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LAMPIRAN

Lampiran 1. Dokumentasi Foto Penelitian Tahap Pertama



Lampiran 2. Hasil Analisa Program SPSS Penelitian Tahap Pertama

1. Deskriptif Bahan Kering

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
P0	3	93.3133	.20502	.11837	92.8040	93.8226	93.11	93.52
P1	3	92.8533	.30501	.17610	92.0956	93.6110	92.55	93.16
P2	3	91.7067	.87638	.50598	89.5296	93.8837	90.86	92.61
P3	3	90.9767	.48232	.27847	89.7785	92.1748	90.42	91.27
P4	3	91.7267	.43004	.24828	90.6584	92.7949	91.30	92.16
P5	3	92.6033	.48993	.28286	91.3863	93.8204	92.18	93.14
P6	3	90.4167	.41765	.24113	89.3792	91.4542	90.10	90.89
P7	3	91.9900	.28844	.16653	91.2735	92.7065	91.67	92.23
Total	24	91.9483	1.00366	.20487	91.5245	92.3721	90.10	93.52

ANOVA

Bahan Kering

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	19.532	7	2.790	12.276	.000
Within Groups	3.637	16	.227		
Total	23.169	23			

Bahan Kering

Duncan^a

Perlakuan	N	Subset for alpha = 0.05				
		1	2	3	4	5
P6	3	90.4167				
P3	3	90.9767	90.9767			
P2	3		91.7067	91.7067		
P4	3		91.7267	91.7267		
P7	3			91.9900	91.9900	
P5	3				92.6033	92.6033
P1	3				92.8533	92.8533
P0	3					93.3133
Sig.		.170	.085	.501	.050	.102

2. Deskriptif Protein Kasar

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
P0	3	9.3267	.59045	.34090	7.8599	10.7934	8.75	9.93
P1	3	10.9167	1.02510	.59184	8.3702	13.4632	9.90	11.95
P2	3	10.9633	.29092	.16796	10.2407	11.6860	10.66	11.24
P3	3	10.9967	.14012	.08090	10.6486	11.3447	10.84	11.11
P4	3	11.2767	.13796	.07965	10.9340	11.6194	11.12	11.38
P5	3	10.8833	.14012	.08090	10.5353	11.2314	10.74	11.02
P6	3	11.1433	.41789	.24127	10.1052	12.1814	10.78	11.60
P7	3	11.0500	.38743	.22368	10.0876	12.0124	10.76	11.49
Total	24	10.8196	.71377	.14570	10.5182	11.1210	8.75	11.95

ANOVA

Protein Kasar

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.983	7	1.140	4.887	.004
Within Groups	3.734	16	.233		
Total	11.718	23			

Protein Kasar

Duncan^a

Perlakuan	N	Subset for alpha = 0.05	
		1	2
P0	3	9.3267	
P5	3		10.8833
P1	3		10.9167
P2	3		10.9633
P3	3		10.9967
P7	3		11.0500
P6	3		11.1433
P4	3		11.2767
Sig.		1.000	.388

3. Deskriptif Lemak Kasar

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
P0	3	2.7333	.30139	.17401	1.9846	3.4820	2.45	3.05
P1	3	2.8000	.64506	.37242	1.1976	4.4024	2.15	3.44
P2	3	2.6000	.23896	.13796	2.0064	3.1936	2.34	2.81
P3	3	2.7933	.04619	.02667	2.6786	2.9081	2.74	2.82
P4	3	2.7367	.21548	.12441	2.2014	3.2720	2.53	2.96
P5	3	2.8200	.05196	.03000	2.6909	2.9491	2.79	2.88
P6	3	2.6700	.38691	.22338	1.7089	3.6311	2.24	2.99
P7	3	2.4600	.19000	.10970	1.9880	2.9320	2.25	2.62
Total	24	2.7017	.28850	.05889	2.5798	2.8235	2.15	3.44

ANOVA

Lemak Kasar

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.312	7	.045	.445	.859
Within Groups	1.602	16	.100		
Total	1.914	23			

LemakKasar

Duncan^a

Perlakuan	N	Subset for alpha = 0.05
		1
P7	3	2.4600
P2	3	2.6000
P6	3	2.6700
P0	3	2.7333
P4	3	2.7367
P3	3	2.7933
P1	3	2.8000
P5	3	2.8200
Sig.		.236

4. Deskriptif Serat Kasar

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
P0	3	50.6267	4.52500	2.61251	39.3859	61.8674	46.10	55.15
P1	3	46.6667	1.61658	.93333	38.6509	46.6825	40.80	43.60
P2	3	49.8500	.42332	.24440	48.7984	50.9016	49.53	50.33
P3	3	48.6033	1.07500	.62065	45.9329	51.2738	47.53	49.68
P4	3	42.5767	.51733	.29868	45.2915	47.8618	45.98	46.90
P5	3	45.1200	1.09503	.63222	42.3998	47.8402	44.03	46.22
P6	3	46.5067	.80984	.46756	44.4949	48.5184	45.99	47.44
P7	3	45.5433	.54077	.31221	44.2000	46.8867	45.15	46.16
Total	24	46.9367	2.94655	.60146	45.6924	48.1809	40.80	55.15

ANOVA

Serat Kasar

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	146.011	7	20.859	6.217	.001
Within Groups	53.678	16	3.355		
Total	199.689	23			

Serat Kasar

Duncan^a

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
P4	3	42.6667			
P5	3	45.1200	45.1200		
P7	3	45.5433	45.5433		
P6	3		46.5067	46.5067	
P1	3		46.5767	46.5767	
P3	3		48.6033	48.6033	48.6033
P2	3			49.8500	49.8500
P0	3				50.6267
Sig.		.086	.050	.055	.218

5. BETN

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
P0	3	26.2933	.85008	.49079	24.1816	28.4050	25.45	27.15
P1	3	28.3533	1.95021	1.12596	27.6887	37.3779	30.60	34.50
P2	3	26.0333	.79827	.46088	24.0503	28.0163	25.28	26.87
P3	3	26.6433	1.78576	1.03101	22.2073	31.0794	25.01	28.55
P4	3	32.5333	1.07747	.62208	25.6768	31.0299	27.56	29.58
P5	3	30.5933	.84595	.48841	28.4919	32.6948	29.68	31.35
P6	3	29.0333	.58825	.33962	27.5720	30.4946	28.53	29.68
P7	3	30.7700	.94271	.54427	28.4282	33.1118	29.74	31.59
Total	24	28.7817	2.48956	.50818	27.7304	29.8329	25.01	34.50

ANOVA

BETN

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	119.625	7	17.089	11.926	.000
Within Groups	22.927	16	1.433		
Total	142.552	23			

BETN

Duncan^a

Perlakuan	N	Subset for alpha = 0.05				
		1	2	3	4	5
P2	3	26.0333				
P0	3	26.2933	26.2933			
P3	3	26.6433	26.6433			
P1	3		28.3533	28.3533		
P6	3			29.0333	29.0333	
P5	3				30.5933	30.5933
P7	3				30.7700	30.7700
P4	3					32.5333
Sig.		.563	.062	.497	.110	.077

6. ABU

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
P0	3	11.1000	1.00000	.57735	8.6159	13.5841	10.10	12.10
P1	3	10.1967	.30006	.17324	9.4513	10.9420	9.90	10.50
P2	3	10.5467	.09452	.05457	10.3119	10.7815	10.44	10.62
P3	3	10.9600	.56630	.32696	9.5532	12.3668	10.34	11.45
P4	3	11.0600	.37510	.21656	10.1282	11.9918	10.80	11.49
P5	3	10.5800	.35043	.20232	9.7095	11.4505	10.24	10.94
P6	3	10.6400	.59152	.34152	9.1706	12.1094	10.19	11.31
P7	3	10.1800	.35539	.20518	9.2972	11.0628	9.96	10.59
Total	24	10.6579	.55339	.11296	10.4242	10.8916	9.90	12.10

ANOVA

ABU

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.725	7	.389	1.442	.256
Within Groups	4.319	16	.270		
Total	7.044	23			

ABUDuncan^a

Perlakuan	N	Subset for alpha = 0.05
		1
P7	3	10.1800
P1	3	10.1967
P2	3	10.5467
P5	3	10.5800
P6	3	10.6400
P3	3	10.9600
P4	3	11.0600
P0	3	11.1000
Sig.		.074

7. ADF

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
P0	3	65.4167	.97511	.56298	62.9944	67.8390	64.45	66.40
P1	3	61.8767	1.02500	.59179	59.3304	64.4229	60.85	62.90
P2	3	64.0333	.78117	.45101	62.0928	65.9739	63.50	64.93
P3	3	63.9500	.84451	.48758	61.8521	66.0479	63.21	64.87
P4	3	62.8767	.74191	.42834	61.0337	64.7197	62.26	63.70
P5	3	63.5767	.26502	.15301	62.9183	64.2350	63.31	63.84
P6	3	62.8900	.22068	.12741	62.3418	63.4382	62.66	63.10
P7	3	62.5967	.10263	.05925	62.3417	62.8516	62.51	62.71
Total	24	63.4021	1.19627	.24419	62.8969	63.9072	60.85	66.40

ANOVA

ADF

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	24.905	7	3.558	7.107	.001
Within Groups	8.010	16	.501		
Total	32.914	23			

ADF

Duncan^a

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
P1	3	61.8767			
P7	3	62.5967	62.5967		
P4	3	62.8767	62.8767	62.8767	
P6	3	62.8900	62.8900	62.8900	
P5	3		63.5767	63.5767	
P3	3			63.9500	
P2	3			64.0333	
P0	3				65.4167
Sig.		.125	.137	.088	1.000

8. Deskriptif NDF

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
P0	3	70.1333	1.05040	.60645	67.5240	72.7427	69.10	71.20
P1	3	68.8000	.95000	.54848	66.4401	71.1599	67.85	69.75
P2	3	68.9433	.47648	.27510	67.7597	70.1270	68.40	69.29
P3	3	66.9300	.67446	.38940	65.2545	68.6055	66.33	67.66
P4	3	66.9567	.42194	.24361	65.9085	68.0048	66.62	67.43
P5	3	68.8267	.47057	.27168	67.6577	69.9956	68.55	69.37
P6	3	71.1367	.55510	.32049	69.7577	72.5156	70.63	71.73
P7	3	68.2133	.65248	.37671	66.5925	69.8342	67.46	68.60
Total	24	68.7425	1.48992	.30413	68.1134	69.3716	66.33	71.73

ANOVA

NDF

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	43.415	7	6.202	12.985	.000
Within Groups	7.642	16	.478		
Total	51.057	23			

NDFDuncan^a

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
P3	3	66.9300			
P4	3	66.9567			
P7	3		68.2133		
P1	3		68.8000		
P5	3		68.8267		
P2	3		68.9433	68.9433	
P0	3			70.1333	70.1333
P6	3				71.1367
Sig.		.963	.251	.051	.094

9. Deskriptif Selulosa

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
P0	3	26.1600	1.01000	.58312	23.6510	28.6690	25.15	27.17
P1	3	25.0000	1.00000	.57735	22.5159	27.4841	24.00	26.00
P2	3	25.9533	.75923	.43834	24.0673	27.8394	25.51	26.83
P3	3	25.6500	.56630	.32696	24.2432	27.0568	25.03	26.14
P4	3	24.3833	.40550	.23412	23.3760	25.3907	23.99	24.80
P5	3	25.7167	.09292	.05364	25.4859	25.9475	25.64	25.82
P6	3	25.3467	.64694	.37351	23.7396	26.9538	24.60	25.74
P7	3	24.7467	.28361	.16374	24.0421	25.4512	24.42	24.93
Total	24	25.3696	.81203	.16575	25.0267	25.7125	23.99	27.17

ANOVA

Selulosa

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.987	7	1.141	2.543	.058
Within Groups	7.179	16	.449		
Total	15.166	23			

SelulosaDuncan^a

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
P4	3	24.3833		
P7	3	24.7467	24.7467	
P1	3	25.0000	25.0000	25.0000
P6	3	25.3467	25.3467	25.3467
P3	3	25.6500	25.6500	25.6500
P5	3		25.7167	25.7167
P2	3		25.9533	25.9533
P0	3			26.1600
Sig.		.051	.066	.076

10. Deskriptif Hemiselulosa

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
P0	3	4.7333	.40104	.23154	3.7371	5.7296	4.35	5.15
P1	3	6.9300	.85000	.49075	4.8185	9.0415	6.08	7.78
P2	3	4.9100	.70505	.40706	3.1586	6.6614	4.21	5.62
P3	3	2.9767	.53501	.30889	1.6476	4.3057	2.56	3.58
P4	3	4.0800	.42755	.24685	3.0179	5.1421	3.74	4.56
P5	3	5.2467	.53501	.30889	3.9176	6.5757	4.71	5.78
P6	3	8.2467	.34269	.19785	7.3954	9.0979	7.97	8.63
P7	3	5.6167	.63571	.36703	4.0375	7.1959	4.89	6.07
Total	24	5.3425	1.63758	.33427	4.6510	6.0340	2.56	8.63

ANOVA

Hemiselulosa

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	56.364	7	8.052	24.241	.000
Within Groups	5.315	16	.332		
Total	61.678	23			

HemiselulosaDuncan^a

Perlakuan	N	Subset for alpha = 0.05				
		1	2	3	4	5
P3	3	2.9767				
P4	3		4.0800			
P0	3		4.7333	4.7333		
P2	3		4.9100	4.9100		
P5	3			5.2467		
P7	3			5.6167		
P1	3				6.9300	
P6	3					8.2467
Sig.		1.000	.113	.102	1.000	1.000

11. Deskriptif Abu Tak Larut

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
P0	3	1.1000	.30000	.17321	.3548	1.8452	.80	1.40
P1	3	.0667	.02517	.01453	.0042	.1292	.04	.09
P2	3	.0667	.03512	.02028	-.0206	.1539	.03	.10
P3	3	.3133	.39577	.22850	-.6698	1.2965	.07	.77
P4	3	.8267	.02887	.01667	.7550	.8984	.81	.86
P5	3	.3333	.34962	.20185	-.5352	1.2018	.07	.73
P6	3	.1400	.09539	.05508	-.0970	.3770	.03	.20
P7	3	.0867	.06658	.03844	-.0787	.2521	.03	.16
Total	24	.3667	.41491	.08469	.1915	.5419	.03	1.40

ANOVA

Abu Tak Larut

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.189	7	.456	9.465	.000
Within Groups	.770	16	.048		
Total	3.960	23			

Abu Tak Larut

Duncan^a

Perlakuan	N	Subset for alpha = 0.05	
		1	2
P1	3	.0667	
P2	3	.0667	
P7	3	.0867	
P6	3	.1400	
P3	3	.3133	
P5	3	.3333	
P4	3		.8267
P0	3		1.1000
Sig.		.202	.147

12. Deskriptif Lignin

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
P0	3	38.1400	.16000	.09238	37.7425	38.5375	37.98	38.30
P1	3	37.6667	1.12001	.64664	34.0211	39.5856	35.68	37.92
P2	3	38.0200	.07810	.04509	37.8260	38.2140	37.93	38.07
P3	3	37.9867	.08327	.04807	37.7798	38.1935	37.92	38.08
P4	3	36.8033	.50501	.29157	36.4122	38.9212	37.09	38.03
P5	3	37.5267	.30436	.17572	36.7706	38.2827	37.29	37.87
P6	3	37.4033	.42477	.24524	36.3481	38.4585	37.02	37.86
P7	3	37.7633	.31565	.18224	36.9792	38.5474	37.52	38.12
Total	24	37.6638	.57959	.11831	37.4190	37.9085	35.68	38.30

ANOVA

Lignin

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.885	7	.555	2.311	.078
Within Groups	3.842	16	.240		
Total	7.726	23			

LigninDuncan^a

Perlakuan	N	Subset for alpha = 0.05	
		1	2
P4	3	36.8033	
P6	3	37.4033	37.4033
P5	3	37.5267	37.5267
P1	3	37.6667	37.6667
P7	3		37.7633
P3	3		37.9867
P2	3		38.0200
P0	3		38.1400
Sig.		.063	.122

13. Deskriptif Tanin

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
P0	3	1.5067	.19502	.11260	1.0222	1.9911	1.31	1.70
P1	3	1.0533	.03055	.01764	.9774	1.1292	1.02	1.08
P2	3	1.1633	.10116	.05840	.9120	1.4146	1.10	1.28
P3	3	1.1433	.12702	.07333	.8278	1.4589	1.07	1.29
P4	3	1.0333	.00577	.00333	1.0190	1.0477	1.03	1.04
P5	3	1.2067	.01528	.00882	1.1687	1.2446	1.19	1.22
P6	3	1.0300	.02000	.01155	.9803	1.0797	1.01	1.05
P7	3	1.1667	.08737	.05044	.9496	1.3837	1.07	1.24
Total	24	1.1629	.16786	.03426	1.0920	1.2338	1.01	1.70

ANOVA

Tanin

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.501	7	.072	7.773	.000
Within Groups	.147	16	.009		
Total	.648	23			

TaninDuncan^a

Perlakuan	N	Subset for alpha = 0.05	
		1	2
P6	3	1.0300	
P4	3	1.0333	
P1	3	1.0533	
P3	3	1.1433	
P2	3	1.1633	
P7	3	1.1667	
P5	3	1.2067	
P0	3		1.5067
Sig.		.063	1.000

14. Deskriptif Theobromin

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
P0	3	.1067	.02517	.01453	.0442	.1692	.08	.13
P1	3	.1067	.01528	.00882	.0687	.1446	.09	.12
P2	3	.1067	.01528	.00882	.0687	.1446	.09	.12
P3	3	.0900	.01000	.00577	.0652	.1148	.08	.10
P4	3	.0700	.01000	.00577	.0452	.0948	.06	.08
P5	3	.1100	.00000	.00000	.1100	.1100	.11	.11
P6	3	.1000	.02000	.01155	.0503	.1497	.08	.12
P7	3	.1000	.02000	.01155	.0503	.1497	.08	.12
Total	24	.0988	.01849	.00377	.0909	.1066	.06	.13

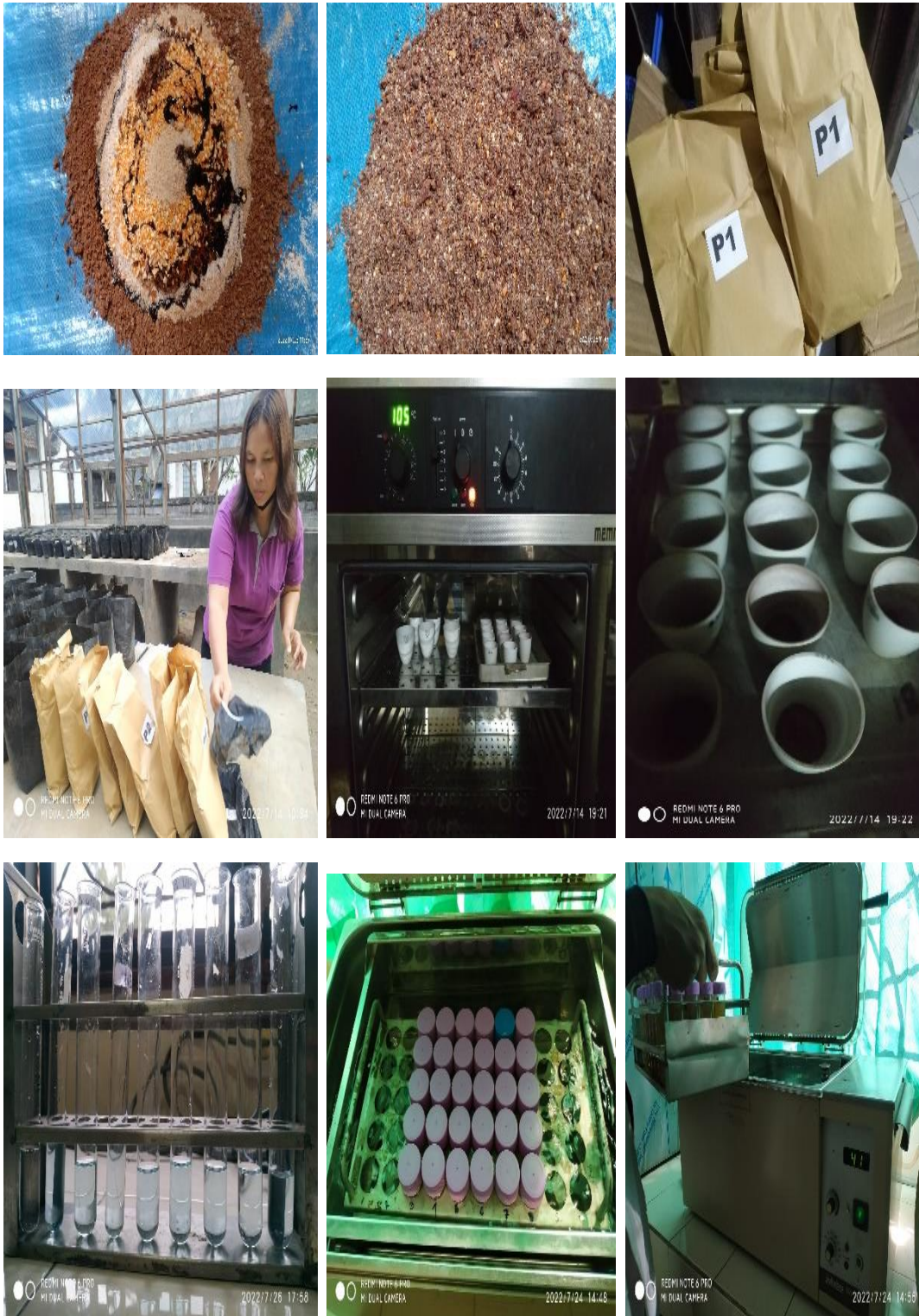
ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.004	7	.001	1.993	.120
Within Groups	.004	16	.000		
Total	.008	23			

Duncan^a

Perlakuan	N	Subset for alpha = 0.05	
		1	2
P4	3	.0700	
P3	3	.0900	.0900
P6	3	.1000	.1000
P7	3	.1000	.1000
P0	3		.1067
P1	3		.1067
P2	3		.1067
P5	3		.1100
Sig.		.052	.198

Lampiran 3. Dokumentasi Foto Penelitian Tahap Ke-Dua



Lampiran 4. Hasil Analisa Program SPSS Penelitian Tahap Ke-Dua
ANOVA

BK

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	34.248	3	11.416	988.412	.000
Within Groups	.092	8	.012		
Total	34.341	11			

BK

Duncan^a

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
Perlakuan 4	3	83.6100		
Perlakuan 2	3	83.7333	83.7333	
Perlakuan 3	3		83.9167	
Perlakuan 1	3			87.6467
Sig.		.197	.070	1.000

ANOVA

PK

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.019	3	2.006	135.103	.000
Within Groups	.119	8	.015		
Total	6.138	11			

PK

Duncan^a

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
Perlakuan 2	3	14.4000		
Perlakuan 3	3		15.1767	
Perlakuan 1	3		15.3667	
Perlakuan 4	3			16.3867
Sig.		1.000	.093	1.000

ANOVA

LK

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.086	3	1.695	19.369	.001
Within Groups	.700	8	.088		
Total	5.786	11			

LK

Duncan^a

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
Perlakuan 3	3	3.3967		
Perlakuan 4	3		4.2367	
Perlakuan 2	3		4.7267	4.7267
Perlakuan 1	3			5.1467
Sig.		1.000	.077	.120

ANOVA

SK

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	14.131	3	4.710	33.233	.000
Within Groups	1.134	8	.142		
Total	15.265	11			

SKDuncan^a

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
Perlakuan 2	3	9.8000		
Perlakuan 4	3	10.1467	10.1467	
Perlakuan 3	3		10.6600	
Perlakuan 1	3			12.6067
Sig.		.292	.133	1.000

ANOVA

BO

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.363	3	1.788	627.231	.000
Within Groups	.023	8	.003		
Total	5.386	11			

BODuncan^a

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
Perlakuan 3	3	90.5467			
Perlakuan 1	3		90.9667		
Perlakuan 2	3			91.1500	
Perlakuan 4	3				92.3467
Sig.		1.000	1.000	1.000	1.000

NOVA

Abu

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.361	3	1.787	626.994	.000
Within Groups	.023	8	.003		
Total	5.384	11			

AbuDuncan^a

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
Perlakuan 4	3	7.6467			
Perlakuan 2	3		8.8400		
Perlakuan 1	3			9.0267	
Perlakuan 3	3				9.4467
Sig.		1.000	1.000	1.000	1.000

ANOVA

BETN

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.230	3	.410	3.415	.073
Within Groups	.960	8	.120		
Total	2.190	11			

BETNDuncan^a

Perlakuan	N	Subset for alpha = 0.05	
		1	2
Perlakuan 4	3	45.1867	
Perlakuan 3	3	45.2200	
Perlakuan 1	3	45.4867	45.4867
Perlakuan 2	3		45.9867
Sig.		.339	.115

ANOVA

TDN

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	55.531	3	18.510	16.546	.001
Within Groups	8.950	8	1.119		
Total	64.481	11			

TDNDuncan^a

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
Perlakuan 1	3	55.2400		
Perlakuan 3	3		57.4200	
Perlakuan 4	3			59.5567
Perlakuan 2	3			60.9067
Sig.		1.000	1.000	.157

ANOVA

KCBK

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	259.032	3	86.344	159.820	.000
Within Groups	4.322	8	.540		
Total	263.354	11			

KCBKDuncan^a

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
Perlakuan 3	3	60.8400			
Perlakuan 1	3		63.5167		
Perlakuan 2	3			65.8200	
Perlakuan 4	3				73.3200
Sig.		1.000	1.000	1.000	1.000

ANOVA

KCBO

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	228.449	3	76.150	190.223	.000
Within Groups	3.203	8	.400		
Total	231.651	11			

KCBODuncan^a

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
Perlakuan 3	3	64.8367			
Perlakuan 1	3		67.2300		
Perlakuan 2	3			70.7300	
Perlakuan 4	3				76.4367
Sig.		1.000	1.000	1.000	1.000

ANOVA

KCPK

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	480.492	3	160.164	111.148	.000
Within Groups	11.528	8	1.441		
Total	492.020	11			

KCPK

Duncan^a

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
Perlakuan 1	3	61.0467			
Perlakuan 2	3		66.8200		
Perlakuan 3	3			71.1267	
Perlakuan 4	3				78.3867
Sig.		1.000	1.000	1.000	1.000

ANOVA

KCSK

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	952.526	3	317.509	322.748	.000
Within Groups	7.870	8	.984		
Total	960.396	11			

KCSK

Duncan^a

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
Perlakuan 1	3	48.2300			
Perlakuan 2	3		53.6800		
Perlakuan 3	3			63.4067	
Perlakuan 4	3				71.4067
Sig.		1.000	1.000	1.000	1.000

ANOVA

Gross energy

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.291	3	.097	85.002	.000
Within Groups	.009	8	.001		
Total	.300	11			

Gross energy

Duncan^a

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
Perlakuan 3	3	3.4300			
Perlakuan 2	3		3.5167		
Perlakuan 1	3			3.6200	
Perlakuan 4	3				3.8467
Sig.		1.000	1.000	1.000	1.000

Lampiran 5. Dokumentasi Foto Penelitian Tahap Ke-Ketiga



Lampiran 6. Hasil Analisa Program SPSS Penelitian Tahap Ke-Ketiga

Dependent Variable: Konsumsi Bahan Kering

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	690.300 ^a	3	230.100	478.641	.000
Intercept	1697932.787	1	1697932.787	3531948.611	.000
Perlakuan	690.300	3	230.100	478.641	.000
Error	5.769	12	.481		
Total	1698628.856	16			
Corrected Total	696.068	15			

Duncan^{a,b}

Perlakuan	N	Subset		
		1	2	3
P0	4	315.6975		
P1	4		324.1175	
P3	4			331.4900
P2	4			331.7425
Sig.		1.000	1.000	.616

Dependent Variable: Konsumsi Bahan Organik

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1781.566 ^a	3	593.855	1591.599	.000
Intercept	1322034.291	1	1322034.291	3543199.828	.000
Perlakuan	1781.566	3	593.855	1591.599	.000
Error	4.477	12	.373		
Total	1323820.335	16			
Corrected Total	1786.044	15			

Duncan^{a,b}

Perlakuan	N	Subset			
		1	2	3	4
P0	4	270.6175			
P1	4		286.4425		
P2	4			295.3800	
P3	4				297.3575
Sig.		1.000	1.000	1.000	1.000

Dependent Variable: Konsumsi Protein Kasar

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	578.075 ^a	3	192.692	29826.501	.000
Intercept	24117.314	1	24117.314	3733089.482	.000
Perlakuan	578.075	3	192.692	29826.501	.000
Error	.078	12	.006		
Total	24695.466	16			
Corrected Total	578.152	15			

Duncan^{a,b}

Perlakuan	N	Subset			
		1	2	3	4
P0	4	29.0125			
P1	4		39.1075		
P2	4			42.4125	
P3	4				44.7650
Sig.		1.000	1.000	1.000	1.000

Dependent Variable: Konsumsi Lemak Kasar

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	21.061 ^a	3	7.020	12165.325	.000
Intercept	2011.747	1	2011.747	3486059.361	.000
Perlakuan	21.061	3	7.020	12165.325	.000
Error	.007	12	.001		
Total	2032.815	16			
Corrected Total	21.068	15			

Duncan^{a,b}

Perlakuan	N	Subset			
		1	2	3	4
P0	4	9.3450			
P1	4		11.2425		
P2	4			11.9275	
P3	4				12.3375
Sig.		1.000	1.000	1.000	1.000

Dependent Variable: Konsumsi Serat Kasar

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3677.040 ^a	3	1225.680	40498.819	.000
Intercept	100477.905	1	100477.905	3319983.104	.000
Perlakuan	3677.040	3	1225.680	40498.819	.000
Error	.363	12	.030		
Total	104155.308	16			
Corrected Total	3677.403	15			

Duncan^{a,b}

Perlakuan	N	Subset			
		1	2	3	4
P3	4	63.9250			
P2	4		71.5575		
P1	4			77.3200	
P0	4				104.1800
Sig.		1.000	1.000	1.000	1.000

Dependent Variable: Konsumsi BETN

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	356.523 ^a	3	118.841	1307.653	.000
Intercept	322274.775	1	322274.775	3546108.516	.000
Perlakuan	356.523	3	118.841	1307.653	.000
Error	1.091	12	.091		
Total	322632.389	16			
Corrected Total	357.614	15			

Duncan^{a,b}

Perlakuan	N	Subset			
		1	2	3	4
P0	4	134.4250			
P1	4		141.3800		
P2	4			145.5675	
P3	4				146.3200
Sig.		1.000	1.000	1.000	1.000

Dependent Variable: Kosnsumsi Air

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	127.429 ^a	3	42.476	252.435	.000
Intercept	1334110.471	1	1334110.471	7928546.797	.000
Perlakuan	127.429	3	42.476	252.435	.000
Error	2.019	12	.168		
Total	1334239.920	16			
Corrected Total	129.449	15			

Duncan^{a,b}

Perlakuan	N	Subset		
		1	2	3
P0	4	283.9655		
P1	4		289.4828	
P2	4			290.6068
P3	4			290.9820
Sig.		1.000	1.000	.220

Dependent Variable: KCBK

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	43.252 ^a	3	14.417	1.095	.389
Intercept	70124.336	1	70124.336	5325.708	.000
Perlakuan	43.252	3	14.417	1.095	.389
Error	158.006	12	13.167		
Total	70325.594	16			
Corrected Total	201.257	15			

Dependent Variable: KCBO

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	45.138 ^a	3	15.046	1.908	.182
Intercept	72638.335	1	72638.335	9210.869	.000
Perlakuan	45.138	3	15.046	1.908	.182
Error	94.634	12	7.886		
Total	72778.107	16			
Corrected Total	139.772	15			

Dependent Variable: KCPK

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	519.741 ^a	3	173.247	15.596	.000
Intercept	94390.273	1	94390.273	8497.258	.000
Perlakuan	519.741	3	173.247	15.596	.000
Error	133.300	12	11.108		
Total	95043.314	16			
Corrected Total	653.041	15			

Duncan^{a,b}

Perlakuan	N	Subset	
		1	2
P0	4	67.1125	
P1	4		78.4100
P2	4		80.2925
P3	4		81.4150
Sig.		1.000	.248

Dependent Variable: KCLK

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	397.386 ^a	3	132.462	6.460	.008
Intercept	77641.643	1	77641.643	3786.487	.000
Perlakuan	397.386	3	132.462	6.460	.008
Error	246.059	12	20.505		
Total	78285.088	16			
Corrected Total	643.445	15			

Duncan^{a,b}

Perlakuan	N	Subset	
		1	2
P0	4	61.6375	
P1	4		69.9025
P2	4		72.0275
P3	4		75.0750
Sig.		1.000	.150

Dependent Variable: KCSK

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	898.302 ^a	3	299.434	9.359	.002
Intercept	33569.568	1	33569.568	1049.225	.000
Perlakuan	898.302	3	299.434	9.359	.002
Error	383.936	12	31.995		
Total	34851.806	16			
Corrected Total	1282.238	15			

Duncan^{a,b}

Perlakuan	N	Subset	
		1	2
P3	4	37.3575	
P2	4	42.4625	
P1	4	45.6775	
P0	4		57.7225
Sig.		.070	1.000

Dependent Variable: Konsumsi Nitrogen

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	14.832 ^a	3	4.944	32507.658	.000
Intercept	617.398	1	617.398	4059604.973	.000
Perlakuan	14.832	3	4.944	32507.658	.000
Error	.002	12	.000		
Total	632.232	16			
Corrected Total	14.833	15			

Duncan^{a,b}

Perlakuan	N	Subset			
		1	2	3	4
P0	4	4.6400			
P1	4		6.2575		
P2	4			6.7875	
P3	4				7.1625
Sig.		1.000	1.000	1.000	1.000

Dependent Variable: Nitrogen Dalam Feses

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.107 ^a	3	.036	.966	.441
Intercept	30.747	1	30.747	830.720	.000
Perlakuan	.107	3	.036	.966	.441
Error	.444	12	.037		
Total	31.298	16			
Corrected Total	.551	15			

Dependent Variable: Nitrogen Dalam Urine

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.415 ^a	3	.138	35.259	.000
Intercept	21.275	1	21.275	5429.067	.000
Perlakuan	.415	3	.138	35.259	.000
Error	.047	12	.004		
Total	21.737	16			
Corrected Total	.462	15			

Duncan^{a,b}

Perlakuan	N	Subset		
		1	2	3
P3	4	1.0125		
P2	4	1.0500	1.0500	
P1	4		1.1275	
P0	4			1.4225
Sig.		.413	.105	1.000

Dependent Variable: Serapan Nitrogen

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	17.339 ^a	3	5.780	155.696	.000
Intercept	372.683	1	372.683	10039.727	.000
Perlakuan	17.339	3	5.780	155.696	.000
Error	.445	12	.037		
Total	390.467	16			
Corrected Total	17.784	15			

Duncan^{a,b}

Perlakuan	N	Subset			
		1	2	3	4
P0	4	3.1150			
P1	4		4.9075		
P2	4			5.4525	
P3	4				5.8300
Sig.		1.000	1.000	1.000	1.000

Dependent Variable: Retensi Nitrogen

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	23.033 ^a	3	7.678	214.295	.000
Intercept	215.723	1	215.723	6021.217	.000
Perlakuan	23.033	3	7.678	214.295	.000
Error	.430	12	.036		
Total	239.185	16			
Corrected Total	23.463	15			

Duncan^{a,b}

Perlakuan	N	Subset			
		1	2	3	4
P0	4	1.6950			
P1	4		3.7775		
P2	4			4.3975	
P3	4				4.8175
Sig.		1.000	1.000	1.000	1.000

Dependent Variable: Persentase Retensi Nitrogen

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2390.465 ^a	3	796.822	72.839	.000
Intercept	52445.580	1	52445.580	4794.168	.000
Perlakuan	2390.465	3	796.822	72.839	.000
Error	131.273	12	10.939		
Total	54967.318	16			
Corrected Total	2521.738	15			

Duncan^{a,b}

Perlakuan	N	Subset		
		1	2	3
P0	4	36.5125		
P1	4		60.4150	
P2	4		64.8200	64.8200
P3	4			67.2625
Sig.		1.000	.084	.317

Dependent Variable: pH

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.014 ^a	3	.005	.203	.893
Intercept	729.540	1	729.540	31770.935	.000
Perlakuan	.014	3	.005	.203	.893
Error	.276	12	.023		
Total	729.830	16			
Corrected Total	.289	15			

Dependent Variable: NH3

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	163.275 ^a	3	54.425	36.273	.000
Intercept	2390.721	1	2390.721	1593.349	.000
Perlakuan	163.275	3	54.425	36.273	.000
Error	18.005	12	1.500		
Total	2572.001	16			
Corrected Total	181.280	15			

Duncan^{a,b}

Perlakuan	N	Subset			
		1	2	3	4
P0	4	8.2550			
P1	4		10.1525		
P2	4			14.1175	
P3	4				16.3700
Sig.		1.000	1.000	1.000	1.000

Dependent Variable: VFA

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2548.870 ^a	3	849.623	17.205	.000
Intercept	189103.220	1	189103.220	3829.388	.000
Perlakuan	2548.870	3	849.623	17.205	.000
Error	592.585	12	49.382		
Total	192244.675	16			
Corrected Total	3141.455	15			

Duncan^{a,b}

Perlakuan	N	Subset	
		1	2
P0	4	91.6825	
P1	4	101.5350	
P2	4		119.7175
P3	4		121.9250
Sig.		.071	.665

CURRICULUM VITAE

Data Pribadi

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Pekerjaan dan Riwayat Pekerjaan

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A. Karya ilmiah yang telah dipublikasikan:

Atmaja *et al.*, 2023, Fermentation of cocoa pods husk using turmeric powder and *Aspergillus niger*: effects on fiber composition and antinutrients, JTTV Vol. 28 No 4 Th. 2023:259-267, DOI:<http://dx.doi.org/10.14334/jitv.v28i4.3180>.

Makalah pada Seminar/Konferensi Ilmiah Nasional dan Internasional

- a. Atmaja *et al.*, 2023, The performance and carcass percentage of goat fed with cocoa POD husk and turmeric, AIP Conference Proceedings 2628, 030010 (2023), <https://doi.org/10.1063/5.0143960>
- b. Atmaja *et al.*, 2021, Meningkatkan performa kambing dengan pakan kulit buah kakao dan kunyit, Prosiding seminar nasional inovasi teknologi nutrisi dan pakan untuk pengembangan peternakan rakyat, Makassar, 21 Oktober 2021