

DAFTAR PUSTAKA

- Aggarwal, B. B., Yuan, W., Li, S., & Gupta, S. C. (2013). Curcumin-free turmeric exhibits anti-inflammatory and anticancer activities: Identification of novel components of turmeric. *Molecular Nutrition and Food Research*, *57*, 1529–1542. <https://doi.org/10.1002/mnfr.201200838>
- Akbik, D., Ghadiri, M., Chrzanowski, W., & Rohanizadeh, R. (2014). Curcumin as a wound healing agent. *Life Sciences*, *116*(1), 1–7. <https://doi.org/10.1016/j.lfs.2014.08.016>
- Aliska, G., Indriatmi, W., & Farmakologi, D. (n.d.). *Tinjauan Pustaka Berbagai Faktor Yang Mempengaruhi Pemberian Obat Secara Topikal*. 38–46.
- Arisonya, S., Wibisono, G., & Aditya, G. (2014). *Jumlah Sel Makrofag Dan Diameter Pada Lesi Ulkus Traumatikus (suatu penelitian in vivo pada Tikus putih Jantan (Rattus norvegicus)) Susanti Arisonya * , Gunawan Wibisono ** , Grahita Aditya ****. *1*(2), 118–125.
- Aryati, Meizarini, A., Riawan, W., Puteri, A., & Kuntari, S. (2017). The Effects of Different Durations of Zinc Oxide–Turmeric Dressing Application on Wound toward Neovascularization and Expression of Macrophage Marker Antibody and Cyclooxygenase-2: An In vivo Study. *Journal of International Oral Health*, *9*(September), 55–59. <https://doi.org/10.4103/jioh.jioh>
- Ashraf, K., & Sultan, S. (2017). A comprehensive review on Curcuma longa Linn.: Phytochemical, pharmacological, and molecular study Kamran. *Journal of Pharmaceutical Research*, *11*(4), 105. <https://doi.org/10.18579/jpcrkc/2012/11/4/79361>
- Astuti, K. E. W., & Handajani, S. R. (2018). *Efektifitas Anti Inflamasi Formulasi Kunyit (Curcuma Longa), Daun Binahong (Anredera Cordifolia) Dan Daun Sambiloto (Andrographis Paniculata) Terhadap Luka Sayat Pada Kelinc*. 223–226.
- Bagchi, A. (2012). Extraction of Curcumin. *IOSR Journal of Environmental Science, Toxicology and Food Technology*, *1*(3), 01–16. <https://doi.org/10.9790/2402-0130116>
- Cobra, L. S., Amini, H. W., & Putri, A. E. (2017). *Skirining Fitokimia Ekstrak Sokhletasi Rimpang Kunyit (Curcuma longa) dengan Pelarut Etanol 96 %*. *1*(1), 12–17.
- Damarini, S., Eliana, E., & Mariati, M. (2013). Efektivitas Sirih Merah dalam Perawatan Luka Perineum di Bidan Praktik Mandiri. *Kesmas: National Public Health Journal*, *8*(1), 39. <https://doi.org/10.21109/kesmas.v8i1.340>

ti, & Ia, S. (2013). Hubungan Faktor-Faktor Yang Mempengaruhi Sembuhan Luka Dengan Lama Sembuhan Luka Perineum Ibu Nifas. *Idea Sing Journal*, *4*(3), 41–51.

, S., Dalirfardouei, R., Jafari Najaf Abadi, M. H., Ebrahimi Nik, M., Jaafari, M.



- R., & Mahdipour, E. (2020). Topical application of curcumin regulates the angiogenesis in diabetic-impaired cutaneous wound. *Cell Biochemistry and Function*, (December 2019), 1–9. <https://doi.org/10.1002/cbf.3500>
- Erawati, E., Pratiwi, D., & Zaky, M. (2015). *Formulation Development and Evaluation of Physical Preparation Cream*. 3(1).
- Fareshteh Jahdi, Khabbaz, A. H., Kashian, M., Taghizadeh, M., & Haghani, H. (2017). The Impact Of Calendula Ointment on Cesarean Wound Healing : A Randomized Controlled Clinical Trial. *Journal of Family Medicine and Primary Care*, 6(2), 169–170. <https://doi.org/10.4103/jfmpc.jfmpc>
- Gothai, S., Arulselvan, P., Tan, W. S., & Fakurazi, S. (2016). Wound Healing Properties of Ethyl Acetate Fraction of Moringa Oleifera in Normal Human Dermal Fibroblasts. *Journal of Intercultural Ethnopharmacology*, 5(1), 1–6. <https://doi.org/10.5455/jice.20160201055629>
- Hamid, M. A. (2011). *Pengaruh Pemberian Rimpang Kunyit (Curcuma Domestica Vall) Dalam mempercepat Proses Penyembuhan Luka Bersih Pada Marmut (Cavia porcellus)*. 1(2), 23–29.
- Handayany, G., Mukhriani, & Halim, R. (2015). uji efek penyembuhan luka sayat ekstrak etanol daun kecombrang (Etlingera elatior) dalam bentuk sediaan gel terhadap kelinci. *Jf Fik Uinam*, 3(2), 54–55.
- Harianto, I. K., Pieter L, S., & Mintjijelungan, C. (2017). Uji Daya Hambat Perasan Rimpang Kunyit Candida albicans. *Pharmacon Jurnal Ilmiah Farmasi*, 6(2), 1–6.
- Hasyim, N., Pare, K. R., Junaid, I., & Kurniati, A. (2012). Formulasi dan uji efektivitas gel luka bakar ekstrak daun cocor bebek. *Kalanchoe Pinnata*, 89–94.
- Hendriati, L., Hamid, I. S., Widodo, T., Wandasari, C., & Risata, P. M. (2018). Effect of Egg White Gel againts Burn Healing on White Rat (Rattus novergicus). *Jurnal Ilmu Kefarmasian Indonesia*, 16(2), 231. <https://doi.org/10.35814/jifi.v16i2.532>
- Ioannis Tsakiridis, Ms., Apostolos Mamopoulos, P., Apostolos Athanasiadis, P., & Themistoklis Dagklis, P. (2017). Obstetric Anal Sphincter Injuries at Vaginal Delivery: A Review of Recently Published National Guidelines. *Pediatric Emergency Care*, 33(12), 792–793. <https://doi.org/10.1097/01.pec.0000526609.89886.37>
- Jagetia, G. C., & Rajanikant, G. K. (2012). Acceleration of wound repair by curcumin in the excision wound of mice exposed to different doses of fractionated y radiation. *International Wound Journal*, 9(1), 76–92. <https://doi.org/10.1111/j.1742-481X.2011.00848.x>

W., & Komalasari, O. (2017). Eksplorasi Jenis Dan Pemanfaatan Tumbuhan t Pada Masyarakat Suku Muna Di Permukiman Kota Wuna Inventory. *ditional Medicine Journal*, 22(April), 45–56.

Gopal, A., Pathak, N. N., Kumar, P., Tandan, S. K., & Kumar, D. (2014).



Antioxidant and anti-inflammatory potential of curcumin accelerated the cutaneous wound healing in streptozotocin-induced diabetic rats. *International Immunopharmacology*, 20(2), 322–330. <https://doi.org/10.1016/j.intimp.2014.03.009>

Kristiana, H. (2008). *Diberi Salep Ekstrak Etanol Dan Fraksi Hexan Rimpang Kunyit (Curcuma Longa Linn.) Pada Proses*.

Landén, N. X., Li, D., & Stähle, M. (2016). Transition from inflammation to proliferation: a critical step during wound healing. *Cellular and Molecular Life Sciences*, 73(20), 3861–3885. <https://doi.org/10.1007/s00018-016-2268-0>

Lima, C. F., Pereira-Wilson, C., & Rattan, S. I. S. (2011). Curcumin induces heme oxygenase-1 in normal human skin fibroblasts through redox signaling: Relevance for anti-aging intervention. *Molecular Nutrition and Food Research*, 55(3), 430–442. <https://doi.org/10.1002/mnfr.201000221>

Milasari, M., Jamaluddin, A. W., & Adikurniawan, Y. M. (2019). PENGARUH PEMBERIAN SALEP EKSTRAK KUNYIT KUNING (*Curcuma Longa Linn*) TERHADAP PENYEMBUHAN LUKA SAYAT PADA TIKUS PUTIH (*Rattus norvegicus*). *Jurnal Ilmiah Ibnu Sina (JIIS): Ilmu Farmasi Dan Kesehatan*, 4(1), 186–202. <https://doi.org/10.36387/jiis.v4i1.268>

Minden-Birkenmaier, B. A., & Bowlin, G. L. (2018). Honey-Based Templates in Wound Healing and Tissue Engineering. *Bioengineering*, 5(2). <https://doi.org/10.3390/bioengineering5020046>

Mohanty, C., & Sahoo, S. K. (2017). Curcumin and its topical formulations for wound healing applications. *Drug Discovery Today*, 22(10), 1582–1592. <https://doi.org/10.1016/j.drudis.2017.07.001>

Murthy, M. B., Murthy, B. K., & Bhawe, S. (2012). Comparison of Safety and Efficacy of Papaya Dressing with Hydrogen Peroxide Solution on Wound Bed Preparation in Patients with Wound Gape. *Indian Journal of Pharmacology*, 44(6), 784–787. <https://doi.org/10.4103/0253-7613.103302>

Mutiah, R. (2015). Evidence Based Kurkumin dari Tanaman Kunyit (*Curcuma longa*) sebagai Terapi Kanker. *Jurnal Farma Sains*, 1(1), 28–41.

Naibaho, O. H., Yamlean, P. V. Y., & Wiyono, W. (2013). Pengaruh Basis Salep Terhadap Formulasi Sediaan Salep Ekstrak Daun Kemangi (*Ocimum sanctum L.*) Pada Kulit Punggung Kelinci yang Dibuati Infeksi *Staphylococcus aureus*. *Jurnal Ilmiah Farmasi-UNSRAT*, 2(02), 27–34.

Nurcholis, I. A., Yusriadi, & Sulastri, E. (2018). Aktivitas Antiinflamasi Gel Ekstrak Rumpun Mutiara (*Ordellandia corymbosa L.*) Pada Tikus (*Rattus norvegicus L.*) yang Diinduksikan Karagenan. *Biocelebes*, 12(2013), 88–97.

..., N., Basori, A., & Perdanakusuma, D. S. (2019). Proses Penyembuhan ... Ditinjau dari Aspek Mekanisme Seluler dan Molekuler. *Qanun Medika - Medical Journal Faculty of Medicine Muhammadiyah Surabaya*, 3(1), 31.



<https://doi.org/10.30651/jqm.v3i1.2198>

- Rini, C., Widjajanto, E., & Loekito, R. (2011). Peranan Curcumin terhadap Proliferasi, Apoptosis dan Diferensiasi Hepatosit Mice Balb/C yang Dipapar dengan Benzopyrene. *The Journal of Experimental Life Sciences*, 1(2), 64–71. <https://doi.org/10.21776/ub.jels.2011.001.02.02>
- Ruauw, E. F., Wantania, Frans E, & Leman, M. A. (2016). Pengaruh Lidah Buaya (Aloe vera) terhadap Waktu Penutupan Luka Sayat ada Mukosa Rongga Mulut Tikus Wistar. *Jurnal Ilmiah Farmasi*, 5(2), 22–28.
- Sidhu, G. S., Singh, A. K., Thaloor, D., Banaudha, K. K., Patnaik, G. K., Srimal, R. C., & Maheshwari, R. K. (1998). Enhancement of wound healing by curcumin in animals. *Wound Repair and Regeneration*, 6(2), 167–177. <https://doi.org/10.1046/j.1524-475X.1998.60211.x>
- Thangapazham, R. L., Sharad, S., & Maheshwari, R. K. (2013). Skin regenerative potentials of curcumin. *BioFactors*, 39(1), 141–149. <https://doi.org/10.1002/biof.1078>
- Venkatasubbu, G. D., & Anusuya, T. (2017). Investigation on Curcumin nanocomposite for wound dressing. *International Journal of Biological Macromolecules*, 98, 366–378. <https://doi.org/10.1016/j.ijbiomac.2017.02.002>
- Winarsih, W., Wientarsih, I., Sutardi, L. N., Patologi, B., Farmasi, B., & Klinik, D. (2012). Aktivitas Salep Ekstrak Rimpang Kunyit dalam Proses Persembuhan Luka pada Mencit yang Diinduksi Diabetes. *Jurnal Veteriner*, 13(3), 242–250.
- World Health Organization. (2015). Postnatal Care for Mothers and Newborns: Highlights from the World Health Organization 2013 Guidelines. *Postnatal Care Guidelines*, (March), 1–8. Retrieved from https://www.who.int/maternal_child_adolescent/publications/WHO-MCA-PNC-2014-Briefer_A4.pdf?ua=1
- Yen, Y. H., Pu, C. M., Liu, C. W., Chen, Y. C., Chen, Y. C., Liang, C. J., ... Chen, Y. L. (2018). Curcumin accelerates cutaneous wound healing via multiple biological actions: The involvement of TNF- α , MMP-9, α -SMA, and collagen. *International Wound Journal*, 15(4), 605–617. <https://doi.org/10.1111/iwj.12904>
- Yurista, S. R., Ferdian, R. A., & Sargowo, D. (2017). Principles of the 3Rs and ARRIVE Guidelines in Animal Research. *Indonesian Journal of Cardiology*, 37(3), 156–163. <https://doi.org/10.30701/ijc.v37i3.579>



Lampiran 1

Curriculum Vitae



Adeliana, Penulis lahir di kota Palopo, 06 April 1995. Saat ini bertempat tinggal di kota Palopo tepatnya di Jl. Wecudai, kec. Wara, Kel.Tompotikka Provinsi Sulawesi Selatan. Anak pertama dari dua bersaudara yang merupakan anak dari pasangan Drs. Mathius Somba Karambe dan Rina Sikku, Amd. Pendidikan SD hingga SMA diselesaikan di kota Palopo Sulawesi Selatan, yaitu : SD 74 Pajalesang (2000-2006), SMP Negeri 4 Palopo (2006-2009), dan SMA Negeri 3 Palopo (2009-2012). Melanjutkan Pendidikan Diploma III Kebidanan di STIKES Bhakti Pertiwi Luwu Raya Palopo (2012-2015), setelah itu melanjutkan Pendidikan Diploma IV di Stikes Mega Rezky Makassar (2015-2016). Pada Agustus 2018 kembali melanjutkan Pendidikan program Magister program studi Ilmu Kebidanan di Fakultas Sekolah Pascasarjana Universitas Hasanuddin. Saat ini penulis telah melakukan publikasi jurnal (1) Effectiveness of Turmeric (*Curcuma longa* Linn) Gel Extract on Wound Healing in Female Rabbits (*Oryctolagus cuniculus*), **International Journal of Current Research And Review (IJCRR)**, terindex Scopus yang akan terbit pada bulan Desember 2020 (sementara dalam proses penerbitan).

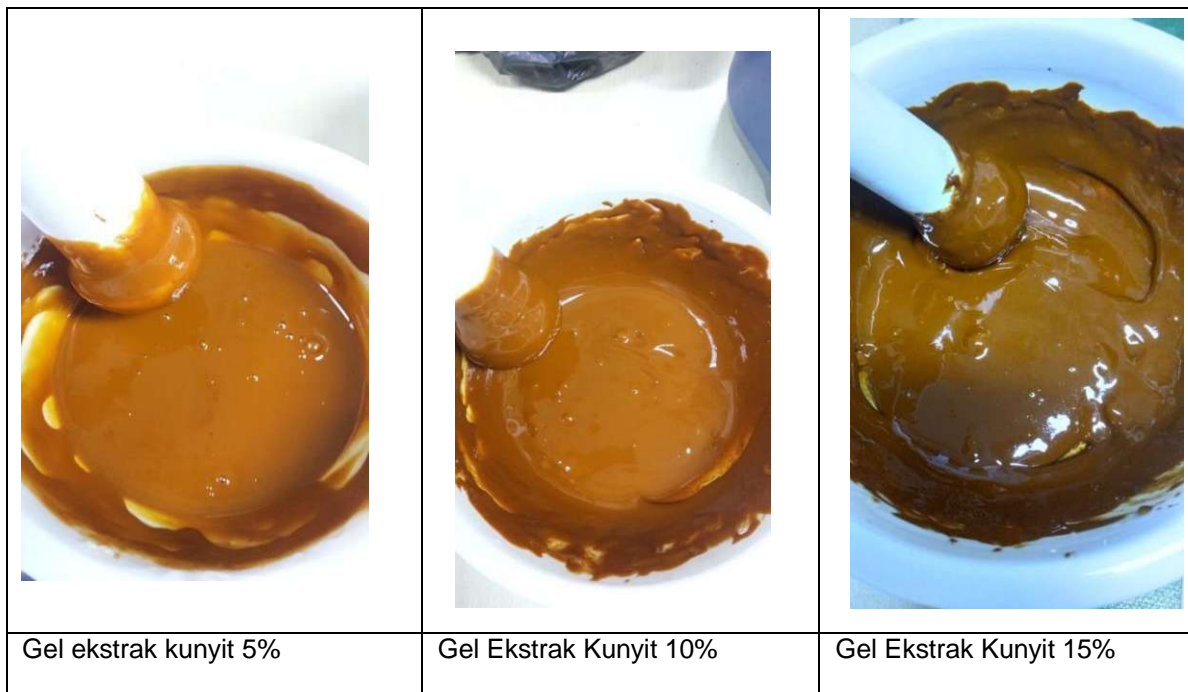


LAMPIRAN 2

DOKUMENTASI PENELITIAN

<p>kunyit basah</p> 	<p>kunyit yang telah dikeringkan</p> 	<p>alkohol 70%</p> 
<p>kunyit bubuk direndam dengan etanol 70% selama 3 x 24 jam</p> 	<p>hasil maserasi disaring menggunakan kertas saring dan corong</p> 	<p>Rotavapor</p> 
	<p>ekstrak kental</p> 	<p>Waterbath</p> 





s Gel dan Gel Ekstrak Kunyit Kuning konsentrasi 5%, 10%, dan 15% dalam kemasan





Penyayatan luka pada kelinci



LAMPIRAN 3

Warnings

HARI.KE.14 is constant when KELOMPOK = GEK 5%. It will be included in any boxplots produced but other output will be omitted.

KELOMPOK

Case Processing Summary

KELOMPOK		Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
HARI.KE.3	BASIS GEL	4	100.0%	0	0.0%	4	100.0%
	GEK 5%	4	100.0%	0	0.0%	4	100.0%
	GEK 10%	4	100.0%	0	0.0%	4	100.0%
	GEK 15%	4	100.0%	0	0.0%	4	100.0%
HARI.KE.7	BASIS GEL	4	100.0%	0	0.0%	4	100.0%
	GEK 5%	4	100.0%	0	0.0%	4	100.0%
	GEK 10%	4	100.0%	0	0.0%	4	100.0%
	GEK 15%	4	100.0%	0	0.0%	4	100.0%
HARI.KE.14	BASIS GEL	4	100.0%	0	0.0%	4	100.0%
	GEK 5%	4	100.0%	0	0.0%	4	100.0%
	GEK 10%	4	100.0%	0	0.0%	4	100.0%
	GEK 15%	4	100.0%	0	0.0%	4	100.0%



Descriptives^a

KELOMPOK		Statistic	Std. Error		
HARI.KE.3	BASIS GEL	Mean	1.3000	.04082	
		95% Confidence Interval for Mean	Lower Bound	1.1701	
			Upper Bound	1.4299	
		5% Trimmed Mean	1.3000		
		Median	1.3000		
		Variance	.007		
		Std. Deviation	.08165		
		Minimum	1.20		
		Maximum	1.40		
		Range	.20		
		Interquartile Range	.15		
		Skewness	.000	1.014	
		Kurtosis	1.500	2.619	
		GEK 5%		Mean	1.0250
95% Confidence Interval for Mean	Lower Bound			.8727	
	Upper Bound			1.1773	
5% Trimmed Mean	1.0278				
Median	1.0500				
Variance	.009				
Std. Deviation	.09574				
Minimum	.90				
Maximum	1.10				
Range	.20				



	Interquartile Range		.18	
	Skewness		-.855	1.014
	Kurtosis		-1.289	2.619
GEK 10%	Mean		1.2000	.04082
	95% Confidence Interval for Mean	Lower Bound	1.0701	
		Upper Bound	1.3299	
	5% Trimmed Mean		1.2000	
	Median		1.2000	
	Variance		.007	
	Std. Deviation		.08165	
	Minimum		1.10	
	Maximum		1.30	
	Range		.20	
	Interquartile Range		.15	
	Skewness		.000	1.014
	Kurtosis		1.500	2.619
GEK 15%	Mean		1.2000	.07071
	95% Confidence Interval for Mean	Lower Bound	.9750	
		Upper Bound	1.4250	
	5% Trimmed Mean		1.2056	
	Median		1.2500	
	Variance		.020	
	Std. Deviation		.14142	
	Minimum		1.00	
	Maximum		1.30	



		Range		.30	
		Interquartile Range		.25	
		Skewness		-1.414	1.014
		Kurtosis		1.500	2.619
HARI.KE.7	BASIS GEL	Mean		1.0250	.04787
		95% Confidence Interval for Mean	Lower Bound	.8727	
			Upper Bound	1.1773	
		5% Trimmed Mean		1.0278	
		Median		1.0500	
		Variance		.009	
		Std. Deviation		.09574	
		Minimum		.90	
		Maximum		1.10	
		Range		.20	
		Interquartile Range		.18	
		Skewness		-.855	1.014
		Kurtosis		-1.289	2.619
	GEK 5%	Mean		.6500	.06455
		95% Confidence Interval for Mean	Lower Bound	.4446	
			Upper Bound	.8554	
		5% Trimmed Mean		.6500	
		Median		.6500	
		Variance		.017	
		Std. Deviation		.12910	
		Minimum		.50	



	Maximum		.80	
	Range		.30	
	Interquartile Range		.25	
	Skewness		.000	1.014
	Kurtosis		-1.200	2.619
GEK 10%	Mean		.8500	.02887
	95% Confidence Interval for Mean	Lower Bound	.7581	
		Upper Bound	.9419	
	5% Trimmed Mean		.8500	
	Median		.8500	
	Variance		.003	
	Std. Deviation		.05774	
	Minimum		.80	
	Maximum		.90	
	Range		.10	
	Interquartile Range		.10	
	Skewness		.000	1.014
	Kurtosis		-6.000	2.619
GEK 15%	Mean		.9750	.02500
	95% Confidence Interval for Mean	Lower Bound	.8954	
		Upper Bound	1.0546	
	5% Trimmed Mean		.9778	
	Median		1.0000	
	Variance		.002	
	Std. Deviation		.05000	
	Minimum		.90	



	Maximum		1.00	
	Range		.10	
	Interquartile Range		.07	
	Skewness		-2.000	1.014
	Kurtosis		4.000	2.619
HARI.KE.14	BASIS GEL	Mean	.3750	.11087
		95% Confidence Interval for Mean	Lower Bound Upper Bound	.0222 .7278
		5% Trimmed Mean	.3778	
		Median	.4000	
		Variance	.049	
		Std. Deviation	.22174	
		Minimum	.10	
		Maximum	.60	
		Range	.50	
		Interquartile Range	.42	
		Skewness	-.482	1.014
		Kurtosis	-1.700	2.619
	GEK 10%	Mean	.0500	.05000
		95% Confidence Interval for Mean	Lower Bound Upper Bound	-.1091 .2091
		5% Trimmed Mean	.0444	
		Median	.0000	
		Variance	.010	
		Std. Deviation	.10000	



	Minimum		.00	
	Maximum		.20	
	Range		.20	
	Interquartile Range		.15	
	Skewness		2.000	1.014
	Kurtosis		4.000	2.619
GEK 15%	Mean		.0750	.07500
	95% Confidence Interval for Mean	Lower Bound	-.1637	
		Upper Bound	.3137	
	5% Trimmed Mean		.0667	
	Median		.0000	
	Variance		.022	
	Std. Deviation		.15000	
	Minimum		.00	
	Maximum		.30	
	Range		.30	
	Interquartile Range		.22	
	Skewness		2.000	1.014
	Kurtosis		4.000	2.619

a. HARI.KE.14 is constant when KELOMPOK = GEK 5%. It has been omitted.



Tests of Normality^b

KELOMPOK	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
HARI.KE.3 BASIS GEL	.250	4	.	.945	4	.683
GEK 5%	.283	4	.	.863	4	.272
GEK 10%	.250	4	.	.945	4	.683
GEK 15%	.260	4	.	.827	4	.161
HARI.KE.7 BASIS GEL	.283	4	.	.863	4	.272
GEK 5%	.151	4	.	.993	4	.972
GEK 10%	.307	4	.	.729	4	.024
GEK 15%	.441	4	.	.630	4	.001
HARI.KE.14 BASIS GEL	.214	4	.	.963	4	.798
GEK 10%	.441	4	.	.630	4	.001
GEK 15%	.441	4	.	.630	4	.001

a. Lilliefors Significance Correction

b. HARI.KE.14 is constant when KELOMPOK = GEK 5%. It has been omitted.

Kruskal-Wallis Test

Ranks

KELOMPOK	N	Mean Rank
HARI.KE.3 BASIS GEL	4	12.63
GEK 5%	4	3.38
GEK 10%	4	8.75



	GEK 15%	4	9.25
	Total	16	
HARI.KE.7	BASIS GEL	4	13.00
	GEK 5%	4	2.75
	GEK 10%	4	6.75
	GEK 15%	4	11.50
	Total	16	
HARI.KE.14	BASIS GEL	4	13.88
	GEK 5%	4	5.50
	GEK 10%	4	7.13
	GEK 15%	4	7.50
	Total	16	

Test Statistics^{a,b}

	HARI.KE.3	HARI.KE.7	HARI.KE.14
Chi-Square	8.169	11.977	9.521
df	3	3	3
Asymp. Sig.	.043	.007	.023

a. Kruskal Wallis Test

b. Grouping Variable: KELOMPOK



NPA

/M- Optimization Software: HARI.KE.7 HARI.KE.14 BY KELOMPOK(1 2)

www.balesio.com

/MISSING ANALYSIS.

Mann-Whitney Test

Ranks

	KELOMPOK	N	Mean Rank	Sum of Ranks
HARI.KE.3	BASIS GEL	4	6.50	26.00
	GEK 5%	4	2.50	10.00
	Total	8		
HARI.KE.7	BASIS GEL	4	6.50	26.00
	GEK 5%	4	2.50	10.00
	Total	8		
HARI.KE.14	BASIS GEL	4	6.50	26.00
	GEK 5%	4	2.50	10.00
	Total	8		

Test Statistics^a

	HARI.KE.3	HARI.KE.7	HARI.KE.14
Mann-Whitney U	.000	.000	.000
Wilcoxon W	10.000	10.000	10.000
Z	-2.337	-2.323	-2.460
Asymp. Sig. (2-tailed)	.019	.020	.014
Exact Sig. (2-tailed)	.029 ^b	.029 ^b	.029 ^b



Optimization Software:
www.balesio.com

a. G...ELOMPOK

b. Not corrected for ties.

NPAR TESTS

/M-W= HARI.KE.3 HARI.KE.7 HARI.KE.14 BY KELOMPOK(1 3)

/MISSING ANALYSIS.

Mann-Whitney Test

Ranks

	KELOMPOK	N	Mean Rank	Sum of Ranks
HARI.KE.3	BASIS GEL	4	5.75	23.00
	GEK 10%	4	3.25	13.00
	Total	8		
HARI.KE.7	BASIS GEL	4	6.25	25.00
	GEK 10%	4	2.75	11.00
	Total	8		
HARI.KE.14	BASIS GEL	4	6.25	25.00
	GEK 10%	4	2.75	11.00
	Total	8		

Test Statistics^a

	HARI.KE.3	HARI.KE.7	HARI.KE.14
Mann-Whitney U	3.000	1.000	1.000
Wilcoxon W	13.000	11.000	11.000
Z	-1.517	-2.097	-2.071
Asy taile	.129	.036	.038



Exact Sig. [2*(1-tailed Sig.)]	.200 ^b	.057 ^b	.057 ^b
--------------------------------	-------------------	-------------------	-------------------

a. Grouping Variable KELOMPOK

NPAR TESTS

/M-W= HARI.KE.3 HARI.KE.7 HARI.KE.14 BY KELOMPOK(1 4)

/MISSING ANALYSIS.

Mann-Whitney Test

Ranks

	KELOMPOK	N	Mean Rank	Sum of Ranks
HARI.KE.3	BASIS GEL	4	5.38	21.50
	GEK 15%	4	3.63	14.50
	Total	8		
HARI.KE.7	BASIS GEL	4	5.25	21.00
	GEK 15%	4	3.75	15.00
	Total	8		
HARI.KE.14	BASIS GEL	4	6.13	24.50
	GEK 15%	4	2.88	11.50
	Total	8		



Test Statistics^a

	HARI.KE.3	HARI.KE.7	HARI.KE.14
Mann-Whitney U	4.500	5.000	1.500
Wilcoxon W	14.500	15.000	11.500
Z	-1.084	-.935	-1.935
Asymp. Sig. (2-tailed)	.278	.350	.053
Exact Sig. [2*(1-tailed Sig.)]	.343 ^b	.486 ^b	.057 ^b

a. Grouping Variable: KELOMPOK



b. Not corrected for ties.

NPAR TESTS

/M-W= HARI.KE.3 HARI.KE.7 HARI.KE.14 BY KELOMPOK(2 3)

/MISSING ANALYSIS.

Mann-Whitney Test

Ranks

KELOMPOK	N	Mean Rank	Sum of Ranks
HARI.KE.3 GEK 5%	4	2.75	11.00
GEK 10%	4	6.25	25.00
Total	8		
HARI.KE.7 GEK 5%	4	2.75	11.00
GEK 10%	4	6.25	25.00
Total	8		
HARI.KE.14 GEK 5%	4	4.00	16.00
GEK 10%	4	5.00	20.00
Total	8		

Test Statistics^a

	HARI.KE.3	HARI.KE.7	HARI.KE.14
Mann-Whitney U	1.000	1.000	6.000
Wilcoxon Signed Rank Z	11.000	11.000	16.000
Asymptotic Significance (2-tailed)	-2.084	-2.084	-1.000
	.037	.037	.317



Exact Sig. [2*(1-tailed Sig.)]	.057 ^b	.057 ^b	.686 ^b
--------------------------------	-------------------	-------------------	-------------------

a. Grouping Variable: KELOMPOK

c. Not corrected for ties.

NPAR TESTS

/M-W= HARI.KE.3 HARI.KE.7 HARI.KE.14 BY KELOMPOK(2 4)

/MISSING ANALYSIS.

Mann-Whitney Test

Ranks

	KELOMPOK	N	Mean Rank	Sum of Ranks
HARI.KE.3	GEK 5%	4	3.13	12.50
	GEK 15%	4	5.88	23.50
	Total	8		
HARI.KE.7	GEK 5%	4	2.50	10.00
	GEK 15%	4	6.50	26.00
	Total	8		
HARI.KE.14	GEK 5%	4	4.00	16.00
	GEK 15%	4	5.00	20.00
	Total	8		



Test Statistics^a

	HARI.KE.3	HARI.KE.7	HARI.KE.14
Mann-Whitney U	2.500	.000	6.000

Wilcoxon W	12.500	10.000	16.000
Z	-1.617	-2.366	-1.000
Asymp. Sig. (2-tailed)	.106	.018	.317
Exact Sig. [2*(1-tailed Sig.)]	.114 ^b	.029 ^b	.686 ^b

a. Grouping Variable: KELOMPOK

b. Not corrected for ties.

NPAR TESTS

/M-W= HARI.KE.3 HARI.KE.7 HARI.KE.14 BY KELOMPOK(3 4)

/MISSING ANALYSIS.

Mann-Whitney Test

Ranks

	KELOMPOK	N	Mean Rank	Sum of Ranks
HARI.KE.3	GEK 10%	4	4.25	17.00
	GEK 15%	4	4.75	19.00
	Total	8		
HARI.KE.7	GEK 10%	4	2.75	11.00
	GEK 15%	4	6.25	25.00
	Total	8		
HARI.KE.14	GEK 10%	4	4.38	17.50
	GEK 15%	4	4.63	18.50
	Total	8		



Test Statistics^a

	HARI.KE.3	HARI.KE.7	HARI.KE.14
Mann-Whitney U	7.000	1.000	7.500
Wilcoxon W	17.000	11.000	17.500
Z	-.303	-2.139	-.189
Asymp. Sig. (2-tailed)	.762	.032	.850
Exact Sig. [2*(1-tailed Sig.)]	.886 ^b	.057 ^b	.886 ^b

a. Grouping Variable: KELOMPOK

b. Not corrected for ties.

