,966	48,945	21,519	1,274502	127,45
Pot (50%)	1	16,089	52,247	31,29	16,076	36,158	15,214	1,376627	137,66
	2	15,638	52,909	31,76	15,618	37,271	16,142	1,308946	130,89
	3	22,462	57,321	37,38	22,444	34,859	14,936	1,333891	133,39
T. Bioc	1	16,134	66,887	44,668	16,116	50,753	28,552	0,777564	77,756

Ulangan 3									
Dosis	Pot	Kadar Lengas Max (Gram)					c-d		klm
		A	B	C	D	b-a			
Pot (15%)	1	17,984	55,293	32,427	18,011	37,309	14,416	1,588	158,8
	2	21,778	57,244	34,345	21,623	35,466	12,722	1,7878	178,78
	3	25,356	65,299	41,671	25,677	39,943	15,994	1,4974	149,74
Pot (35%)	1	16,567	51,122	30,676	16,317	34,555	14,359	1,4065	140,65
	2	23,781	54,99	36,781	23,513	31,209	13,268	1,3522	135,22
	3	16,723	54,477	33,504	25,996	37,754	7,508	4,0285	402,85
Pot (50%)	1	23,235	56,588	37,483	23,202	33,353	14,281	1,3355	133,55
	2	17,367	54,634	32,056	16,556	37,267	15,5	1,4043	140,43
	3	17,466	50,833	30,811	17,607	33,367	13,204	1,527	152,7
T. Bioc	1	21,835	62,911	47,108	22,115	41,076	24,993	0,6435	64,35

3. Porositas

ulangan 1					ulangan 2					ulangan 3				
dosisi	pot	bv	bj	porositas	dosisi	pot	bv	bj	porositas	dosisi	pot	bv	bj	porosita
	1	1,13	1,3952	0,8099			1	1,2568	1,535			1	1,5912	1,5563
15%	2	1,1841	1,4032	0,8439	15%		2	1,3082	1,4732	15%		2	1,4867	1,184
	3	1,0992	1,4866	0,7394			3	1,4214	1,3635			3	1,5438	1,5869
	1	1,2217	1,5417	0,7925			1	1,8649	1,7226			1	1,5876	1,6254
35%	2	1,0398	1,4894	0,6982	35%		2	1,3486	1,601	35%		2	1,7199	2,0518
	3	1,0529	1,357	0,7759			3	1,5908	1,5573			3	1,1302	1,0797
	1	1,1439	1,0291	1,1116			1	1,487	1,1845			1	1,1841	1,7129
50%	2	1,0706	1,3389	0,7996	50%		2	1,5439	1,5883	50%		2	1,0987	1,0206
	3	1,0543	1,443	0,7306			3	1,5877	1,6261			3	1,2218	1,4007
t.biocar	1	1,6036	2,1267	0,754	t.biocar	1	1,7207	2,0536	0,8379	t.biocar	1	1,0408	0,765	1,3606

4. Berat Jenis

Ulangan 1													
Dosis	Pot	Berat Jenis (Gram/cm3)										C-A	BTkM
		A	B	C	D	T1	T2	KL	KL	KL	0/(100+KL)		
Pot (15%)	1	15,25	40,69	20,85	42,31	0,996	0,997	17,637	0,176	0,998	0,998	5,602	5,592
	2	22,43	49,51	27,74	51,05	0,997	0,997	17,213	0,172	0,998	0,998	5,309	5,3
	3	20,37	45,32	26,13	47,21	0,997	0,997	12,553	0,126	0,999	0,999	5,756	5,749
Pot (35%)	1	18,69	45,4	25,44	47,78	0,997	0,997	12,46	0,125	0,999	0,999	6,749	6,741
	2	25,16	51,5	32,95	54,08	0,997	0,997	12,55	0,126	0,999	0,999	7,791	7,781
	3	29,28	55,19	36,74	57,17	0,997	0,997	12,11	0,121	0,999	0,999	7,457	7,448
Pot (50%)	1	20,2	45,06	25,37	45,23	0,997	0,997	13,49	0,135	0,999	0,999	5,173	5,166
	2	18,07	43,11	24,26	44,69	0,997	0,997	12,16	0,122	0,999	0,999	6,19	6,182
	3	20,05	44,97	25,93	46,79	0,997	0,997	17,21	0,172	0,998	0,998	5,88	5,87
T. Biod	1	16,49	42,26	21,29	44,8	0,997	0,997	6,035	0,06	0,999	0,999	4,801	4,798
Ulangan 2													
Dosis	Pot	Berat Jenis (Gram/cm3)										C-A	BTkM
		A	B	C	D	T1	T2	KL	KL	KL	0/(100+KL)		
Pot (15%)	1	16,57	42,88	22	44,79	0,997	0,997	18,770	0,188	0,998	0,998	5,465	5,455
	2	24,91	51,17	31,15	53,19	0,997	0,997	18,480	0,185	0,998	0,998	6,243	6,231
	3	24,51	50,83	30,45	52,43	0,997	0,997	11,434	0,114	0,998	0,998	5,937	5,93
Pot (35%)	1	16,53	41,55	21,53	43,65	0,997	0,997	12,39	0,124	0,998	0,998	5,001	4,995
	2	20,57	47,26	26,57	49,52	0,997	0,997	11,43	0,114	0,998	0,998	5,991	5,98
	3	16,26	43,3	21,87	45,31	0,997	0,997	10,23	0,102	0,999	0,999	5,608	5,602
Pot (50%)	1	17,56	44,68	24,31	45,76	0,997	0,997	15,34	0,153	0,998	0,998	6,751	6,741
	2	16,87	42,42	20,78	43,87	0,997	0,997	10,23	0,102	0,999	0,999	3,911	3,907
	3	16,38	42,74	21,1	44,56	0,997	0,997	10,81	0,108	0,998	0,998	4,713	4,708
T. Biod	1	22,47	48,57	27,08	50,94	0,997	0,997	5,854	0,059	0,999	0,999	4,613	4,61
Ulangan 3													
Dosis	Pot	Berat Jenis (Gram/cm3)										C-A	BTkM
		A	B	C	D	T1	T2	KL	KL	KL	0/(100+KL)		
Pot (15%)	1	16,26	43,3	21,87	45,31	0,997	0,997	16,67	0,167	0,998	0,998	5,608	5,599
	2	17,56	44,68	24,31	45,76	0,997	0,997	19,2	0,192	0,998	0,998	6,751	6,738
	3	16,87	42,42	20,78	43,87	0,997	0,997	18,58	0,186	0,998	0,998	3,911	3,904
Pot (35%)	1	16,38	42,74	21,1	44,56	0,997	0,997	15,04	0,15	0,998	0,998	4,713	4,706
	2	22,47	48,57	27,08	50,94	0,997	0,997	14,71	0,147	0,998	0,998	4,613	4,606
	3	15,43	40,69	21,1	42,79	0,997	0,997	13,27	0,133	0,998	0,998	26,84	26,84
Pot (50%)	1	22,43	49,51	27,74	51,05	0,997	0,997	15,2	0,152	0,998	0,998	28,62	28,58
	2	20,37	45,32	26,13	47,21	0,997	0,997	13,65	0,136	0,998	0,998	26,84	26,84
	3	18,69	45,4	25,44	47,78	0,997	0,997	19,2	0,192	0,998	0,998	29,09	29,04
T. Biod	1	25,16	51,5	32,95	54,08	0,997	0,997	6,677	0,067	0,999	0,999	28,92	28,9
Ulangan 4													
Dosis	Pot	Berat Jenis (Gram/cm3)										C-A	BTkM
		A	B	C	D	T1	T2	KL	KL	KL	0/(100+KL)		
Pot (15%)	1	16,26	43,3	21,87	45,31	0,997	0,997	16,67	0,167	0,998	0,998	5,608	5,599
	2	17,56	44,68	24,31	45,76	0,997	0,997	19,2	0,192	0,998	0,998	6,751	6,738
	3	16,87	42,42	20,78	43,87	0,997	0,997	18,58	0,186	0,998	0,998	3,911	3,904
Pot (35%)	1	16,38	42,74	21,1	44,56	0,997	0,997	15,04	0,15	0,998	0,998	4,713	4,706
	2	22,47	48,57	27,08	50,94	0,997	0,997	14,71	0,147	0,998	0,998	4,613	4,606
	3	15,43	40,69	21,1	42,79	0,997	0,997	13,27	0,133	0,998	0,998	26,84	26,84
Pot (50%)	1	22,43	49,51	27,74	51,05	0,997	0,997	15,2	0,152	0,998	0,998	28,62	28,58
	2	20,37	45,32	26,13	47,21	0,997	0,997	13,65	0,136	0,998	0,998	26,84	26,84
	3	18,69	45,4	25,44	47,78	0,997	0,997	19,2	0,192	0,998	0,998	29,09	29,04
T. Biod	1	25,16	51,5	32,95	54,08	0,997	0,997	6,677	0,067	0,999	0,999	28,92	28,9

5. Berat Volume

Ulangan 1																	
Dosis	Pot	Berat Volum (Gram/cm3)							Q-P	100/(100+KL)	BTM	(B-A)/0,87	VBT	HASIL			
		A	B	P	Q	KL	KL										
Pot (15%)	1	5,014	5,51	70	75	16,2377	0,16238	5	0,9983789	5,00587	0,57011	4,42989	1,13002				
	2	6,709	7,009	70	76	18,9412	0,18941	6	0,9981095	6,69632	0,34483	5,65517	1,1841				
	3	6,005	6,479	70	76	14,7329	0,14733	6	0,9985289	5,99617	0,54483	5,45517	1,09917				
Pot (35%)	1	6,8	7,185	70	76	15,3646	0,15365	6	0,9984659	6,78957	0,44253	5,55747	1,2217				
	2	6,672	7,188	70	77	14,7329	0,14733	7	0,9985289	6,66218	0,5931	6,4069	1,03985				
	3	4,758	5,182	70	75	13,5658	0,13566	5	0,9986453	4,75155	0,48736	4,51264	1,05294				
Pot (50%)	1	6,052	6,675	70	76	12,648	0,12648	6	0,9987368	6,04436	0,71609	5,28391	1,14392				
	2	7,628	8,399	70	78	15,7674	0,15767	8	0,9984257	7,61599	0,88621	7,11379	1,0706				
	3	6,46	7,229	70	77	18,2919	0,18292	7	0,9981741	6,4482	0,88391	6,11609	1,0543				
T. Biocar	1	10,196	11	70	77	6,5826	0,06583	7	0,9993422	10,1893	0,64598	6,35402	1,6036				

Ulangan 2														
Dosis	Pot	olum (Gram/cm ³)						Q-P	100/(100+KL)	BTM	(B-A)/0,87	VBT	HASIL	
		A	B	P	Q	KL	KL							
Pot (15%)	1	6,775	8,182	70	77	14,6181	0,14618	7	0,99854033	6,765111	1,6172414	5,38276	1,25681	
	2	6,007	6,369	70	75	17,3007	0,17301	5	0,99827292	5,996625	0,416092	4,58391	1,30819	
	3	5,139	5,478	70	74	13,9089	0,13909	4	0,99861104	5,131862	0,3896552	3,61034	1,42143	
Pot (35%)	1	5,248	5,413	70	73	13,1245	0,13124	3	0,99868927	5,241121	0,1896552	2,81034	1,86494	
	2	4,878	5,215	70	74	11,9778	0,11978	4	0,99880365	4,872164	0,3873563	3,61264	1,34864	
	3	8,635	9,141	70	76	17,9708	0,17971	6	0,99820614	8,61951	0,5816092	5,41839	1,59079	
Pot (50%)	1	5,184	5,635	70	74	13,0172	0,13017	4	0,99869997	5,177261	0,5183908	3,48161	1,48703	
	2	6,405	7,152	70	75	17,2683	0,17268	5	0,99827614	6,393959	0,8586207	4,14138	1,54392	
	3	6,359	7,229	70	75	12,8058	0,12806	5	0,99872106	6,350867	1	4	1,58772	
T. Biocar	1	11,04	11,552	70	77	7,03711	0,07037	7	0,99929678	11,03224	0,5885057	6,41149	1,7207	

Ulangan 3														
Dosis	Pot	olum (Gram/cm3)												
		A	B	P	Q	KL	KL	Q-P	100/(100+KL)	BTM	(B-A)/0,87	VBT	HASIL	
Pot (15%)	1	8,635	9,141	70	76	15,6513	0,15651	6	0,99843731	8,62150621	0,581609	5,41839	1,59116	
	2	5,184	5,635	70	74	15,486	0,15486	4	0,99845379	5,17598447	0,518391	3,48161	1,48666	
	3	6,405	7,152	70	75	18,1516	0,18152	5	0,99818813	6,39339497	0,858621	4,14138	1,54378	
Pot (35%)	1	6,359	7,229	70	75	13,5414	0,13541	5	0,99864769	6,35040065	1	4	1,5876	
	2	11,04	11,552	70	77	11,9535	0,11954	7	0,99880608	11,0268191	0,588506	6,41149	1,71985	
	3	5,014	5,51	70	75	14,2549	0,14255	5	0,99857654	5,00686277	0,570115	4,42989	1,13025	
Pot (50%)	1	6,709	7,009	70	76	18,9713	0,18971	6	0,99810647	6,69629629	0,344828	5,65517	1,1841	
	2	6,005	6,479	70	76	18,9426	0,18943	6	0,99810932	5,99364645	0,544828	5,45517	1,09871	
	3	6,8	7,185	70	76	14,4971	0,14497	6	0,99855238	6,79015621	0,442529	5,55747	1,22181	
T. Biocar	1	6,672	7,188	70	77	5,61678	0,05617	7	0,99943864	6,66825459	0,593103	6,4069	1,04079	

- Gambar pada lapangan praktek





- Gambar pada analisa LAB





