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LAMPIRAN

Lampiran 1. Data Hasil Penelitian

TABEL DATA PENELITIAN KUALITAS SEMEN SEGAR SECARA MAKROSKOPIS

ULANGAN	VOLUME (ml)	WARNA	BAU	KEASAMAN	KONSISTENSI
1	1,5	Kekuningan	khas	7	sedang
2	1,8	Kekuningan	Khas	6,8	sedang
3	1	Kekuningan	Khas	6,8	sedang
4	1,7	Kekuningan	khas	6,8	sedang
5	1,2	kekuningan	khas	6,8	sedang
Rata-rata	1,44			6,84	

TABEL DATA PENELITIAN KUALITAS SECARA MIKROSKOPIS DAN KINEMATIKA SEMEN KAMBING SAANEN

PERLAKUAN	ULANGAN	VARIABEL PENELITIAN													
		Motilitas (%) (x 10 ³)	Konsentrasi	KINEMATIKA SPERMATOZOA											
Semen Segar	1	71,57	2,017	38,10	20,68	14,52	92,68	50,73	35,96	0,39	0,69	0,55	20,96	5,88	15,33
	2	88,43	6,831	48,13	24,50	15,23	120,40	61,77	38,64	0,32	0,63	0,51	21,70	6,21	20,36
	3	89,57	3,381	49,31	26,50	17,78	119,20	64,67	43,77	0,37	0,68	0,54	22,18	7,00	20,85
	4	90,00	4,769	49,49	26,15	18,29	119,70	63,62	44,89	0,38	0,71	0,53	22,79	6,78	19,27
	5	87,64	2,501	40,84	21,00	13,99	97,68	50,62	34,00	0,35	0,67	0,52	19,30	6,21	18,60
Rata-rata		85,44	3,8998	45,17	23,77	15,96	109,93	58,28	39,45	0,36	0,68	0,53	21,39	6,42	18,88
P1(tanpa pencucian) diencerkan	1	73,18		43,98	23,72	17,89	109,20	59,23	44,80	0,41	0,76	0,54	24,21	5,51	20,11
	2	79,79		50,47	29,14	19,93	126,10	72,76	55,01	0,44	0,76	0,58	26,38	5,95	21,17
	3	60,91		26,78	15,20	11,52	65,66	37,94	28,99	0,44	0,76	0,58	15,63	4,72	12,97
	4	79,38		44,32	23,39	16,55	107,00	56,84	40,36	0,38	0,71	0,53	20,90	6,56	20,17
	5	91,80		56,46	27,83	18,09	136,30	67,56	44,09	0,32	0,65	0,50	23,46	7,33	22,72
Rata-rata		77,01	#DIV/0!	44,40	23,86	17,20	108,85	58,87	42,65	0,40	0,73	0,55	22,12	6,01	19,43
P2(Pencucian)	1	48,31	1,013	35,82	18,50	12,99	85,84	45,08	32,06	0,37	0,71	0,53	22,84	5,68	17,38
	2	85,5	2,835	53,45	26,93	17,57	130,50	66,01	43,35	0,33	0,66	0,51	22,30	7,09	20,53
	3	84,32	1,591	46,54	23,67	15,77	110,80	56,83	38,08	0,34	0,67	0,51	21,58	6,85	20,90
	4	89,75	2,118	44,36	22,77	14,90	106,60	54,83	36,01	0,34	0,66	0,51	20,60	6,63	19,61
	5	91,8	1,055	42,91	21,76	14,35	104,80	53,59	35,65	0,34	0,67	0,51	21,47	5,99	17,37
Rata-rata		79,94	1,72	44,62	22,73	15,12	107,71	55,27	37,03	0,34	0,67	0,51	21,76	6,45	19,16
P2(Pencucian) diencerkan	1	59,2		37,25	19,58	13,67	92,24	48,85	34,45	0,37	0,71	0,53	21,91	5,96	17,10
	2	80,52		53,93	26,18	17,11	133,40	65,13	43,09	0,32	0,66	0,49	23,37	7,24	25,08
	3	82,83		41,90	21,30	14,60	103,20	53,12	36,70	0,36	0,69	0,51	12,40	6,40	19,19
	4	81,95		47,67	24,99	17,46	114,40	60,35	42,52	0,37	0,70	0,53	22,39	6,75	20,54
	5	79,57		36,82	21,63	17,05	87,01	51,33	40,70	0,41	0,79	0,59	20,21	5,73	16,32
Rata-rata		76,81	#DIV/0!	43,51	22,74	15,98	106,05	55,76	39,49	0,37	0,71	0,53	20,06	6,42	19,65
P1 (Tanpa Pencucian) Ekuilibrasi	1	44,30		32,62	17,26	11,77	79,75	42,00	29,38	0,37	0,69	0,54	20,33	5,38	16,40
	2	73,34		43,74	24,52	17,48	98,09	58,62	43,73	0,45	0,75	0,59	21,75	5,25	19,40
	3	70,93		32,02	16,89	12,40	76,02	40,56	29,98	0,39	0,74	0,53	19,22	5,38	17,29
	4	85,69		45,52	24,74	17,88	107,80	58,95	42,68	0,40	0,72	0,55	23,73	6,18	19,88
	5	73,86		30,07	17,04	13,26	74,24	42,17	32,80	0,44	0,78	0,57	18,14	5,44	17,42
Rata-rata		69,62	#DIV/0!	36,79	20,09	14,56	87,18	48,46	35,71	0,41	0,74	0,56	20,63	5,51	18,08
P2 (Pencucian) Ekuilibrasi	1	42,75		32,56	17,08	11,66	81,25	42,99	29,38	0,36	0,68	0,53	23,30	5,59	12,25
	2	72,24		41,34	21,21	14,34	100,80	52,05	35,42	0,35	0,68	0,52	21,65	5,88	18,10
	3	76,24		37,11	19,82	13,83	89,86	48,38	33,99	0,38	0,70	0,54	18,84	5,98	19,81
	4	80,47		45,17	22,11	14,80	114,30	56,66	38,05	0,33	0,67	0,50	21,57	6,18	18,60
	5	77,39		31,66	16,56	11,60	78,08	41,46	29,32	0,38	0,71	0,53	17,90	5,58	14,58
Rata-rata		69,82	#DIV/0!	37,57	19,36	13,25	92,86	48,31	33,23	0,36	0,69	0,52	20,65	5,84	16,67
P1 (Tanpa Pencucian) Semen Beku	1	62,20		25,63	14,41	11,13	66,57	37,59	29,15	0,44	0,78	0,56	16,63	5,12	13,46
	2	46,71		23,12	18,45	10,97	62,65	35,16	23,47	0,37	0,67	0,56	19,56	5,28	14,80
	3	58,32		27,87	16,64	12,88	67,83	37,05	28,96	0,42	0,78	0,54	16,01	5,16	16,35
	4	79,22		43,04	22,40	15,06	105,40	55,13	37,09	0,35	0,67	0,52	20,54	6,31	19,90
	5	68,75		32,27	17,97	13,22	80,55	45,37	33,57	0,42	0,74	0,56	18,91	5,52	15,50
Rata-rata		63,04	#DIV/0!	30,39	17,97	12,65	80,09	42,06	30,45	0,40	0,73	0,55	18,33	5,48	16,00
P2 (Pencucian) Semen beku	1	64,43		25,42	14,44	11,61	69,21	40,34	32,33	0,47	0,80	0,58	16,53	4,69	12,76
	2	57,95		27,38	14,71	10,56	67,34	36,01	25,98	0,39	0,72	0,53	16,14	4,61	16,49
	3	43,97		22,76	12,65	12,68	58,17	33,14	25,26	0,43	0,76	0,57	16,04	4,13	12,16
	4	78,03		38,66	20,72	15,63	93,00	50,15	37,91	0,41	0,76	0,54	21,56	5,58	19,27
	5	63,64		28,89	16,38	12,01	73,84	41,98	30,55	0,41	0,73	0,57	20,86	5,15	15,93
Rata-rata		61,60	#DIV/0!	28,62	15,78	12,50	72,31	40,32	30,41	0,42	0,75	0,56	18,23	4,83	15,32

Lampiran 2. Data uji-T menggunakan SPSS pada data hasil penelitian

		PENGENCERAN				95% Confidence Interval for Mean			
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Motilitas	Tanpa Pencucian	5	770.120	1.124.687	502.975	630.472	909.768	60.91	91.80
	Pencucian	5	768.140	992.665	443.933	644.884	891.396	59.20	82.83
	Total	10	769.130	1.000.122	316.266	697.586	840.674	59.20	91.80
DCL	Tanpa Pencucian	5	444.020	1.110.108	496.455	306.182	581.858	26.78	56.46
	Pencucian	5	435.140	728.728	325.897	344.656	525.624	36.82	53.93
	Total	10	439.580	886.519	280.342	376.162	502.998	26.78	56.46
DAP	Tanpa Pencucian	5	238.560	545.150	243.798	170.871	306.249	15.20	29.14
	Pencucian	5	227.360	274.715	122.856	193.250	261.470	19.58	26.18
	Total	10	232.960	411.229	130.042	203.542	262.378	15.20	29.14
DSL	Tanpa Pencucian	5	171.960	375.253	167.818	125.366	218.554	11.52	21.93
	Pencucian	5	159.780	172.139	.76983	138.406	181.154	13.67	17.46
	Total	10	165.870	282.621	.89373	145.652	186.088	11.52	21.93
VCL	Tanpa Pencucian	5	1.088.520	2.701.845	1.208.302	753.042	1.423.998	65.66	136.30
	Pencucian	5	1.060.500	1.856.815	830.393	829.946	1.291.054	87.01	133.40
	Total	10	1.074.510	2.190.565	692.718	917.806	1.231.214	65.66	136.30
VAP	Tanpa Pencucian	5	588.660	1.333.007	596.139	423.145	754.175	37.94	72.76
	Pencucian	5	557.560	676.771	302.661	473.528	641.592	48.85	65.13
	Total	10	573.110	1.010.034	319.401	500.857	645.363	37.94	72.76
VSL	Tanpa Pencucian	5	426.500	937.157	419.109	310.137	542.863	28.99	55.01
	Pencucian	5	394.920	376.798	168.509	348.134	441.706	34.45	43.09
	Total	10	410.710	693.645	219.350	361.090	460.330	28.99	55.01
LIN	Tanpa Pencucian	5	.3980	.05020	.02245	.3357	.4603	.32	.44
	Pencucian	5	.3660	.03209	.01435	.3262	.4058	.32	.41
	Total	10	.3820	.04315	.01365	.3511	.4129	.32	.44
STR	Tanpa Pencucian	5	.7280	.04868	.02177	.6676	.7884	.65	.76
	Pencucian	5	.7100	.04848	.02168	.6498	.7702	.66	.79
	Total	10	.7190	.04677	.01479	.6855	.7525	.65	.79
WOB	Tanpa Pencucian	5	.5460	.03435	.01536	.5033	.5887	.50	.58
	Pencucian	5	.5300	.03742	.01673	.4835	.5765	.49	.59
	Total	10	.5380	.03490	.01104	.5130	.5630	.49	.59
BCF	Tanpa Pencucian	5	221.160	412.067	184.282	169.995	272.325	15.63	26.38
	Pencucian	5	200.560	443.017	198.123	145.552	255.568	12.40	23.37
	Total	10	210.860	417.711	132.092	180.979	240.741	12.40	26.38
ALH	Tanpa Pencucian	5	60.140	.99530	.44511	47.782	72.498	4.72	7.33
	Pencucian	5	64.160	.60608	.27105	56.635	71.685	5.73	7.24
	Total	10	62.150	.80525	.25464	56.390	67.910	4.72	7.33
AOC	Tanpa Pencucian	5	194.280	376.143	168.216	147.576	240.984	12.97	22.72
	Pencucian	5	196.460	346.698	155.048	153.412	239.508	16.32	25.08
	Total	10	195.370	341.227	107.905	170.960	219.780	12.97	25.08

PENGENCERAN

		Sum of Squares	df	Mean Square	F	Sig.
Motilitas	Between Groups	.098	1	.098	.001	.977
	Within Groups	900.122	8	112.515		
	Total	900.220	9			
DCL	Between Groups	1.971	1	1.971	.022	.885
	Within Groups	705.353	8	88.169		
	Total	707.325	9			
DAP	Between Groups	3.136	1	3.136	.168	.692
	Within Groups	149.063	8	18.633		
	Total	152.199	9			
DSL	Between Groups	3.709	1	3.709	.435	.528
	Within Groups	68.179	8	8.522		
	Total	71.887	9			
VCL	Between Groups	19.628	1	19.628	.037	.853
	Within Groups	4.299.091	8	537.386		
	Total	4.318.719	9			
VAP	Between Groups	24.180	1	24.180	.216	.654
	Within Groups	893.971	8	111.746		
	Total	918.151	9			
VSL	Between Groups	24.932	1	24.932	.489	.504
	Within Groups	408.096	8	51.012		
	Total	433.028	9			
LIN	Between Groups	.003	1	.003	1.442	.264
	Within Groups	.014	8	.002		
	Total	.017	9			
STR	Between Groups	.001	1	.001	.343	.574
	Within Groups	.019	8	.002		
	Total	.020	9			
WOB	Between Groups	.001	1	.001	.496	.501
	Within Groups	.010	8	.001		
	Total	.011	9			
BCF	Between Groups	10.609	1	10.609	.580	.468
	Within Groups	146.425	8	18.303		
	Total	157.034	9			
ALH	Between Groups	.404	1	.404	.595	.463
	Within Groups	5.432	8	.679		
	Total	5.836	9			
AOC	Between Groups	.119	1	.119	.009	.926
	Within Groups	104.673	8	13.084		
	Total	104.792	9			

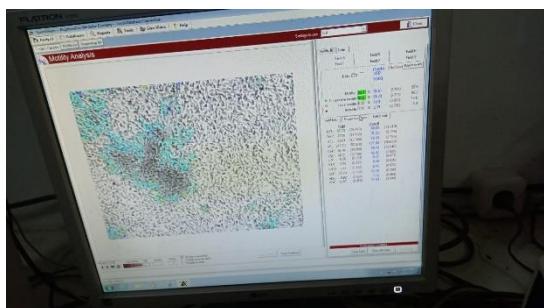
EKUILIBRASI									
		N	Mean	Std. Deviation	Std. Error	Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Motilitas	Tanpa Pencucian	5	696.240	1.527.154	682.964	506.619	885.861	44.30	85.69
	Pencucian	5	698.180	1.541.578	689.415	506.768	889.592	42.75	80.47
	Total	10	697.210	1.446.666	457.476	593.722	800.698	42.75	85.69
DCL	Tanpa Pencucian	5	367.940	724.251	323.895	278.012	457.868	30.07	45.52
	Pencucian	5	375.680	574.919	257.112	304.294	447.066	31.66	45.17
	Total	10	371.810	617.815	195.370	327.614	416.006	30.07	45.52
DAP	Tanpa Pencucian	5	200.900	414.725	185.471	149.405	252.395	16.89	24.74
	Pencucian	5	193.560	246.145	110.079	162.997	224.123	16.56	22.11
	Total	10	197.230	323.832	102.405	174.064	220.396	16.56	24.74
DSL	Tanpa Pencucian	5	145.580	290.209	129.785	109.546	181.614	11.77	17.88
	Pencucian	5	132.460	151.472	.67740	113.652	151.268	11.60	14.80
	Total	10	139.020	228.933	.72395	122.643	155.397	11.60	17.88
VCL	Tanpa Pencucian	5	871.800	1.492.822	667.610	686.442	1.057.158	74.24	107.80
	Pencucian	5	928.580	1.487.412	665.191	743.893	1.113.267	78.08	114.30
	Total	10	900.190	1.436.417	454.235	797.435	1.002.945	74.24	114.30
VAP	Tanpa Pencucian	5	484.600	944.684	422.476	367.302	601.898	40.56	58.95
	Pencucian	5	483.080	630.357	281.904	404.811	561.349	41.46	56.66
	Total	10	483.840	757.165	239.437	429.676	538.004	40.56	58.95
VSL	Tanpa Pencucian	5	357.140	696.906	311.666	270.608	443.672	29.38	43.73
	Pencucian	5	332.320	383.134	171.343	284.748	379.892	29.32	38.05
	Total	10	344.730	546.086	172.687	305.665	383.795	29.32	43.73
LIN	Tanpa Pencucian	5	.4100	.03391	.01517	.3679	.4521	.37	.45
	Pencucian	5	.3600	.02121	.00949	.3337	.3863	.33	.38
	Total	10	.3850	.03749	.01186	.3582	.4118	.33	.45
STR	Tanpa Pencucian	5	.7360	.03362	.01503	.6943	.7777	.69	.78
	Pencucian	5	.6880	.01643	.00735	.6676	.7084	.67	.71
	Total	10	.7120	.03553	.01123	.6866	.7374	.67	.78
WOB	Tanpa Pencucian	5	.5560	.02408	.01077	.5261	.5859	.53	.59
	Pencucian	5	.5240	.01517	.00678	.5052	.5428	.50	.54
	Total	10	.5400	.02539	.00803	.5218	.5582	.50	.59
BCF	Tanpa Pencucian	5	206.340	218.761	.97833	179.177	233.503	18.14	23.73
	Pencucian	5	206.520	221.966	.99266	178.959	234.081	17.90	23.30
	Total	10	206.430	207.768	.65702	191.567	221.293	17.90	23.73
ALH	Tanpa Pencucian	5	55.100	.38158	.17065	50.362	59.838	5.25	6.18
	Pencucian	5	58.420	.25830	.11552	55.213	61.627	5.58	6.18
	Total	10	56.760	.35353	.11180	54.231	59.289	5.25	6.18
AOC	Tanpa Pencucian	5	180.780	148.866	.66575	162.296	199.264	16.40	19.88
	Pencucian	5	166.680	314.380	140.595	127.645	205.715	12.25	19.81
	Total	10	173.730	243.513	.77005	156.310	191.150	12.25	19.88

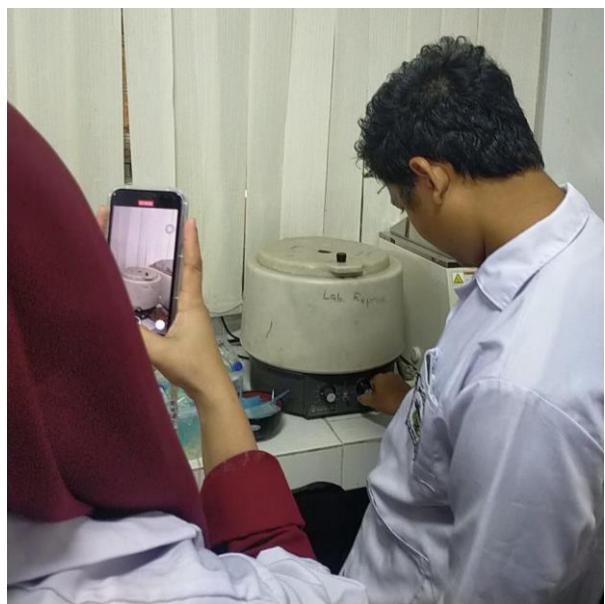
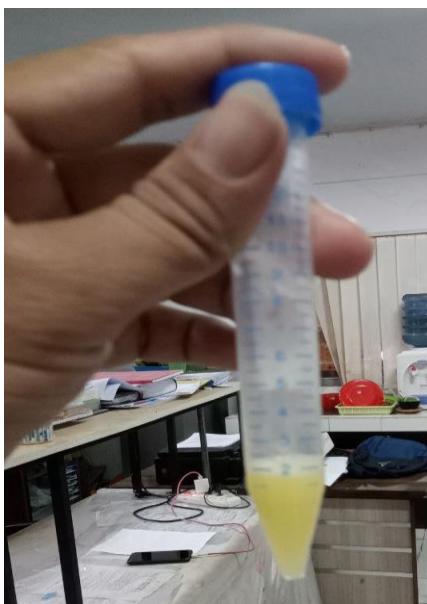
EKUILIBRASI					
		Sum of Squares	df	Mean Square	F
Motilitas	Between Groups	.094	1	.094	.000
	Within Groups	1.883.464	8	235.433	
	Total	1.883.558	9		
DCL	Between Groups	1.498	1	1.498	.035
	Within Groups	342.028	8	42.754	
	Total	343.526	9		
DAP	Between Groups	1.347	1	1.347	.116
	Within Groups	93.034	8	11.629	
	Total	94.381	9		
DSL	Between Groups	4.303	1	4.303	.803
	Within Groups	42.866	8	5.358	
	Total	47.169	9		
VCL	Between Groups	80.599	1	80.599	.363
	Within Groups	1.776.364	8	222.046	
	Total	1.856.963	9		
VAP	Between Groups	.058	1	.058	.001
	Within Groups	515.911	8	64.489	
	Total	515.969	9		
VSL	Between Groups	15.401	1	15.401	.487
	Within Groups	252.988	8	31.623	
	Total	268.389	9		
LIN	Between Groups	.006	1	.006	7.812
	Within Groups	.006	8	.001	
	Total	.013	9		
STR	Between Groups	.006	1	.006	8.229
	Within Groups	.006	8	.001	
	Total	.011	9		
WOB	Between Groups	.003	1	.003	6.321
	Within Groups	.003	8	.000	
	Total	.006	9		
BCF	Between Groups	.001	1	.001	.000
	Within Groups	38.850	8	4.856	
	Total	38.851	9		
ALH	Between Groups	.276	1	.276	2.596
	Within Groups	.849	8	.106	
	Total	1.125	9		
AOC	Between Groups	4.970	1	4.970	.822
	Within Groups	48.398	8	6.050	
	Total	53.369	9		

		POST-THAWING							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Motilitas	Tanpa Pencucian	5	630.400	1.208.356	540.393	480.363	780.437	46.71	79.22
	Pencucian	5	616.040	1.231.112	550.570	463.177	768.903	43.97	78.03
	Total	10	623.220	1.152.514	364.457	540.774	705.666	43.97	79.22
DCL	Tanpa Pencucian	5	303.860	783.291	350.298	206.602	401.118	23.12	43.04
	Pencucian	5	286.220	606.201	271.101	210.950	361.490	22.76	38.66
	Total	10	295.040	666.824	210.868	247.338	342.742	22.76	43.04
DAP	Tanpa Pencucian	5	179.740	292.821	130.954	143.381	216.099	14.41	22.40
	Pencucian	5	157.800	306.190	136.932	119.781	195.819	12.65	20.72
	Total	10	168.770	305.201	.96513	146.937	190.603	12.65	22.40
DSL	Tanpa Pencucian	5	126.520	168.216	.75229	105.633	147.407	10.97	15.06
	Pencucian	5	124.980	191.214	.85513	101.238	148.722	10.56	15.63
	Total	10	125.750	169.977	.53752	113.591	137.909	10.56	15.63
VCL	Tanpa Pencucian	5	766.000	1.744.390	780.115	549.405	982.595	62.65	105.40
	Pencucian	5	723.120	1.289.057	576.484	563.062	883.178	58.17	93.00
	Total	10	744.560	1.463.555	462.817	639.864	849.256	58.17	105.40
VAP	Tanpa Pencucian	5	420.600	828.360	370.454	317.746	523.454	35.16	55.13
	Pencucian	5	403.240	650.986	291.130	322.409	484.071	33.14	50.15
	Total	10	411.920	708.300	223.984	361.251	462.589	33.14	55.13
VSL	Tanpa Pencucian	5	304.480	515.884	230.710	240.425	368.535	23.47	37.09
	Pencucian	5	304.060	515.032	230.329	240.110	368.010	25.26	37.91
	Total	10	304.270	485.984	153.682	269.505	339.035	23.47	37.91
LIN	Tanpa Pencucian	5	.4000	.03808	.01703	.3527	.4473	.35	.44
	Pencucian	5	.4220	.03033	.01356	.3843	.4597	.39	.47
	Total	10	.4110	.03446	.01090	.3863	.4357	.35	.47
STR	Tanpa Pencucian	5	.7280	.05541	.02478	.6592	.7968	.67	.78
	Pencucian	5	.7540	.03130	.01400	.7151	.7929	.72	.80
	Total	10	.7410	.04458	.01410	.7091	.7729	.67	.80
WOB	Tanpa Pencucian	5	.5480	.01789	.00800	.5258	.5702	.52	.56
	Pencucian	5	.5580	.02168	.00970	.5311	.5849	.53	.58
	Total	10	.5530	.01947	.00616	.5391	.5669	.52	.58
BCF	Tanpa Pencucian	5	183.300	193.687	.86619	159.251	207.349	16.01	20.54
	Pencucian	5	182.260	274.135	122.597	148.222	216.298	16.04	21.56
	Total	10	182.780	223.837	.70784	166.768	198.792	16.01	21.56
ALH	Tanpa Pencucian	5	54.780	.49053	.21937	48.689	60.871	5.12	6.31
	Pencucian	5	48.320	.55292	.24727	41.455	55.185	4.13	5.58
	Total	10	51.550	.59895	.18940	47.265	55.835	4.13	6.31
AOC	Tanpa Pencucian	5	160.020	242.250	108.338	129.941	190.099	13.46	19.90
	Pencucian	5	153.220	291.044	130.159	117.082	189.358	12.16	19.27
	Total	10	156.620	254.979	.80631	138.380	174.860	12.16	19.90

POST-THAWING						
		Sum of Squares	df	Mean Square	F	Sig.
Motilitas	Between Groups	5.155	1	5.155	.035	.857
	Within Groups	1.190.304	8	148.788		
	Total	1.195.459	9			
DCL	Between Groups	7.779	1	7.779	.159	.701
	Within Groups	392.409	8	49.051		
	Total	400.189	9			
DAP	Between Groups	12.034	1	12.034	1.341	.280
	Within Groups	71.799	8	8.975		
	Total	83.833	9			
DSL	Between Groups	.059	1	.059	.018	.896
	Within Groups	25.944	8	3.243		
	Total	26.003	9			
VCL	Between Groups	45.967	1	45.967	.195	.670
	Within Groups	1.881.826	8	235.228		
	Total	1.927.794	9			
VAP	Between Groups	7.534	1	7.534	.136	.722
	Within Groups	443.985	8	55.498		
	Total	451.520	9			
VSL	Between Groups	.004	1	.004	.000	.990
	Within Groups	212.558	8	26.570		
	Total	212.562	9			
LIN	Between Groups	.001	1	.001	1.021	.342
	Within Groups	.009	8	.001		
	Total	.011	9			
STR	Between Groups	.002	1	.002	.835	.388
	Within Groups	.016	8	.002		
	Total	.018	9			
WOB	Between Groups	.000	1	.000	.633	.449
	Within Groups	.003	8	.000		
	Total	.003	9			
BCF	Between Groups	.027	1	.027	.005	.946
	Within Groups	45.066	8	5.633		
	Total	45.093	9			
ALH	Between Groups	1.043	1	1.043	3.819	.086
	Within Groups	2.185	8	.273		
	Total	3.229	9			
AOC	Between Groups	1.156	1	1.156	.161	.699
	Within Groups	57.357	8	7.170		
	Total	58.513	9			

Lampiran 3. Dokumentasi koleksi semen dan processing semen







BIODATA PENELITI



Andi Rizal, dilahirkan di Kotabaru pada tanggal 12 Agustus 1999, merupakan anak pertama dari bapak Andi Akbar dan ibu Juita. Memiliki satu adik perempuan bernama Andi Resti. Tinggal di desa Tanjung Lalak Selatan, kecamatan Pulau Laut Kepulauan, kabupaten Kotabaru, Kalimantan Selatan. Menempuh pendidikan formal pertama di Taman Kanak-kanak Pertiwi Hilir dan lulus tahun 2006. Kemudian melanjutkan pendidikan di SDN 3 Kotabaru Hilir hingga kelas 5 lalu pindah ke SDN Tanjung Lalak Selatan dan lulus pada tahun 2012. Selanjutnya menempuh pendidikan lanjutan di SMPN 1 Pulau Laut Kepulauan dan lulus tahun 2015, lalu melanjutkan pendidikan menengah atas di SMAN 8 Bone dan lulus pada tahun 2018. Pada tahun 2018, melanjutkan pendidikan Strata 1 di Perguruan Tinggi Negeri lulus jalur tes SBMPTN di Fakultas Peternakan Universitas Hasanuddin, Makassar. Selama menempuh pendidikan di Universitas Hasanuddin, penulis juga aktif dalam berbagai organisasi intra kampus maupun ekstra kampus, diantaranya adalah MATERPALA FAPET UNHAS, HIMAPROTEK-UH, UKM KPI UNHAS, PMB-UH Latenritatta, HMI Komisariat Peternakan, ISMAPETI, dan pencapaian terbaik selama berorganisasi adalah menjadi Ketua Umum Senat Mahasiswa KEMA FAPET-UH periode 2022.