LAMPIRAN

Lampiran 1. Hasil Pengukuran Pertumbuhan berat Selama Penelitian

PERLAKUAN	Berat benih ikan nila(gr) pada minggu ke-					
	0	1	2	3	4	5
A1	1,16	1,6	2,73	4,8	5,25	7,83
A2	1,16	1,6	3,12	5	5,62	9,61
A3	1,16	1,83	3,43	5,12	6,29	7,9
Total	3,48	5,03	9,28	14,92	17,16	25,34
Rata-rata	1,16	1,68	3,09	4,97	5,72	8,45
B1	1,15	1,67	3,12	5,91	7,84	8,94
B2	1,15	1,6	3,27	3,75	6,26	10,47
B3	1,18	1,65	3,25	5,6	5,55	8,95
Total	3,48	4,92	9,64	15,26	19,65	28,36
Rata-rata	1,16	1,64	3,21	5,09	6,55	9,45
C1	1,17	1,53	3,07	5,84	7,67	8,9
C2	1,16	1,56	3,22	6,61	7,3	11,7
C3	1,18	1,54	3,57	6,51	7,5	13,62
Total	3,51	4,63	9,86	18,96	22,47	34,22
Rata-rata	1,17	1,54	3,29	6,32	7,49	11,41
D1	1,15	1,41	2,6	4,9	6,9	9,45
D2	1,18	1,57	3,3	5,83	6,85	9,46
D3	1,16	1,48	3,04	6,62	6,6	11,62
Total	3,49	4,46	8,94	17,35	20,35	30,53
Rata-rata	1,16	1,49	2,98	5,78	6,78	10,18

Keterangan : A : 0 mg/kg pakan, B : 100 ml ekstrak kunyit putih / kg pakan,
C : 200 ml ekstrak kunyit putih/ kg pakan. D : 300 ml ekstrak kunyit putih/ kg pakan.

Lampiran 2. Hasil analisis Ragam (Anova) Berat Ikan nila

A.Deskripsi Data

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Berat	1	18	4.1756	2.61608	.61662	2.8746	5.4765	1.16	9.61
	2	18	4.5067	3.04011	.71656	2.9949	6.0185	1.15	10.40
	3	18	5.1944	3.81422	.89902	3.2977	7.0912	1.16	13.60
	4	18	4.7150	3.34340	.78805	3.0524	6.3776	1.10	11.60
	Total	72	4.6479	3.18591	.37546	3.8993	5.3966	1.10	13.60

B. Homogenitas Data

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Berat	1.310	3	68	.278

C. Anova

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Berat	Between Groups	9.833	3	3.278	.314	.816
	Within Groups	710.818	68	10.453		
	Total	720.650	71			

D. Post Hoc

Multiple Comparisons

Tukey HSD

Dependent Variable	(I) Perlakuan	(J) Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Berat	1	2	-.33111	1.07771	.990	-3.1695	2.5073
		3	-1.01889	1.07771	.780	-3.8573	1.8195
		4	-.53944	1.07771	.959	-3.3778	2.2989
	2	1	.33111	1.07771	.990	-2.5073	3.1695
		3	-.68778	1.07771	.919	-3.5262	2.1506
		4	-.20833	1.07771	.997	-3.0467	2.6301
	3	1	1.01889	1.07771	.780	-1.8195	3.8573
		2	.68778	1.07771	.919	-2.1506	3.5262
		4	.47944	1.07771	.970	-2.3589	3.3178
	4	1	.53944	1.07771	.959	-2.2989	3.3778
		2	.20833	1.07771	.997	-2.6301	3.0467
		3	-.47944	1.07771	.970	-3.3178	2.3589

E. Homogenitas Subset

Berat

Tukey HSD

Perlakuan	N	Subset for alpha = 0.05
		1
1	18	4.1756
2	18	4.5067
4	18	4.7150
3	18	5.1944
Sig.		.780

Berat

Tukey HSD

Perlakuan	N	Subset for alpha = 0.05
		1
1	18	4.1756
2	18	4.5067
4	18	4.7150
3	18	5.1944
Sig.		.780

Means for groups in homogeneous subsets are displayed.

Lampiran 3. Hasil Pengukuran Pertumbuhan panjang Selama Penelitian

PERLAKUAN	Panjang benih ikan nila(cm) pada minggu ke-					
	0	1	2	3	4	5
A1	4,13	4,5	5,01	5,92	6,6	7,54
A2	4,11	4,6	5,5	6,01	6,6	7,65
A3	4,12	4,5	5,7	6,19	7,1	8,25
Total	12,36	13,6	16,21	18,12	20,3	23,44
Rata-rata	4,12	4,53	5,40	6,04	6,77	7,81
B1	4,12	4,4	5,6	6,61	7,45	7,9
B2	4,14	4,43	5,7	5,91	7,04	8,51
B3	4,13	4,5	5,55	6,56	6,5	7,9
Total	12,39	13,33	16,85	19,08	20,99	24,31
Rata-rata	4,13	4,44	5,62	6,36	7,00	8,10
C1	4,11	4,33	5,43	6,7	7,61	8,07
C2	4,13	4,42	5,6	7	7,52	9,15
C3	4,12	4,4	5,72	7,1	7,49	8,98
Total	12,36	13,15	16,75	20,8	22,62	26,2
Rata-rata	4,12	4,38	5,58	6,93	7,54	8,73
D1	4,14	4,23	5,05	6,21	7,01	8,12
D2	4,12	4,4	5,62	6,52	7,92	8,85
D3	4,13	4,23	5,37	6,97	7,01	8,3
Total	12,39	12,86	16,04	19,7	21,94	25,27
Rata-rata	4,13	4,29	5,35	6,57	7,31	8,42

Lampiran 4. Hasil analisis Ragam (Anova) Panjang Ikan nila

A.Deskripsi Data

Descriptives

Panjang		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
	1	18	5.7794	1.32036	.31121	5.1228	6.4360	4.11	8.25
	2	18	5.9339	1.45873	.34383	5.2085	6.6593	4.10	8.51
	3	18	6.2094	1.73893	.40987	5.3447	7.0742	4.10	9.15
	4	18	5.9983	1.64843	.38854	5.1786	6.8181	4.10	8.85
	Total	72	5.9803	1.52504	.17973	5.6219	6.3386	4.10	9.15

B. Homogenitas Data

Test of Homogeneity of Variances

Descriptives	Descriptives	Descriptives	Descriptives	Descriptives
Panjang	**1.324**	**3**	**68**	**.274**

C. Anova

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Panjang	Between Groups	1.716	3	.572	.238	.870
	Within Groups	163.412	68	2.403		
	Total	165.128	71			

D. Post Hoc

Multiple Comparisons

Tukey HSD

Dependent Variable	(I) Perlakuan	(J) Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Panjang	1	2	-.15444	.51673	.991	-1.5154	1.2065
		3	-.43000	.51673	.839	-1.7909	.9309
		4	-.21889	.51673	.974	-1.5798	1.1420
	2	1	.15444	.51673	.991	-1.2065	1.5154
		3	-.27556	.51673	.951	-1.6365	1.0854
		4	-.06444	.51673	.999	-1.4254	1.2965
	3	1	.43000	.51673	.839	-.9309	1.7909
		2	.27556	.51673	.951	-1.0854	1.6365
		4	.21111	.51673	.977	-1.1498	1.5720
	4	1	.21889	.51673	.974	-1.1420	1.5798
		2	.06444	.51673	.999	-1.2965	1.4254
		3	-.21111	.51673	.977	-1.5720	1.1498

E. Homogenitas Subset

Panjang

Tukey HSD

Perlakuan	N	Subset for alpha = 0.05
		1
1	18	5.7794
2	18	5.9339
4	18	5.9983
3	18	6.2094
Sig.		.839

Means for groups in homogeneous subsets are displayed.

Lampiran 5. Sintasan ikan Nila selama penelitian

PERLAKUAN	Sintasan	
	Awal	Akhir
A1	100	85
A2	100	87
A3	100	89
Total	300	261
Rata-rata	100	87
B1	100	92
B2	100	90
B3	100	91
Total	300	273
Rata-rata	100	91
C1	100	97
C2	100	95
C3	100	98
Total	300	290
Rata-rata	100	96,67
D1	100	95
D2	100	94
D3	100	96
Total	300	285
Rata-rata	100	95

Lampiran 6. Hasil Analisis Ragam Sintasan

A.Deskripsi Data

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Sintasan	A=0 ml/kg pakan	3	87.0000	2.00000	1.15470	82.0317	91.9683	85.00	89.00
	B=100 ml/kg pakan	3	91.0000	1.00000	.57735	88.5159	93.4841	90.00	92.00
	C=200 ml/kg pakan	3	96.6667	1.52753	.88192	92.8721	100.4612	95.00	98.00
	D=300 ml/kg pakan	3	95.0000	1.00000	.57735	92.5159	97.4841	94.00	96.00
	Total	12	92.4167	4.10007	1.18359	89.8116	95.0217	85.00	98.00

B. Homogenitas Data

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Sintasan	.537	3	8	.670

C. Anova

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Sintasan	Between Groups	168.250	3	56.083	26.920	.000
	Within Groups	16.667	8	2.083		
	Total	184.917	11			

D. Post Hoc Test

Multiple Comparisons

Tukey HSD

Dependent Variable	(I) Perlakuan	(J) Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Sintasan	A=0 ml/kg pakan	B=100 ml/kg pakan	-4.00000*	1.17851	.038	-7.7740	-.2260
		C=200 ml/kg pakan	-9.66667*	1.17851	.000	-13.4407	-5.8927
		D=300 ml/kg pakan	-8.00000*	1.17851	.001	-11.7740	-4.2260
	B=100 ml/kg pakan	A=0 ml/kg pakan	4.00000*	1.17851	.038	.2260	7.7740
		C=200 ml/kg pakan	-5.66667*	1.17851	.006	-9.4407	-1.8927
		D=300 ml/kg pakan	-4.00000*	1.17851	.038	-7.7740	-.2260
	C=200 ml/kg pakan	A=0 ml/kg pakan	9.66667*	1.17851	.000	5.8927	13.4407
		B=100 ml/kg pakan	5.66667*	1.17851	.006	1.8927	9.4407
		D=300 ml/kg pakan	1.66667	1.17851	.525	-2.1073	5.4407
	D=300 ml/kg pakan	A=0 ml/kg pakan	8.00000*	1.17851	.001	4.2260	11.7740
		B=100 ml/kg pakan	4.00000*	1.17851	.038	.2260	7.7740
		C=200 ml/kg pakan	-1.66667	1.17851	.525	-5.4407	2.1073

E. Homogenitas Subset

Sintasan

Tukey HSD

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
A=0 ml/kg pakan	3	87.0000		
B=100 ml/kg pakan	3		91.0000	
D=300 ml/kg pakan	3			95.0000
C=200 ml/kg pakan	3			96.6667
Sig.		1.000	1.000	.525

Means for groups in homogeneous subsets are displayed.

Lampiran 7. Hasil konversi pakan FCR Selama Penelitian

PERLAKUAN	Konversi pakan
A1	2,23
A2	2,24
A3	2,22
Total	**6,69**
Rata-rata	**2,23**
B1	1,83
B2	1,82
B3	1,84
Total	**5,49**
Rata-rata	**1,83**
C1	1,42
C2	1,39
C3	1,43
Total	**4,24**
Rata-rata	**1,41**
D1	1,7
D2	1,72
D3	1,75
Total	**5,17**
Rata-rata	**1,72**

Ket :A : 0 mg/kg pakan, B : 100 ml ekstrak kunyit putih/ kg pakan,
C : 200 ml ekstrak kunyit putih/ kg pakan. D : 300 ml ekstrak kunyit putih/ kg pakan.

Lampiran 8. Hasil Analisis Ragam (Anova) Konversi Pakan

A. Deskrisi Data

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Konversi	A=0 ml/kg pakan	3	2.2300	.01000	.00577	2.2052	2.2548	2.22	2.24
	B=100 ml/kg pakan	3	1.8300	.01000	.00577	1.8052	1.8548	1.82	1.84
	C=200 ml/kg pakan	3	1.4133	.02082	.01202	1.3616	1.4650	1.39	1.43
	D=300 ml/kg pakan	3	1.7233	.02517	.01453	1.6608	1.7858	1.70	1.75
	Total	12	1.7992	.30542	.08817	1.6051	1.9932	1.39	2.24

B. Homogenitas Data

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Konversi	1.383	3	8	.316

C. Analisis Ragam

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Konversi	Between Groups	1.024	3	.341	1.077E3	.000
	Within Groups	.003	8	.000		
	Total	1.026	11			

D. Post Hoc Test

Multiple Comparisons

Tukey HSD

Dependent Variable	(I) Perlakuan	(J) Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Konversi	A=0 ml/kg pakan	B=100 ml/kg pakan	.40000*	.01453	.000	.3535	.4465
		C=200 ml/kg pakan	.81667*	.01453	.000	.7701	.8632
		D=300 ml/kg pakan	.50667*	.01453	.000	.4601	.5532
	B=100 ml/kg pakan	A=0 ml/kg pakan	-.40000*	.01453	.000	-.4465	-.3535
		C=200 ml/kg pakan	.41667*	.01453	.000	.3701	.4632
		D=300 ml/kg pakan	.10667*	.01453	.000	.0601	.1532
	C=200 ml/kg pakan	A=0 ml/kg pakan	-.81667*	.01453	.000	-.8632	-.7701
		B=100 ml/kg pakan	-.41667*	.01453	.000	-.4632	-.3701
		D=300 ml/kg pakan	-.31000*	.01453	.000	-.3565	-.2635
	D=300 ml/kg pakan	A=0 ml/kg pakan	-.50667*	.01453	.000	-.5532	-.4601
		B=100 ml/kg pakan	-.10667*	.01453	.000	-.1532	-.0601
		C=200 ml/kg pakan	.31000*	.01453	.000	.2635	.3565

*. The mean difference is significant at the 0.05 level.

E. Homogenitas Subset

Konversi

Tukey HSD

		Subset for alpha = 0.05			
Perlakuan	N	1	2	3	4
C=200 ml/kg pakan	3	1.4133			
D=300 ml/kg pakan	3		1.7233		
B=100 ml/kg pakan	3			1.8300	
A=0 ml/kg pakan	3				2.2300
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Lampiran 9. Hasil Analisi Ragam Keragaan

PERLAKUAN	Keragaan		
	Formalin	Salinitas	Suhu
A1	66,7	100	100
A2	66,7	100	100
A3	66,7	100	100
Total	200,1	300	300
Rata-rata	66,7	100	100
Bobot	0	1	1
B1	100	100	96,7
B2	100	100	96,7
B3	100	100	96,7
Total	300	300	290,1
Rata-rata	100	100	96,7
Bobot	1	1	1
C1	100	100	100
C2	100	100	100
C3	100	100	100
Total	300	300	300
Rata-rata	100	100	100
Bobot	1	1	1
D1	100	100	96,7
D2	100	100	96,7
D3	100	100	96,7
Total	300	300	290,1
Rata-rata	100	100	96,7
Bobot	1	1	1

Lampiran 10. Hasil Analisis Ragam Keragaan

A. Deskrisi Data

Descriptives

Keragaan

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
A=0 ml/kg pakan	9	88.9000	16.65000	5.55000	76.1017	101.6983	66.70	100.00
B=100 ml/kg pakan	9	98.9000	1.65000	.55000	97.6317	100.1683	96.70	100.00
C=200 ml/kg pakan	9	1.0000E2	.00000	.00000	100.0000	100.0000	100.00	100.00
D=300 ml/kg pakan	9	98.9000	1.65000	.55000	97.6317	100.1683	96.70	100.00
Total	36	96.6750	9.24895	1.54149	93.5456	99.8044	66.70	100.00

B. Homogenitas Data

Test of Homogeneity of Variances

Keragaan

Levene Statistic	df1	df2	Sig.
55.295	3	32	.000

C. Anova

ANOVA

Keragaan

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	732.668	3	244.223	3.456	.028
Within Groups	2261.340	32	70.667		
Total	2994.007	35			

D. Post Hoc Test

Multiple Comparisons

Keragaan

Tukey HSD

(I) Perlakuan	(J) Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
A=0 ml/kg pakan	B=100 ml/kg pakan	-10.00000	3.96280	.075	-20.7366	.7366
	C=200 ml/kg pakan	-11.10000*	3.96280	.041	-21.8366	-.3634
	D=300 ml/kg pakan	-10.00000	3.96280	.075	-20.7366	.7366
B=100 ml/kg pakan	A=0 ml/kg pakan	10.00000	3.96280	.075	-.7366	20.7366
	C=200 ml/kg pakan	-1.10000	3.96280	.992	-11.8366	9.6366
	D=300 ml/kg pakan	.00000	3.96280	1.000	-10.7366	10.7366
C=200 ml/kg pakan	A=0 ml/kg pakan	11.10000*	3.96280	.041	.3634	21.8366
	B=100 ml/kg pakan	1.10000	3.96280	.992	-9.6366	11.8366
	D=300 ml/kg pakan	1.10000	3.96280	.992	-9.6366	11.8366
D=300 ml/kg pakan	A=0 ml/kg pakan	10.00000	3.96280	.075	-.7366	20.7366
	B=100 ml/kg pakan	.00000	3.96280	1.000	-10.7366	10.7366
	C=200 ml/kg pakan	-1.10000	3.96280	.992	-11.8366	9.6366

*. The mean difference is significant at the 0.05 level.

E. Homogenitas Subset

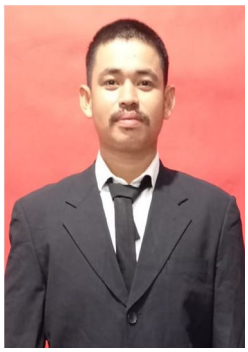
Keragaan

Tukey HSD

Perlakuan	N	Subset for alpha = 0.05	
		1	2
A=0 ml/kg pakan	9	88.9000	
B=100 ml/kg pakan	9	98.9000	98.9000
D=300 ml/kg pakan	9	98.9000	98.9000
C=200 ml/kg pakan	9		100.0000
Sig.		.075	.992

Means for groups in homogeneous subsets are displayed.

DAFTAR RIWAYAT HIDUP



Belly estevan lahir di kanyuara kecematan watang sidenreng kabupaten sidrap lahir pada tanggal 30 Desember 1996 . Anak ke 6 dari 6 bersaudara dari pasangan suami istri yaitu Lakole dan Icengngeng.

Penulis mengawali pendidikan formal sekolah dasar di SD Negeri 3 watang sidenreng pada tahun 2003 sampai dengan 2010,pada tahun yang sama melanjutkan pendidikan di tingkat SMP di SMP Negeri 1 Tellu Limpoe, pada tahun 2008 smpai 2011.pada tahun yang sama penulis melanjutkan pendidikan di SMA Negeri 1 Pangsid, dan tamat pada tahun 2014. Pada tahun 2015 penulis melanjutkan pendidikan di perguruan tinggi di Universitas Muhammadiyah Parepare dan mengambil jurusan perikanan fakultas pertanian, peternakan dan perikanan dan selesai pada tahun 2022 dengan judul penelitian" Pengaruh penambahan ekstrak kunyit putih (curcuma mangga Val) pada pakan terhadap pertumbuhan sintasan konversi pakan dan keragaan benih ikan nila (oreochromis niloticus).

Lampiran 11. Dokumentasi kegiatan penelitian

Kunyit Putih



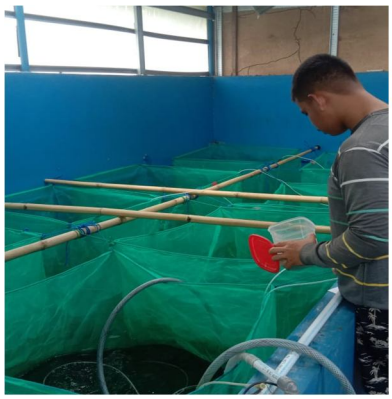
Penghalusan Kunyit



Pemisahan Ampas Kunyit



Pemberian Pakan







Timbang Pakan

Pembersihan Kunyit