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Lampiran 1. Hasil identifikasi tanaman kersen (*Muntingia calabura* L.)



UNIVERSITAS SETIA BUDI

UPT-LABORATORIUM

Jl. Letjen Sutoyo, Mojosongo-Solo 57127 Telp. 0271-852518, Fax. 0271-853275

Nomor : 147/DET/UPT-LAB/05.03.2021
 Hal : Hasil determinasi tumbuhan
 Lamp. : -

Nama Pemesan : Dwi Wulan Leksono
 NIM : 23175345A
 Alamat : Program Studi S1 Farmasi,
 Universitas Setia Budi, Surakarta
 Nama sampel : *Muntingia calabura* L./ Kersen

HASIL DETERMINASI TUMBUHAN

Klasifikasi
 Kingdom : Plantae
 Super Divisi : Spermatophyta
 Divisi : Magnoliophyta
 Kelas : Magnoliopsida
 Ordo : Malvales
 Famili : Tiliaceae
 Genus : *Muntingia*
 Species : *Muntingia calabura* L.

Hasil Determinasi menurut Steenis, C.G.G.J.V, Bloembergen, H, Eyma, P.J. 1992 :
 1b – 2b – 3b – 4b – 6b – 7b – 9b – 10b – 11b – 12b – 13b – 15a. Golongan 8 – 109b – 119b –
 120b – 128b – 129b – 135b – 136b – 139b – 140b – 142b – 143b – 146b – 154b – 155b –
 156b – 162b – 163b – 167b – 169b – 171b – 177b – 179a – 180b – 182b – 183b – 184b –
 185b – 186b. Familia 74. Tiliaceae. 1a. 1. *Muntingia*. *Muntingia calabura* L.

Deskripsi :
 Habitus : Pohon kecil, menahun, tinggi 2 – 10 m.
 Akar : Sistem akar tunggang


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- Batang : Batang berkayu, coklat, bulat, percabangan simpodial, tegak, ranting diselimuti rapat oleh rambut biasa yang halus dan oleh rambut kelenjar.
- Daun : Daun tunggal, berseling, helaian daun tidak sama sisi, bulat telur sampai lanset, panjang 6,3 – 9,1 cm, lebar 2,5 – 3,3 cm, ujung runcing, tepi bergerigi, permukaan bawah berambut rapat, tangkai pendek, berambut seperti wol rapat, tulang daun menyirip, hijau. Dari tiap pasang daun pelindung 1 rudimenter dan 1 bentuk benang – bentuk paku, panjang lk 0,5 cm.
- Bunga : Bunga 1-3 menjadi satu di ketiak daun, berbilangan 5, berkelamin 2. Kelopak berbagi dalam, taju meruncing menjadi bentuk benang, berambut halus. Daun mahkota putih, tepi rata, bulat telur terbalik, gundul, panjang lk 6 mm. Tonjolan dasar bunga bentuk cawan. Benangsari banyak, terutama pada tonjolan dasar bunga. Bakal buah bertangkai pendek, gundul, beruang 5 – 6. Kepala sari hampir duduk, berlekuk 5 – 6. Tonjolan dasar bunga bentuk cawan. Benangsari banyak terutama pada tonjolan dasar bunga. Bakal buah bertangkai pendek, gundul, beruang 5 – 6. Kepala putik hampir duduk, berlekuk 5 – 6.
- Buah : Buah buni dimahkotai dengan tangkai putik yang tetap, waktu muda hijau, setelah masak merah, panjang 1 cm.


Kepala UPT-LAB
 Universitas Setia Budi

 Asik Gunawan, Amdk

Surakarta, 5 Maret 2021
 Penanggung jawab
 Determinasi Tumbuhan


 Dra. Dewi Sulistyawati. M.Sc.

Lampiran 2. Surat Keterangan Kesehatan Hewan.


PEMERINTAH KOTA SURAKARTA
DINAS PERTANIAN,
KETAHANAN PANGAN DAN PERIKANAN
 JL. Yap Tjwan Bing (Jagalan) No. 26 Telp. (0271) 656816 – Fax. (0271) 656816
 Website www.disperten.surakarta.co.id E-mail pertanian_ska@yahoo.co.id
SURAKARTA
 5 7 1 2 4

SURAT KETERANGAN KESEHATAN HEWAN
 Nomor : 524.3/ 197 /SKKH

Yang bertandatangan di bawah ini drh. Evy Nurwulandari Dokter Hewan yang berwenang di wilayah Kota Surakarta, menerangkan bahwa pada hari Senin tanggal 22 bulan Februari tahun 2021 telah memeriksa hewan di bawah ini :

NO	JENIS HEWAN	SUB SPESIES/ TRAH	JUMLAH (ekor)			UMUR (bln)	Tanda / Warna
			Jtn	Btn	Total		
1	Kelinci	New Zealand	6	0	6	3-4	Putih

Menerangkan bahwa hewan-hewan tersebut di atas : sehat, atau saat pemeriksaan tidak menunjukkan tanda klinis penyakit hewan menular, khususnya Avian Influenza (30 hari terakhir tidak terjadi wabah Avian Influenza radius 1 km dari tempat asal hewan).


KETERANGAN :

Nama pemilik/pengirim : Sdr. Yuliyanto Ratno Saputro
 No KTP/SIM pemilik/pengirim : 3372053007720003
 No telp. Pemilik/pengirim : 082133998945
 Alamat pemilik/pengirim : Sumber Rt.04 Rw.03 Surakarta.
 Daerah asal hewan : Pasar Burung Depok, Surakarta.
 Daerah tujuan : Universitas Setia Budi Surakarta
 Nama dan alamat penerima : Dwi Wulan Laksono
 Rencana dikirim : Senin, 22 Februari 2021
 Kendaraan : Mobil.

Setelah sampai di daerah tujuan segera melaporkan ke dinas yang membidangi fungsi peternakan dan kesehatan hewan.

Surakarta, 22 Februari 2021.

a.n. KEPALA DINAS PERTANIAN'
 KETAHANAN PANGAN DAN PERIKANAN
 KOTA SURAKARTA
 Kepala Bidang Keswan, Kesmavet


drh. EVY NURWULANDARI
 Pembina
 NIP. 19700806199803 2 004


Tembusan Yth. :

1. Walikota Surakarta (sebagai laporan);
2. Kepala Dinas Peternakan dan Kesehatan Hewan Provinsi Jawa Tengah;
3. Kepala Balai Karantina Surakarta;
4. Arsip.

Lampiran 3. Ethical Clearance.

3/19/2021

KEPK-RSDM



**HEALTH RESEARCH ETHICS COMMITTEE
KOMISI ETIK PENELITIAN KESEHATAN**

Dr. Moewardi General Hospital
RSUD Dr. Moewardi

ETHICAL CLEARANCE
KELAIKAN ETIK

Nomor : 302 / III / HREC / 2021

The Health Research Ethics Committee Dr. Moewardi
Komisi Etik Penelitian Kesehatan RSUD Dr. Moewardi

after reviewing the proposal design, herewith to certify
setelah menilai rancangan penelitian yang diusulkan, dengan ini menyatakan

That the research proposal with topic :
Bahwa usulan penelitian dengan judul

Uji Efektivitas Gel Ekstrak Etanol Daun Kersen (Muntingia calabura L.) dengan Kitosan Sebagai Gelling Agent Terhadap Luka Bakar pada Kelinci (Oryctolagus Cuniculus)

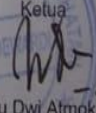
Principal investigator : Dwi Wulan Leksono
Peneliti Utama 23175345A

Location of research : Universitas Setia Budi Surakarta
Lokasi Tempat Penelitian


Is ethically approved
Dinyatakan layak etik

Issued on : 19 Maret 2021

Chairman
Ketua



Dr. Wahyu Dwi Atmoko., Sp.F
19770224.201001 1 004



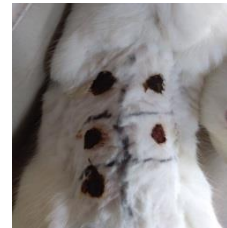
Lampiran 4. Hewan Uji Kelinci.



Kelinci 1



Kelinci 2



Kelinci 3



Kelinci 4



Kelinci 5



Kelinci Uji Iritasi

Lampiran 5. Alat dan bahan penelitian.

1. Simplicia daun kersen



2. Kitosan



3. CMC-Na



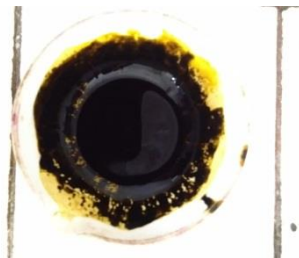
4. Propilenglikol



5. Metil Paraben



6. Aquadest



7. Ekstrak

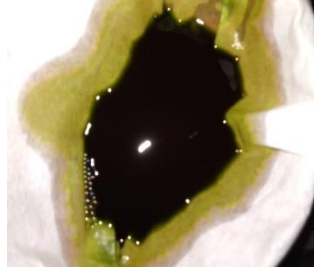


8. Alat uji daya sebar

9. *Moisture balance*

Lampiran 6. Proses Ekstraksi.

1. Proses maserasi

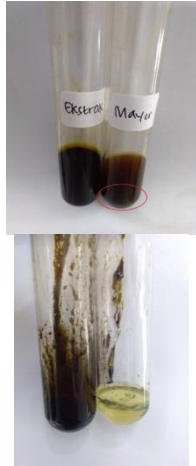


2. Penyaringan dengan kertas saring



3. Proses evaporasi

Lampiran 7. Proses pengujian kandungan senyawa kimia ekstrak daun kersen.



1. Uji alkaloid



2. Uji flavonoid



3. Uji tanin



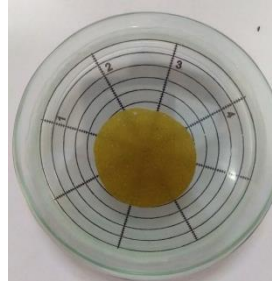
4. Uji saponin



5. Uji triterpenoid

Lampiran 8. Proses pengujian sifat fisik gel ekstrak etanol daun kersen.

1. Uji viskositas



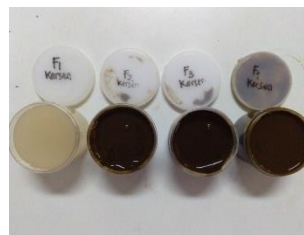
2. Uji daya sebar



3. Uji daya lekat



4. Uji pH



5. Uji stabilitas



6. Uji organoleptic



7. Uji homogenitas

Lampiran 9. Hasil analisis statistik terhadap uji viskositas, uji daya sebar, uji daya lekat, dan uji pH gel luka bakar ekstrak etanol daun kersen.

Uji Viskositas

1. Hari ke-1

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Viskositas	12	231.67	41.587	200	300

One-Sample Kolmogorov-Smirnov Test

		Viskositas
N		12
Normal Parameters ^{a,b}	Mean	231.67
	Std. Deviation	41.587
Most Extreme Differences	Absolute Positive	.314
	Absolute Negative	.314
	Positive	-.223
Kolmogorov-Smirnov Z		1.087
Asymp. Sig. (2-tailed)		.188

a. Test distribution is Normal.

b. Calculated from data.

Oneway

Descriptives

Viskositas

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Basis	3	215.00	13.229	7.638	182.14	247.86	200	225
10%	3	299.33	1.155	.667	296.46	302.20	298	300
20%	3	208.33	7.638	4.410	189.36	227.31	200	215
40%	3	204.00	5.292	3.055	190.86	217.14	200	210
Total	12	231.67	41.587	12.005	205.24	258.09	200	300

Test of Homogeneity of Variances

Viskositas

Levene Statistic	df1	df2	Sig.
4.192	3	8	.047

ANOVA

Viskositas

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	18499.333	3	6166.444	93.905	.000
Within Groups	525.333	8	65.667		
Total	19024.667	11			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Viskositas

	(I) Formula	(J) Formula	Mean Difference (I- J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	Basis	10%	-84.333*	6.616	.000	-105.52	-63.15
		20%	6.667	6.616	.750	-14.52	27.85
		40%	11.000	6.616	.400	-10.19	32.19
	10%	Basis	84.333*	6.616	.000	63.15	105.52
		20%	91.000*	6.616	.000	69.81	112.19
		40%	95.333*	6.616	.000	74.15	116.52
	20%	Basis	-6.667	6.616	.750	-27.85	14.52
		10%	-91.000*	6.616	.000	-112.19	-69.81
		40%	4.333	6.616	.911	-16.85	25.52
	40%	Basis	-11.000	6.616	.400	-32.19	10.19
		10%	-95.333*	6.616	.000	-116.52	-74.15
		20%	-4.333	6.616	.911	-25.52	16.85
Dunnnett T3	Basis	10%	-84.333*	7.667	.024	-141.93	-26.74
		20%	6.667	8.819	.951	-37.42	50.75
		40%	11.000	8.226	.717	-36.88	58.88
	10%	Basis	84.333*	7.667	.024	26.74	141.93
		20%	91.000*	4.460	.006	58.59	123.41
		40%	95.333*	3.127	.002	73.72	116.95
	20%	Basis	-6.667	8.819	.951	-50.75	37.42
		10%	-91.000*	4.460	.006	-123.41	-58.59
		40%	4.333	5.364	.939	-20.70	29.36
40%	Basis	-11.000	8.226	.717	-58.88	36.88	
	10%	-95.333*	3.127	.002	-116.95	-73.72	

20%	-4.333	5.364	.939	-29.36	20.70
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*. The mean difference is significant at the 0.05 level.

Homogeneous Subsets

Viskositas

	Formula	N	Subset for alpha = 0.05	
			1	2
Tukey HSD ^a	40%	3	204.00	
	20%	3	208.33	
	Basis	3	215.00	
	10%	3		299.33
	Sig.		.400	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

2. Hari ke-7

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Viskositas	12	238.92	39.608	200	300

One-Sample Kolmogorov-Smirnov Test

		Viskositas
N		12
Normal Parameters ^{a,b}	Mean	238.92
	Std. Deviation	39.608
Most Extreme Differences	Absolute Positive	.267
	Absolute Negative	.267
	Positive	-.163
Kolmogorov-Smirnov Z		.924
Asymp. Sig. (2-tailed)		.360

a. Test distribution is Normal.

b. Calculated from data.

Oneway**Descriptives**

Viskositas

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Basis	3	242.00	38.626	22.301	146.05	337.95	200	276
10%	3	293.00	11.269	6.506	265.01	320.99	280	300
20%	3	212.33	9.292	5.364	189.25	235.41	202	220
40%	3	208.33	7.638	4.410	189.36	227.31	200	215
Total	12	238.92	39.608	11.434	213.75	264.08	200	300

Test of Homogeneity of Variances

Viskositas

Levene Statistic	df1	df2	Sig.
3.742	3	8	.060

ANOVA

Viskositas

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	13729.583	3	4576.528	10.380	.004
Within Groups	3527.333	8	440.917		
Total	17256.917	11			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Viskositas

	(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	Basis	10%	-51.000	17.145	.069	-105.90	3.90
		20%	29.667	17.145	.369	-25.24	84.57
		40%	33.667	17.145	.277	-21.24	88.57
	10%	Basis	51.000	17.145	.069	-3.90	105.90
		20%	80.667*	17.145	.007	25.76	135.57
		40%	84.667*	17.145	.005	29.76	139.57
	20%	Basis	-29.667	17.145	.369	-84.57	25.24
		10%	-80.667*	17.145	.007	-135.57	-25.76
		40%	4.000	17.145	.995	-50.90	58.90
	40%	Basis	-33.667	17.145	.277	-88.57	21.24
		10%	-84.667*	17.145	.005	-139.57	-29.76
		20%	-4.000	17.145	.995	-58.90	50.90
Dunnett T3	Basis	10%	-51.000	23.231	.404	-201.29	99.29
		20%	29.667	22.937	.739	-125.89	185.22
		40%	33.667	22.733	.661	-126.11	193.44
	10%	Basis	51.000	23.231	.404	-99.29	201.29
		20%	80.667*	8.433	.003	43.12	118.21
		40%	84.667*	7.860	.003	47.72	121.62
	20%	Basis	-29.667	22.937	.739	-185.22	125.89
		10%	-80.667*	8.433	.003	-118.21	-43.12
		40%	4.000	6.944	.986	-26.93	34.93
	40%	Basis	-33.667	22.733	.661	-193.44	126.11
		10%	-84.667*	7.860	.003	-121.62	-47.72
		20%	-4.000	6.944	.986	-34.93	26.93

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

Homogeneous Subsets

Viskositas

	Formula	N	Subset for alpha = 0.05	
			1	2
Tukey HSD ^a	40%	3	208.33	
	20%	3	212.33	
	Basis	3	242.00	242.00
	10%	3		293.00
	Sig.		.277	.069

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

3. Hari ke-14

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Viskositas	12	235.83	34.826	200	290

One-Sample Kolmogorov-Smirnov Test

		Viskositas
N		12
Normal Parameters ^{a,b}	Mean	235.83
	Std. Deviation	34.826
Most Extreme Differences	Absolute Positive	.259
	Absolute Negative	.259
	Positive	-.152
Kolmogorov-Smirnov Z		.896
Asymp. Sig. (2-tailed)		.398

a. Test distribution is Normal.

b. Calculated from data.

Oneway**Descriptives**

Viskositas

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Basis	3	240.00	17.321	10.000	196.97	283.03	220	250
10%	3	286.67	5.774	3.333	272.32	301.01	280	290
20%	3	215.00	5.000	2.887	202.58	227.42	210	220
40%	3	201.67	2.887	1.667	194.50	208.84	200	205
Total	12	235.83	34.826	10.054	213.71	257.96	200	290

Test of Homogeneity of Variances

Viskositas

Levene Statistic	df1	df2	Sig.
6.693	3	8	.014

ANOVA

Viskositas

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	12608.333	3	4202.778	45.848	.000
Within Groups	733.333	8	91.667		
Total	13341.667	11			

Multiple Comparisons

Dependent Variable: Viskositas

	(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	Basis	10%	-46.667*	7.817	.002	-71.70	-21.63
		20%	25.000	7.817	.050	-.03	50.03
		40%	38.333*	7.817	.005	13.30	63.37
	10%	Basis	46.667*	7.817	.002	21.63	71.70
		20%	71.667*	7.817	.000	46.63	96.70
		40%	85.000*	7.817	.000	59.97	110.03
	20%	Basis	-25.000	7.817	.050	-50.03	.03
		10%	-71.667*	7.817	.000	-96.70	-46.63
		40%	13.333	7.817	.381	-11.70	38.37
	40%	Basis	-38.333*	7.817	.005	-63.37	-13.30
		10%	-85.000*	7.817	.000	-110.03	-59.97
		20%	-13.333	7.817	.381	-38.37	11.70
Dunnett T3	Basis	10%	-46.667	10.541	.106	-112.17	18.83
		20%	25.000	10.408	.353	-42.53	92.53
		40%	38.333	10.138	.173	-34.57	111.24
	10%	Basis	46.667	10.541	.106	-18.83	112.17
		20%	71.667*	4.410	.000	52.20	91.13
		40%	85.000*	3.727	.001	65.21	104.79
	20%	Basis	-25.000	10.408	.353	-92.53	42.53
		10%	-71.667*	4.410	.000	-91.13	-52.20
		40%	13.333	3.333	.092	-3.33	30.00
40%	Basis	-38.333	10.138	.173	-111.24	34.57	
	10%	-85.000*	3.727	.001	-104.79	-65.21	
		20%	-13.333	3.333	.092	-30.00	3.33

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

Homogeneous Subsets**Viskositas**

	Formula	N	Subset for alpha = 0.05		
			1	2	3
Tukey HSD ^a	40%	3	201.67		
	20%	3	215.00	215.00	
	Basis	3		240.00	
	10%	3			286.67
	Sig.			.381	.050

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

4. Hari ke-21**NPar Tests****Descriptive Statistics**

	N	Mean	Std. Deviation	Minimum	Maximum
Viskositas	12	236.58	36.867	200	282

One-Sample Kolmogorov-Smirnov Test

		Viskositas
N		12
Normal Parameters ^{a,b}	Mean	236.58
	Std. Deviation	36.867
	Absolute Differences	.289
Most Extreme Differences	Positive	.289
	Negative	-.237
Kolmogorov-Smirnov Z		1.001
Asymp. Sig. (2-tailed)		.269

a. Test distribution is Normal.

b. Calculated from data.

Oneway**Descriptives**

Viskositas

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Basis	3	280.67	1.155	.667	277.80	283.54	280	282
10%	3	261.67	1.528	.882	257.87	265.46	260	263
20%	3	201.67	2.887	1.667	194.50	208.84	200	205
40%	3	202.33	4.041	2.333	192.29	212.37	200	207
Total	12	236.58	36.867	10.643	213.16	260.01	200	282

Test of Homogeneity of Variances

Viskositas

Levene Statistic	df1	df2	Sig.
3.795	3	8	.058

ANOVA

Viskositas

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	14894.250	3	4964.750	700.906	.000
Within Groups	56.667	8	7.083		
Total	14950.917	11			

Multiple Comparisons

Dependent Variable: Viskositas

	(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	Basis	10%	19.000*	2.173	.000	12.04	25.96
		20%	79.000*	2.173	.000	72.04	85.96
		40%	78.333*	2.173	.000	71.37	85.29
	10%	Basis	-19.000*	2.173	.000	-25.96	-12.04
		20%	60.000*	2.173	.000	53.04	66.96
		40%	59.333*	2.173	.000	52.37	66.29
	20%	Basis	-79.000*	2.173	.000	-85.96	-72.04
		10%	-60.000*	2.173	.000	-66.96	-53.04
		40%	-.667	2.173	.989	-7.63	6.29
	40%	Basis	-78.333*	2.173	.000	-85.29	-71.37
		10%	-59.333*	2.173	.000	-66.29	-52.37
		20%	.667	2.173	.989	-6.29	7.63
Dunnett T3	Basis	10%	19.000*	1.106	.000	13.98	24.02
		20%	79.000*	1.795	.000	68.55	89.45
		40%	78.333*	2.427	.001	62.54	94.12
	10%	Basis	-19.000*	1.106	.000	-24.02	-13.98
		20%	60.000*	1.886	.000	50.22	69.78
		40%	59.333*	2.494	.002	44.50	74.17
	20%	Basis	-79.000*	1.795	.000	-89.45	-68.55
		10%	-60.000*	1.886	.000	-69.78	-50.22
		40%	-.667	2.867	1.000	-13.91	12.58
	40%	Basis	-78.333*	2.427	.001	-94.12	-62.54
		10%	-59.333*	2.494	.002	-74.17	-44.50
		20%	.667	2.867	1.000	-12.58	13.91

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

Homogeneous Subsets

Viskositas

	Formula	N	Subset for alpha = 0.05		
			1	2	3
Tukey HSD ^a	20%	3	201.67		
	40%	3	202.33		
	10%	3		261.67	
	Basis	3			280.67
	Sig.		.989	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Uji Daya Sebar

1. Hari ke-1

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Dayasebar	12	4.6024	1.00566	3.53	6.45

One-Sample Kolmogorov-Smirnov Test

		Dayasebar
N		12
Normal Parameters ^{a,b}	Mean	4.6024
	Std. Deviation	1.00566
Most Extreme Differences	Absolute	.183
	Positive	.183
	Negative	-.144
Kolmogorov-Smirnov Z		.632
Asymp. Sig. (2-tailed)		.819

a. Test distribution is Normal.

b. Calculated from data.

Oneway

Descriptives

Dayasebar

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Basis	3	6.0992	.31045	.17924	5.3280	6.8704	5.86	6.45
10%	3	3.6604	.15004	.08663	3.2877	4.0331	3.53	3.83
20%	3	3.9542	.15428	.08907	3.5709	4.3374	3.83	4.13
40%	3	4.6958	.29130	.16818	3.9722	5.4195	4.39	4.98
Total	12	4.6024	1.00566	.29031	3.9634	5.2414	3.53	6.45

Test of Homogeneity of Variances

Dayasebar

Levene Statistic	df1	df2	Sig.
.996	3	8	.443

ANOVA

Dayasebar

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	10.670	3	3.557	62.520	.000
Within Groups	.455	8	.057		
Total	11.125	11			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Dayasebar

	(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	Basis	10%	2.43875*	.19474	.000	1.8151	3.0624
		20%	2.14500*	.19474	.000	1.5214	2.7686
		40%	1.40333*	.19474	.000	.7797	2.0270
	10%	Basis	-2.43875*	.19474	.000	-3.0624	-1.8151
		20%	-.29375	.19474	.476	-.9174	.3299
		40%	-1.03542*	.19474	.003	-1.6591	-.4118
	20%	Basis	-2.14500*	.19474	.000	-2.7686	-1.5214
		10%	.29375	.19474	.476	-.3299	.9174
		40%	-.74167*	.19474	.022	-1.3653	-.1180
	40%	Basis	-1.40333*	.19474	.000	-2.0270	-.7797
		10%	1.03542*	.19474	.003	.4118	1.6591
		20%	.74167*	.19474	.022	.1180	1.3653
Dunnett T3	Basis	10%	2.43875*	.19907	.005	1.3661	3.5114
		20%	2.14500*	.20015	.007	1.0792	3.2108
		40%	1.40333*	.24579	.020	.3279	2.4788
	10%	Basis	-2.43875*	.19907	.005	-3.5114	-1.3661
		20%	-.29375	.12425	.284	-.8365	.2490
		40%	-1.03542*	.18918	.045	-2.0276	-.0433
	20%	Basis	-2.14500*	.20015	.007	-3.2108	-1.0792
		10%	.29375	.12425	.284	-.2490	.8365
		40%	-.74167	.19031	.106	-1.7280	.2447
	40%	Basis	-1.40333*	.24579	.020	-2.4788	-.3279
		10%	1.03542*	.18918	.045	.0433	2.0276
		20%	.74167	.19031	.106	-.2447	1.7280

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

Homogeneous Subsets

Dayasebar

	Formula	N	Subset for alpha = 0.05		
			1	2	3
Tukey HSD ^a	10%	3	3.6604		
	20%	3	3.9542		
	40%	3		4.6958	
	Basis	3			6.0992
	Sig.		.476	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

2. Hari ke-7

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Dayasebar	12	4.4141	.88141	3.69	6.04

One-Sample Kolmogorov-Smirnov Test

		Dayasebar	
N		12	
Normal Parameters ^{a,b}	Mean	4.4141	
	Std. Deviation	.88141	
Most Differences	Extreme	Absolute	.315
		Positive	.315
		Negative	-.207
Kolmogorov-Smirnov Z		1.093	
Asymp. Sig. (2-tailed)		.183	

Oneway

escriptives

Dayasebar

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Basis	3	5.8458	.17770	.10259	5.4044	6.2873	5.70	6.04
10%	3	3.7854	.09064	.05233	3.5602	4.0106	3.69	3.88
20%	3	3.9083	.10045	.05800	3.6588	4.1579	3.79	3.98
40%	3	4.1167	.19728	.11390	3.6266	4.6067	3.89	4.27
Total	12	4.4141	.88141	.25444	3.8540	4.9741	3.69	6.04

Test of Homogeneity of Variances

Dayasebar

Levene Statistic	df1	df2	Sig.
1.413	3	8	.308

ANOVA

Dayasebar

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	8.368	3	2.789	125.644	.000
Within Groups	.178	8	.022		
Total	8.546	11			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Dayasebar

	(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	Basis	10%	2.06042*	.12166	.000	1.6708	2.4500
		20%	1.93750*	.12166	.000	1.5479	2.3271
		40%	1.72917*	.12166	.000	1.3396	2.1188
	10%	Basis	-2.06042*	.12166	.000	-2.4500	-1.6708
		20%	-.12292	.12166	.748	-.5125	.2667
		40%	-.33125	.12166	.098	-.7208	.0583
	20%	Basis	-1.93750*	.12166	.000	-2.3271	-1.5479
		10%	.12292	.12166	.748	-.2667	.5125
		40%	-.20833	.12166	.377	-.5979	.1813
	40%	Basis	-1.72917*	.12166	.000	-2.1188	-1.3396
		10%	.33125	.12166	.098	-.0583	.7208
		20%	.20833	.12166	.377	-.1813	.5979
Dunnett T3	Basis	10%	2.06042*	.11517	.002	1.4539	2.6669
		20%	1.93750*	.11785	.001	1.3432	2.5318
		40%	1.72917*	.15329	.002	1.0560	2.4023
	10%	Basis	-2.06042*	.11517	.002	-2.6669	-1.4539
		20%	-.12292	.07812	.589	-.4659	.2201
		40%	-.33125	.12535	.271	-1.0212	.3587
	20%	Basis	-1.93750*	.11785	.001	-2.5318	-1.3432
		10%	.12292	.07812	.589	-.2201	.4659
		40%	-.20833	.12782	.579	-.8819	.4653
	40%	Basis	-1.72917*	.15329	.002	-2.4023	-1.0560
		10%	.33125	.12535	.271	-.3587	1.0212
		20%	.20833	.12782	.579	-.4653	.8819

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

Homogeneous Subsets

Dayasebar

	Formula	N	Subset for alpha = 0.05	
			1	2
Tukey HSD ^a	10%	3	3.7854	
	20%	3	3.9083	
	40%	3	4.1167	
	Basis	3		5.8458
	Sig.			.098

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

3. Hari ke-14

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Dayasebar	12	4.4375	.84265	3.64	5.92

One-Sample Kolmogorov-Smirnov Test

		Dayasebar
N		12
Normal Parameters ^{a,b}	Mean	4.4375
	Std. Deviation	.84265
Most Extreme Differences	Absolute Positive	.344
	Absolute Negative	.344
	Positive	-.178
Kolmogorov-Smirnov Z		1.191
Asymp. Sig. (2-tailed)		.117

a. Test distribution is Normal.

b. Calculated from data.

Oneway

Descriptives

Dayasebar

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Basis	3	5.7958	.12505	.07220	5.4852	6.1065	5.67	5.92
10%	3	3.7979	.15314	.08841	3.4175	4.1783	3.64	3.95
20%	3	3.9750	.25070	.14474	3.3522	4.5978	3.69	4.18
40%	3	4.1813	.05340	.03083	4.0486	4.3139	4.13	4.24
Total	12	4.4375	.84265	.24325	3.9021	4.9729	3.64	5.92

Test of Homogeneity of Variances

Dayasebar

Levene Statistic	df1	df2	Sig.
2.017	3	8	.190

ANOVA

Dayasebar

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	7.601	3	2.534	96.714	.000
Within Groups	.210	8	.026		
Total	7.811	11			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Dayasebar

	(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	Basis	10%	1.99792*	.13216	.000	1.5747	2.4211
		20%	1.82083*	.13216	.000	1.3976	2.2440
		40%	1.61458*	.13216	.000	1.1914	2.0378
	10%	Basis	-1.99792*	.13216	.000	-2.4211	-1.5747
		20%	-.17708	.13216	.566	-.6003	.2461
		40%	-.38333	.13216	.077	-.8065	.0399
	20%	Basis	-1.82083*	.13216	.000	-2.2440	-1.3976
		10%	.17708	.13216	.566	-.2461	.6003
		40%	-.20625	.13216	.449	-.6295	.2170
	40%	Basis	-1.61458*	.13216	.000	-2.0378	-1.1914
		10%	.38333	.13216	.077	-.0399	.8065
		20%	.20625	.13216	.449	-.2170	.6295
Dunnett t T3	Basis	10%	1.99792*	.11415	.000	1.4888	2.5071
		20%	1.82083*	.16175	.006	.9609	2.6808
		40%	1.61458*	.07851	.002	1.1693	2.0599
	10%	Basis	-1.99792*	.11415	.000	-2.5071	-1.4888
		20%	-.17708	.16961	.851	-1.0059	.6517
		40%	-.38333	.09363	.123	-.9564	.1898
	20%	Basis	-1.82083*	.16175	.006	-2.6808	-.9609
		10%	.17708	.16961	.851	-.6517	1.0059
		40%	-.20625	.14799	.697	-1.2337	.8212
	40%	Basis	-1.61458*	.07851	.002	-2.0599	-1.1693
		10%	.38333	.09363	.123	-.1898	.9564
		20%	.20625	.14799	.697	-.8212	1.2337

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

Homogeneous Subsets

Dayasebar

	Formula	N	Subset for alpha = 0.05	
			1	2
Tukey HSD ^a	10%	3	3.7979	
	20%	3	3.9750	
	40%	3	4.1813	
	Basis	3		5.7958
	Sig.			.077

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

4. Hari ke-21

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Dayasebar	12	4.4479	.85942	3.77	5.94

One-Sample Kolmogorov-Smirnov Test

			Dayasebar
N			12
Normal Parameters ^{a,b}	Mean		4.4479
	Std. Deviation		.85942
	Absolute		.426
Most Extreme Differences	Positive		.426
	Negative		-.215
Kolmogorov-Smirnov Z			1.475
Asymp. Sig. (2-tailed)			.026

a. Test distribution is Normal.

b. Calculated from data.

Oneway

Test of Homogeneity of Variances

Dayasebar

Levene Statistic	df1	df2	Sig.
2.901	3	8	.102

ANOVA

Dayasebar

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.063	3	2.688	346.607	.000
Within Groups	.062	8	.008		
Total	8.125	11			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Dayasebar

	(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	Basis	10%	1.94167*	.07190	.000	1.7114	2.1719
		20%	1.86875*	.07190	.000	1.6385	2.0990
		40%	1.86458*	.07190	.000	1.6343	2.0948
	10%	Basis	-1.94167*	.07190	.000	-2.1719	-1.7114
		20%	-.07292	.07190	.746	-.3032	.1573
		40%	-.07708	.07190	.715	-.3073	.1532
	20%	Basis	-1.86875*	.07190	.000	-2.0990	-1.6385
		10%	.07292	.07190	.746	-.1573	.3032
		40%	-.00417	.07190	1.000	-.2344	.2261
	40%	Basis	-1.86458*	.07190	.000	-2.0948	-1.6343
		10%	.07708	.07190	.715	-.1532	.3073
		20%	.00417	.07190	1.000	-.2261	.2344
10%		1.94167*	.09350	.000	1.4937	2.3896	
Basis		20%	1.86875*	.05848	.000	1.5772	2.1603
		40%	1.86458*	.05736	.000	1.5687	2.1604
Dunnett T3	10%	Basis	-1.94167*	.09350	.000	-2.3896	-1.4937
		20%	-.07292	.08396	.914	-.5743	.4285
		40%	-.07708	.08318	.893	-.5884	.4342
	20%	Basis	-1.86875*	.05848	.000	-2.1603	-1.5772
		10%	.07292	.08396	.914	-.4285	.5743
		40%	-.00417	.03997	1.000	-.1793	.1709
40%	Basis	-1.86458*	.05736	.000	-2.1604	-1.5687	
	10%	.07708	.08318	.893	-.4342	.5884	
	20%	.00417	.03997	1.000	-.1709	.1793	

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

Homogeneous Subsets**Dayasebar**

	Formula	N	Subset for alpha = 0.05	
			1	2
Tukey HSD ^a	10%	3	3.9250	
	20%	3	3.9979	
	40%	3	4.0021	
	Basis	3		5.8667
	Sig.			.715

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Perbandingan hari ke-1 dan hari ke-21**NPar Tests****Descriptive Statistics**

	N	Mean	Std. Deviation	Minimum	Maximum
Dayasebar	12	4.6024	1.00566	3.53	6.45
Dayasebar2 1	12	4.4479	.85942	3.77	5.94

One-Sample Kolmogorov-Smirnov Test

		Dayasebar	Dayasebar2 1
N		12	12
Normal Parameters ^{a,b}		Mean 4.6024	4.4479
		Std. Deviation 1.00566	.85942
Most Extreme Differences	Absolute	.183	.426
	Positive	.183	.426
	Negative	-.144	-.215
Kolmogorov-Smirnov Z		.632	1.475
Asymp. Sig. (2-tailed)		.819	.026

a. Test distribution is Normal.

b. Calculated from data.

T-Test

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Dayasebar	4.6024	12	1.00566	.29031
	Dayasebar21	4.4479	12	.85942	.24809

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Dayasebar & Dayasebar21	12	.907	.000

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Dayasebar - Dayasebar21	.15448	.42718	.12332	-.11694	.42589	1.253	11	.236

Uji Daya Lekat

1. Hari ke-1

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Diameter	12	2.19	.559	1	3

One-Sample Kolmogorov-Smirnov Test

		Diameter
N		12
Normal Parameters ^{a,b}	Mean	2.19
	Std. Deviation	.559
	Absolute	.199
Most Extreme Differences	Positive	.188
	Negative	-.199
Kolmogorov-Smirnov Z		.689
Asymp. Sig. (2-tailed)		.729

a. Test distribution is Normal.

b. Calculated from data.

Oneway

Descriptives

Diameter

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	3	2.83	.375	.217	1.90	3.76	2	3
2	3	2.35	.031	.018	2.28	2.43	2	2
3	3	2.17	.046	.026	2.06	2.28	2	2
4	3	1.41	.110	.063	1.14	1.69	1	2
Total	12	2.19	.559	.161	1.84	2.55	1	3

Test of Homogeneity of Variances

Diameter

Levene Statistic	df1	df2	Sig.
9.123	3	8	.006

ANOVA

Diameter

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	3.120	3	1.040	26.703	.000
Within Groups	.312	8	.039		
Total	3.431	11			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Diameter

	(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	1	2	.477	.161	.071	-.04	.99
		3	.660*	.161	.015	.14	1.18
		4	1.417*	.161	.000	.90	1.93
	2	1	-.477	.161	.071	-.99	.04
		3	.183	.161	.678	-.33	.70
		4	.940*	.161	.002	.42	1.46
	3	1	-.660*	.161	.015	-1.18	-.14
		2	-.183	.161	.678	-.70	.33
		4	.757*	.161	.007	.24	1.27
	4	1	-1.417*	.161	.000	-1.93	-.90
		2	-.940*	.161	.002	-1.46	-.42
		3	-.757*	.161	.007	-1.27	-.24
Dunnett T3	1	2	.477	.217	.426	-1.16	2.11
		3	.660	.218	.261	-.95	2.27
		4	1.417	.226	.053	-.04	2.88
	2	1	-.477	.217	.426	-2.11	1.16
		3	.183*	.032	.027	.03	.33
		4	.940*	.066	.009	.51	1.37
	3	1	-.660	.218	.261	-2.27	.95
		2	-.183*	.032	.027	-.33	-.03
		4	.757*	.069	.009	.36	1.15
	4	1	-1.417	.226	.053	-2.88	.04
		2	-.940*	.066	.009	-1.37	-.51
		3	-.757*	.069	.009	-1.15	-.36

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

Homogeneous Subsets

Diameter

	Formula	N	Subset for alpha = 0.05		
			1	2	3
Tukey HSD ^a	4	3	1.41		
	3	3		2.17	
	2	3		2.35	2.35
	1	3			2.83
	Sig.			1.000	.678

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

2. Hari ke-7

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Diameter	12	2.19	.340	2	3

One-Sample Kolmogorov-Smirnov Test

		Diameter r
N		12
Normal Parameters ^{a,b}	Mean	2.19
	Std. Deviation	.340
Most Extreme Differences	Absolute	.253
	Positive	.186
	Negative	-.253
Kolmogorov-Smirnov Z		.876
Asymp. Sig. (2-tailed)		.426

a. Test distribution is Normal.

b. Calculated from data.

Oneway**Descriptives**

Diameter

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	3	2.49	.010	.006	2.47	2.51	2	3
2	3	2.39	.021	.012	2.34	2.45	2	2
3	3	2.22	.025	.015	2.15	2.28	2	2
4	3	1.65	.026	.015	1.58	1.72	2	2
Total	12	2.19	.340	.098	1.97	2.40	2	3

Test of Homogeneity of Variances

Diameter

Levene Statistic	df1	df2	Sig.
1.129	3	8	.394

ANOVA

Diameter

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.271	3	.424	907.780	.000
Within Groups	.004	8	.000		
Total	1.275	11			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Diameter

	(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	1	2	.097*	.018	.003	.04	.15
		3	.273*	.018	.000	.22	.33
		4	.840*	.018	.000	.78	.90
	2	1	-.097*	.018	.003	-.15	-.04
		3	.177*	.018	.000	.12	.23
		4	.743*	.018	.000	.69	.80
	3	1	-.273*	.018	.000	-.33	-.22
		2	-.177*	.018	.000	-.23	-.12
		4	.567*	.018	.000	.51	.62
	4	1	-.840*	.018	.000	-.90	-.78
		2	-.743*	.018	.000	-.80	-.69
		3	-.567*	.018	.000	-.62	-.51
Dunnett T3	1	2	.097*	.013	.023	.02	.17
		3	.273*	.016	.003	.18	.36
		4	.840*	.016	.000	.74	.94
	2	1	-.097*	.013	.023	-.17	-.02
		3	.177*	.019	.004	.09	.26
		4	.743*	.019	.000	.66	.83
	3	1	-.273*	.016	.003	-.36	-.18
		2	-.177*	.019	.004	-.26	-.09
		4	.567*	.021	.000	.47	.66
	4	1	-.840*	.016	.000	-.94	-.74
		2	-.743*	.019	.000	-.83	-.66
		3	-.567*	.021	.000	-.66	-.47

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

Homogeneous Subsets**Diameter**

	Formula	N	Subset for alpha = 0.05			
			1	2	3	4
Tukey HSD ^a	4	3	1.65			
	3	3		2.22		
	2	3			2.39	
	1	3				2.49
	Sig.			1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

3. Hari ke-14**NPar Tests****Descriptive Statistics**

	N	Mean	Std. Deviation	Minimum	Maximum
Diameter	12	2.13	.474	1	3

One-Sample Kolmogorov-Smirnov Test

		Diameter
N		12
Normal Parameters ^{a,b}	Mean	2.13
	Std. Deviation	.474
Most Extreme Differences	Absolute	.307
	Positive	.189
	Negative	-.307
Kolmogorov-Smirnov Z		1.062
Asymp. Sig. (2-tailed)		.209

a. Test distribution is Normal.

b. Calculated from data.

Oneway**Descriptives**

Diameter

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	3	2.49	.066	.038	2.33	2.65	2	3
2	3	2.45	.030	.017	2.38	2.52	2	2
3	3	2.22	.020	.012	2.17	2.27	2	2
4	3	1.37	.036	.021	1.28	1.46	1	1
Total	12	2.13	.474	.137	1.83	2.43	1	3

Test of Homogeneity of Variances

Diameter

Levene Statistic	df1	df2	Sig.
1.464	3	8	.296

ANOVA

Diameter

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.453	3	.818	474.014	.000
Within Groups	.014	8	.002		
Total	2.467	11			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Diameter

	(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	1	2	.040	.034	.655	-.07	.15
		3	.270*	.034	.000	.16	.38
		4	1.120*	.034	.000	1.01	1.23
	2	1	-.040	.034	.655	-.15	.07
		3	.230*	.034	.001	.12	.34
		4	1.080*	.034	.000	.97	1.19
	3	1	-.270*	.034	.000	-.38	-.16
		2	-.230*	.034	.001	-.34	-.12
		4	.850*	.034	.000	.74	.96
	4	1	-1.120*	.034	.000	-1.23	-1.01
		2	-1.080*	.034	.000	-1.19	-.97
		3	-.850*	.034	.000	-.96	-.74
Dunnett T3	1	2	.040	.042	.883	-.19	.27
		3	.270*	.040	.043	.02	.52
		4	1.120*	.043	.000	.90	1.34
	2	1	-.040	.042	.883	-.27	.19
		3	.230*	.021	.003	.13	.33
		4	1.080*	.027	.000	.96	1.20
	3	1	-.270*	.040	.043	-.52	-.02
		2	-.230*	.021	.003	-.33	-.13
		4	.850*	.024	.000	.73	.97
	4	1	-1.120*	.043	.000	-1.34	-.90
		2	-1.080*	.027	.000	-1.20	-.96
		3	-.850*	.024	.000	-.97	-.73

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

Homogeneous Subsets

Diameter

	Formula	N	Subset for alpha = 0.05		
			1	2	3
Tukey HSD ^a	4	3	1.37		
	3	3		2.22	
	2	3			2.45
	1	3			2.49
	Sig.			1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

4. Hari ke-21

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Diameter	12	2.14	.454	1	3

One-Sample Kolmogorov-Smirnov Test

		Diameter r
N		12
Normal Parameters ^{a,b}	Mean	2.14
	Std. Deviation	.454
Most Extreme Differences	Absolute	.345
	Positive	.202
	Negative	-.345
Kolmogorov-Smirnov Z		1.195
Asymp. Sig. (2-tailed)		.115

a. Test distribution is Normal.

b. Calculated from data.

Oneway**Descriptives**

Diameter

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	3	2.47	.070	.040	2.30	2.64	2	3
2	3	2.42	.035	.020	2.33	2.50	2	2
3	3	2.28	.025	.015	2.21	2.34	2	2
4	3	1.40	.040	.023	1.30	1.50	1	1
Total	12	2.14	.454	.131	1.85	2.43	1	3

Test of Homogeneity of Variances

Diameter

Levene Statistic	df1	df2	Sig.
1.767	3	8	.231

ANOVA

Diameter

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.255	3	.752	359.388	.000
Within Groups	.017	8	.002		
Total	2.272	11			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Diameter

	(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	1	2	.053	.037	.518	-.07	.17
		3	.193*	.037	.004	.07	.31
		4	1.070*	.037	.000	.95	1.19
	2	1	-.053	.037	.518	-.17	.07
		3	.140*	.037	.023	.02	.26
		4	1.017*	.037	.000	.90	1.14
	3	1	-.193*	.037	.004	-.31	-.07
		2	-.140*	.037	.023	-.26	-.02
		4	.877*	.037	.000	.76	1.00
	4	1	-1.070*	.037	.000	-1.19	-.95
		2	-1.017*	.037	.000	-1.14	-.90
		3	-.877*	.037	.000	-1.00	-.76
Dunnett T3	1	2	.053	.045	.789	-.19	.29
		3	.193	.043	.098	-.07	.45
		4	1.070*	.047	.000	.84	1.30
	2	1	-.053	.045	.789	-.29	.19
		3	.140*	.025	.027	.02	.26
		4	1.017*	.031	.000	.88	1.15
	3	1	-.193	.043	.098	-.45	.07
		2	-.140*	.025	.027	-.26	-.02
		4	.877*	.027	.000	.74	1.01
	4	1	-1.070*	.047	.000	-1.30	-.84
		2	-1.017*	.031	.000	-1.15	-.88
		3	-.877*	.027	.000	-1.01	-.74

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

Homogeneous Subsets**Diameter**

	Formula	N	Subset for alpha = 0.05		
			1	2	3
Tukey HSD ^a	4	3	1.40		
	3	3		2.28	
	2	3			2.42
	1	3			2.47
	Sig.			1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Uji pH**1. Hari ke-1****NPar Tests****Descriptive Statistics**

	N	Mean	Std. Deviation	Minimum	Maximum
pH	12	6.7492	.49864	6.28	7.65

One-Sample Kolmogorov-Smirnov Test

		pH
N		12
Normal Parameters ^{a,b}	Mean	6.7492
	Std. Deviation	.49864
Most Extreme Differences	Absolute	.305
	Positive	.305
	Negative	-.173
Kolmogorov-Smirnov Z		1.057
Asymp. Sig. (2-tailed)		.214

a. Test distribution is Normal.

b. Calculated from data.

Oneway**Descriptives**

pH

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Basis	3	7.5500	.13229	.07638	7.2214	7.8786	7.40	7.65
10%	3	6.6167	.10116	.05840	6.3654	6.8680	6.50	6.68
20%	3	6.4667	.05508	.03180	6.3299	6.6035	6.41	6.52
40%	3	6.3633	.07371	.04256	6.1802	6.5464	6.28	6.42
Total	12	6.7492	.49864	.14395	6.4323	7.0660	6.28	7.65

Test of Homogeneity of Variances

pH

Levene Statistic	df1	df2	Sig.
1.634	3	8	.257

ANOVA

pH

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.663	3	.888	98.073	.000
Within Groups	.072	8	.009		
Total	2.735	11			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: pH

	(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
						Lower Bound	Upper Bound	
Tukey HSD	Basis	10%	.93333*	.07767	.000	.6846	1.1821	
		20%	1.08333*	.07767	.000	.8346	1.3321	
		40%	1.18667*	.07767	.000	.9379	1.4354	
	10%	Basis	20%	-.93333*	.07767	.000	-1.1821	-.6846
		Basis	40%	.25333*	.07767	.046	.0046	.5021
		Basis	20%	-1.08333*	.07767	.000	-1.3321	-.8346
	20%	10%	40%	-.15000	.07767	.288	-.3987	.0987
		40%	Basis	.10333	.07767	.571	-.1454	.3521
		Basis	10%	-1.18667*	.07767	.000	-1.4354	-.9379
	40%	10%	20%	-.25333*	.07767	.046	-.5021	-.0046
		20%	10%	-.10333	.07767	.571	-.3521	.1454
		10%	40%	.93333*	.09615	.004	.4978	1.3689
Dunnnett T3	Basis	20%	1.08333*	.08273	.006	.6093	1.5574	
		40%	1.18667*	.08743	.003	.7431	1.6302	
		Basis	10%	-.93333*	.09615	.004	-1.3689	-.4978
	10%	20%	40%	.15000	.06650	.349	-.1907	.4907
		40%	Basis	.25333	.07226	.111	-.0785	.5852
		Basis	20%	-1.08333*	.08273	.006	-1.5574	-.6093
	20%	10%	40%	-.15000	.06650	.349	-.4907	.1907
		40%	Basis	.10333	.05312	.430	-.1388	.3455
		Basis	10%	-1.18667*	.08743	.003	-1.6302	-.7431
	40%	10%	20%	-.25333	.07226	.111	-.5852	.0785
		20%	10%	-.10333	.05312	.430	-.3455	.1388

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

Homogeneous Subsets

pH

	Formula	N	Subset for alpha = 0.05		
			1	2	3
Tukey HSD ^a	40%	3	6.3633		
	20%	3	6.4667	6.4667	
	10%	3		6.6167	
	Basis	3			7.5500
	Sig.			.571	.288

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

2. Hari ke-7

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
pH	12	6.6017	.35003	6.32	7.30

One-Sample Kolmogorov-Smirnov Test

		pH
N		12
Normal Parameters ^{a,b}	Mean	6.6017
	Std. Deviation	.35003
Most Extreme Differences	Absolute	.386
	Positive	.386
	Negative	-.211
Kolmogorov-Smirnov Z		1.337
Asymp. Sig. (2-tailed)		.056

a. Test distribution is Normal.

b. Calculated from data.

Oneway

Descriptives

pH

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Basis	3	7.1667	.15275	.08819	6.7872	7.5461	7.00	7.30
10%	3	6.4667	.01528	.00882	6.4287	6.5046	6.45	6.48
20%	3	6.4000	.04359	.02517	6.2917	6.5083	6.37	6.45
40%	3	6.3733	.05508	.03180	6.2365	6.5101	6.32	6.43
Total	12	6.6017	.35003	.10105	6.3793	6.8241	6.32	7.30

Test of Homogeneity of Variances

pH

Levene Statistic	df1	df2	Sig.
3.782	3	8	.059

ANOVA

pH

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.291	3	.430	60.387	.000
Within Groups	.057	8	.007		
Total	1.348	11			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: pH

	(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
						Lower Bound	Upper Bound	
Tukey HSD	Basis	10%	.70000*	.06892	.000	.4793	.9207	
		20%	.76667*	.06892	.000	.5460	.9874	
		40%	.79333*	.06892	.000	.5726	1.0140	
	10%	Basis	20%	-.70000*	.06892	.000	-.9207	-.4793
		Basis	40%	.06667	.06892	.771	-.1540	.2874
		Basis	20%	.09333	.06892	.558	-.1274	.3140
	20%	Basis	10%	-.76667*	.06892	.000	-.9874	-.5460
		Basis	40%	-.06667	.06892	.771	-.2874	.1540
		Basis	10%	.02667	.06892	.979	-.1940	.2474
	40%	Basis	20%	-.79333*	.06892	.000	-1.0140	-.5726
		Basis	10%	-.09333	.06892	.558	-.3140	.1274
		Basis	20%	-.02667	.06892	.979	-.2474	.1940
Dunnnett T3	Basis	10%	.70000*	.08863	.045	.0377	1.3623	
		20%	.76667*	.09171	.029	.1697	1.3636	
		40%	.79333*	.09375	.022	.2262	1.3605	
	10%	Basis	20%	-.70000*	.08863	.045	-1.3623	-.0377
		Basis	40%	.06667	.02667	.320	-.0963	.2296
		Basis	20%	.09333	.03300	.270	-.1231	.3097
	20%	Basis	10%	-.76667*	.09171	.029	-1.3636	-.1697
		Basis	40%	-.06667	.02667	.320	-.2296	.0963
		Basis	10%	.02667	.04055	.974	-.1555	.2088
	40%	Basis	20%	-.79333*	.09375	.022	-1.3605	-.2262
		Basis	10%	-.09333	.03300	.270	-.3097	.1231
		Basis	20%	-.02667	.04055	.974	-.2088	.1555

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

Homogeneous Subsets

pH				
	Formula	N	Subset for alpha = 0.05	
			1	2
Tukey HSD ^a	40%	3	6.3733	
	20%	3	6.4000	
	10%	3	6.4667	
	Basis	3		7.1667
	Sig.		.558	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

3. H-14**NPar Tests****Descriptive Statistics**

	N	Mean	Std. Deviation	Minimum	Maximum
pH	12	6.3142	.69670	5.30	7.40

One-Sample Kolmogorov-Smirnov Test

		pH
N		12
Normal Parameters ^{a,b}	Mean	6.3142
	Std. Deviation	.69670
Most Extreme Differences	Absolute	.253
	Positive	.201
	Negative	-.253
Kolmogorov-Smirnov Z		.878
Asymp. Sig. (2-tailed)		.424

a. Test distribution is Normal.

b. Calculated from data.

Oneway**Descriptives**

pH

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Basis	3	7.2000	.20000	.11547	6.7032	7.6968	7.00	7.40
10%	3	6.3767	.02517	.01453	6.3142	6.4392	6.35	6.40
20%	3	6.3467	.02517	.01453	6.2842	6.4092	6.32	6.37
40%	3	5.3333	.02887	.01667	5.2616	5.4050	5.30	5.35
Total	12	6.3142	.69670	.20112	5.8715	6.7568	5.30	7.40

Test of Homogeneity of Variances

pH

Levene Statistic	df1	df2	Sig.
2.844	3	8	.105

ANOVA

pH

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.255	3	1.752	166.432	.000
Within Groups	.084	8	.011		
Total	5.339	11			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: pH

	(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	Basis	10%	.82333*	.08377	.000	.5551	1.0916
		20%	.85333*	.08377	.000	.5851	1.1216
		40%	1.86667*	.08377	.000	1.5984	2.1349
	10%	Basis	- .82333*	.08377	.000	-1.0916	-.5551
		20%	.03000	.08377	.983	-.2382	.2982
		40%	1.04333*	.08377	.000	.7751	1.3116
	20%	Basis	-.85333*	.08377	.000	-1.1216	-.5851
		10%	-.03000	.08377	.983	-.2982	.2382
		40%	1.01333*	.08377	.000	.7451	1.2816
	40%	Basis	-1.86667*	.08377	.000	-2.1349	-1.5984
		10%	-1.04333*	.08377	.000	-1.3116	-.7751
		20%	-1.01333*	.08377	.000	-1.2816	-.7451
Dunnett T3	Basis	10%	.82333	.11638	.054	-.0352	1.6819
		20%	.85333	.11638	.051	-.0052	1.7119
		40%	1.86667*	.11667	.010	1.0153	2.7181
	10%	Basis	-.82333	.11638	.054	-1.6819	.0352
		20%	.03000	.02055	.646	-.0597	.1197
		40%	1.04333*	.02211	.000	.9458	1.1408
	20%	Basis	-.85333	.11638	.051	-1.7119	.0052
		10%	-.03000	.02055	.646	-.1197	.0597
		40%	1.01333*	.02211	.000	.9158	1.1108
	40%	Basis	-1.86667*	.11667	.010	-2.7181	-1.0153
		10%	-1.04333*	.02211	.000	-1.1408	-.9458
		20%	-1.01333*	.02211	.000	-1.1108	-.9158

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

Homogeneous Subsets

pH

	Formula	N	Subset for alpha = 0.05		
			1	2	3
Tukey HSD ^a	40%	3	5.3333		
	20%	3		6.3467	
	10%	3		6.3767	
	Basis	3			7.2000
	Sig.		1.000	.983	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

4. Hari ke-21**NPar Tests****Descriptive Statistics**

	N	Mean	Std. Deviation	Minimum	Maximum
pH	12	6.6058	.38116	6.32	7.30

One-Sample Kolmogorov-Smirnov Test

		pH
N		12
Normal Parameters ^{a,b}	Mean	6.6058
	Std. Deviation	.38116
	Absolute	.409
Most Extreme Differences	Positive	.409
	Negative	-.227
Kolmogorov-Smirnov Z		1.416
Asymp. Sig. (2-tailed)		.036

a. Test distribution is Normal.

b. Calculated from data.

Oneway**Descriptives**

pH

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Basis	3	7.2333	.05774	.03333	7.0899	7.3768	7.20	7.30
10%	3	6.4100	.03606	.02082	6.3204	6.4996	6.38	6.45
20%	3	6.3967	.06807	.03930	6.2276	6.5658	6.32	6.45
40%	3	6.3833	.04163	.02404	6.2799	6.4868	6.35	6.43
Total	12	6.6058	.38116	.11003	6.3637	6.8480	6.32	7.30

Test of Homogeneity of Variances

pH

Levene Statistic	df1	df2	Sig.
.972	3	8	.452

ANOVA

pH

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.576	3	.525	191.041	.000
Within Groups	.022	8	.003		
Total	1.598	11			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: pH

	(I) Formula	(J) Formula	Mean Difference (I- J)	Std. Error	Sig.	95% Confidence Interval				
						Lower Bound	Upper Bound			
Tukey HSD	Basis	10%	.82333*	.04282	.000	.6862	.9604			
		20%	.83667*	.04282	.000	.6996	.9738			
		40%	.85000*	.04282	.000	.7129	.9871			
	Basis	10%	20%	-.82333*	.04282	.000	-.9604	-.6862		
		20%	40%	.01333	.04282	.989	-.1238	.1504		
		40%	Basis	.02667	.04282	.922	-.1104	.1638		
	20%	Basis	10%	-.83667*	.04282	.000	-.9738	-.6996		
			10%	40%	-.01333	.04282	.989	-.1504	.1238	
			40%	Basis	.01333	.04282	.989	-.1238	.1504	
		40%	Basis	10%	-.85000*	.04282	.000	-.9871	-.7129	
				10%	20%	-.02667	.04282	.922	-.1638	.1104
				20%	40%	-.01333	.04282	.989	-.1504	.1238
Dunnnett T3	Basis	10%	.82333*	.03930	.000	.6329	1.0137			
		20%	.83667*	.05153	.000	.6084	1.0649			
		40%	.85000*	.04110	.000	.6607	1.0393			
	10%	Basis	20%	-.82333*	.03930	.000	-1.0137	-.6329		
			20%	40%	.01333	.04447	.999	-.2171	.2438	
			40%	Basis	.02667	.03180	.931	-.1137	.1670	
	20%	Basis	10%	-.83667*	.05153	.000	-1.0649	-.6084		
			10%	40%	-.01333	.04447	.999	-.2438	.2171	
			40%	Basis	.01333	.04607	1.000	-.2117	.2383	
		40%	Basis	10%	-.85000*	.04110	.000	-1.0393	-.6607	
				10%	20%	-.02667	.03180	.931	-.1670	.1137
				20%	40%	-.01333	.04607	1.000	-.2383	.2117

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

Homogeneous Subsets

		pH		
	Formula	N	Subset for alpha = 0.05	
			1	2
Tukey HSD ^a	40%	3	6.3833	
	20%	3	6.3967	
	10%	3	6.4100	
	Basis	3		7.2333
	Sig.		.922	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Uji Diameter Luka**1. Homogeneous Subsets****Diameterluka**

Tukey HSD^{a,b}

Kelompokperlakuan	N	Subset for alpha = 0.05
		1
Kontrol Positif	20	1559.75
Konsentrasi 40%	19	1567.68
Konsentrasi 20%	20	1574.05
Konsentrasi 10%	20	1575.35
Kontrol Negatif	20	1580.30
Sig.		.434

2. Normalitas**Tests of Normality**

	Harike	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	df	Sig.
Diameterluka a	1	.332	25	.000	.633	25	.000
	2	.336	25	.000	.709	25	.000
	3	.143	25	.200*	.945	25	.195
	4	.305	24	.000	.746	24	.000

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

3. Oneway

Descriptives

Diameterluka

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Kontrol Negatif	20	1580.30	31.759	7.102	1565.44	1595.16	1540	1615
Kontrol Positif	20	1559.75	43.637	9.758	1539.33	1580.17	1504	1615
Konsentrasi 10%	20	1575.35	36.231	8.101	1558.39	1592.31	1532	1615
Konsentrasi 20%	20	1574.05	37.060	8.287	1556.71	1591.39	1531	1616
Konsentrasi 40%	19	1567.68	39.686	9.105	1548.56	1586.81	1524	1614
Total	99	1571.46	37.762	3.795	1563.93	1579.00	1504	1616

Test of Homogeneity of Variances

Diameterluka

Levene Statistic	df1	df2	Sig.
4.044	4	94	.005

ANOVA

Diameterluka

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	5013.071	4	1253.268	.874	.482
Within Groups	134729.555	94	1433.293		
Total	139742.626	98			