

### DAFTAR PUSTAKA

- Al-Gazali, M. (2017). *Identifikasi Dan Penanganan Kejadian Ascariasis (Ascaridia Galli) Pada Ayam Layer di Pt. Inti Tani Satwa Kab. Maros [Skripsi]*. Makassar: Universitas Makassar.
- Alvarez, L. I., Mottier, M. L., & Lanusse, C. E. (2007). Drug transfer into target helminth parasites. *Trends in Parasitology*, 23, 97–104. <https://doi.org/10.1016/j.pt.2007.01.003>
- Arifianti, L., Oktarina, R. D., & Kusumawati, I. (2014). Pengaruh Jenis Pelarut Pengekstraksi Terhadap Kadar Sinensetin dalam Ekstrak Daun Orthosiphon Stamineus Benth. *E-Jurnal Planta Husada*.
- Arunyanart C, Kanla P, Chaichun A, Intapan PM, dan M. W. (2009). Ultrastructural effects of albendazole on the bodywall of Gnathostoma Spinegerum third stage larva. *Southeast Asian Journal of Tropical Medicine and Public Health*, 40, 1199–1207.
- Ashour, A. S., El Aziz, M. M. A., & Gomha Melad, A. S. (2019). A review on saponins from medicinal plants: chemistry, isolation, and determination. *Journal of Nanomedicine Research*. <https://doi.org/10.15406/jnmr.2019.07.00199>
- Bachaya, H. A., Iqbal, Z., Khan, M. N., Sindhu, Z. ud D., & Jabbar, A. (2009). Anthelmintic activity of Ziziphus nummularia (bark) and Acacia nilotica (fruit) against Trichostrongylid nematodes of sheep. *Journal of Ethnopharmacology*, 123, 325–329. <https://doi.org/10.1016/j.jep.2009.02.043>
- Balqis, U., Hambal, M., Darmawi, ., Harris, A., Rasmaidar, ., Athaillah, F., Muttaqien, ., Azhar, ., Ismail, ., & Daud, R. (2016). Perbandingan aktivitas antelmintik albendazole dan levamisole terhadap Ascaridia galli secara in vitro. *Acta Veterinaria Indonesiana*, 4(2), 97–102. <https://doi.org/10.29244/avi.4.2.97-102>
- Basri, M. R. (2015). *Uji Aktivitas Larvasida Ekstrak Daun Sirih (Piper betle L.) terhadap Larva Myasis Chrysomya bezziana secara In Vitro [Skripsi]*. Makassar: Universitas Hasanuddin.
- Berijaya, Martindah E, dan N. I. (2006). Masalah Ascariasis Pada ayam. *Lokakarya Nasional Inovasi Teknologi*, 30, 194–200.
- Challam, M., Roy, B., & Tandon, V. (2010). Effect of Lysimachia ramosa (Primulaceae) on helminth parasites: Motility, mortality and scanning electron microscopic observations on surface topography. *Veterinary Parasitology*, 169, 214–218. <https://doi.org/10.1016/j.vetpar.2009.12.024>
- Darmawia, Balqisa, U., Hambala, M., Tiuriab, R., Frengkia, & Priosoeryanto, B. P. (2013). Mucosal mast cells response in the jejunum of Ascaridia galli-Infected laying hens. *Media Peternakan*, 36(2), 113–119. <https://doi.org/10.5398/medpet.2013.36.2.113>
- Departemen Kesehatan RI. (2000). *Parameter Standard Umum Ekstrak Tumbuhan Obat*. Direktorat Jendral Pengawasan Obat Dan Makanan.
- Duke, J. A. (1983). Handbook of Energy Crops: Arachis hypogaea. In *Purdue University, Centre for New Crops and Plants Products*.
- Erna Harfiani dan Aulia Chaerani. (2018). Potensi Jatropha curcas L. sebagai antiseptik pada pertumbuhan Staphylococcus aureus, Escherichia coli, dan Candida sp. *Bio-Site*, 4(1), 1–40.

- Fitriana, S. (2008). *Penapisan Fitokimia dan Uji Aktivitas Anthelmintik Ekstrak Daun Jarak (Jatropha curcas L.) terhadap Cacing Ascaridia galli secara In Vitro [Skripsi]*. Bogor: Institut Pertanian Bogor.
- Habibi, A. I., Firmansyah, R. A., & Setyawati, S. M. (2018). Skrining Fitokimia Ekstrak n-Heksan Korteks Batang Salam (*Syzygium polyanthum*). *Indonesian Journal of Chemical Science*, 7(1), 1–4.
- Hanifah W., S. (2010). *Aktivitas Anthelmintik Ekstrak Daun Jarak Pagar (Jatropha curcas L.) Terhadap Cacing Pita dan Ascaridia Galli [Skripsi]*. Bogor: Institut Pertanian Bogor.
- Harmita. (2009). *Analisis Hayati Uji Toksisitas*. Universitas Indonesia.
- Hasyim, A., Setiawati, W., Lukman, L., & Marhaeni, L. S. (2019). Evaluasi Konsentrasi Lethal dan Waktu Lethal Insektisida Botani Terhadap Ulat Bawang (*Spodoptera exigua*) di Laboratorium. *Jurnal Hortikultura*. <https://doi.org/10.21082/jhort.v29n1.2019.p69-80>
- Hoste, H., Jackson, F., Athanasiadou, S., Thamsborg, S. M., & Hoskin, S. O. (2006). The effects of tannin-rich plants on parasitic nematodes in ruminants. *Trends in Parasitology*, 22, 253–261. <https://doi.org/10.1016/j.pt.2006.04.004>
- Intannia D, Amelia R, Handayani L, S. H. (2015). Pengaruh pemberian ekstrak etanol dan ekstrak n-heksan daun ketepeng china (*Cassia alata*. L) terhadap waktu kematian cacing pita ayam (*Raillietina* sp.) secara in vitro. *Jurnal Pharmascience*, 2(2), 24–30.
- Iqbal, Z., Sarwar, M., Jabbar, A., Ahmed, S., Nisa, M., Sajid, M. S., Khan, M. N., Mufti, K. A., & Yaseen, M. (2007). Direct and indirect anthelmintic effects of condensed tannins in sheep. *Veterinary Parasitology*, 114, 125–131. <https://doi.org/10.1016/j.vetpar.2006.09.035>
- Istiqomah. (2013). *Perbandingan Metode Ekstraksi Maserai dan Sokletasi terhadap Kadar Piperin Buah Cabe Jawa (Piperis retrofracti fructus) [Skripsi]*. Jakarta: UIN Syarif Hidayatullah.
- Khan, N. A., & Iqbal, S. A. (2010). Alkaloid-constituents of *Jatropha curcas* linn. *Oriental Journal of Chemistry*, 26(3), 1231–1232.
- Lalchhandama, K., Roy, B., & Dutta, B. K. (2009). Anthelmintic activity of *Acacia oxyphylla* stem bark against *Ascaridia galli*. *Pharmaceutical Biology*, 47(7), 578–583. <https://doi.org/10.1080/13880200902902463>
- Molan, A. L., Duncan, A. J., Barry, T. N., & McNabb, W. C. (2003). Effects of condensed tannins and crude sesquiterpene lactones extracted from chicory on the motility of larvae of deer lungworm and gastrointestinal nematodes. *Parasitology International*, 52, 209–218. [https://doi.org/10.1016/S1383-5769\(03\)00011-4](https://doi.org/10.1016/S1383-5769(03)00011-4)
- Mubarokah, W. W., Daryatmo, J., Widiarso, B. P., & Sambodo, P. (2019). Morfologi Telur dan Larva 2 *Ascaridia Galli* pada Ayam Kampung. *Jurnal Ilmu Peternakan Dan Veteriner Tropis (Journal of Tropical Animal and Veterinary Science)*, 9(2), 50–54. <https://doi.org/10.30862/jipvet.v9i2.66>
- Naidu, A. S. (2000). *Natural Food Antimicrobial System*. CRC Press, USA.
- Nawa, Y., & Nakamura-Uchiyama, F. (2004). An overview of gnathostomiasis in the world. *Southeast Asian Journal of Tropical Medicine and Public Health*, 35, 87–91.
- Pabala MF, Apsari IAP, dan S. I. (2017). Prevalensi dan intensitas infeksi cacing

- Ascaridia galli* pada ayam buras di wilayah Bukit Jimbaran, Badung. *Indonesia Medicus Veterinus*, 6(3), 198–205.
- Prasad, D. M. R. (2012). *Jatropha curcas*: Plant of medical benefits. *Journal of Medicinal Plants Research*, 6(14), 2691–2699. <https://doi.org/10.5897/jmpr10.977>
- Prastowo, J., & Ariyadi, B. (2015). Pengaruh infeksi cacing *Ascaridia galli* terhadap gambaran darah dan elektrolit ayam kampung (*Gallus domesticus*). *Jurnal Medika Veterinaria*, 9(1), 12–17. <https://doi.org/10.21157/j.med.vet.v9i1.2986>
- Purnamasari, T. (2017). *Uji Aktivitas Anthelmintik Ekstrak Etanol Daun Jarak Pagar (Jatropha Curcas Linn) Terhadap Cacing Paramphistomum Sp. Secara In Vitro [Skripsi]*. Makassar: Universitas Hasanuddin.
- Robiyanto, Ria Kusuma, E. K. U. (2018). Potensi Antelmintik Ekstrak Etanol Daun Mangga Arumanis (*Mangifera indica* L.) pada Cacing *Ascaridia galli* dan *Raillietina tetragona* secara In Vitro. *Pharmaceutical Sciences and Research*, 5(2), 81–89.
- Santoso, B. . (2010). *Deskripsi Botan Jarak Pagar Jatropha curcas L.* Arga Puji Press.
- Siamba, D. N., Okitoi, L. O., Watai, M. K., Wachira, A. M., Lukibisi, F. B., & Mukisira, E. A. (2007). Efficacy of *Tephrosia vogelli* and *Vernonia amygdalina* as anthelmintics against *Ascaridia galli* in indigenous chicken. *Livestock Research for Rural Development*, 19, 1–8.
- Simamora, N. (2011). *Performa produksi dan karakteristik organ dalam ayam kampung umur 12-16 minggu yang diinfeksi cacing Ascaridia galli dan disuplementasi ekstrak daun jarak pagar (Jatropha curcas Linn)*. Bogor: Institut Pertanian Bogor.
- Soulsby, E. J. L. (1986). *Textbook of Clinical Parasitology Volume I: Helminth*. Blackwell Scientific.
- Suhaerah, L. (2013). *Statistika Dasar*.
- Suharti, S., Wiryawan, K. G., Tiuria, R., Ridwan, Y., Fitriana, S., & Sumarni, N. (2010). Efektivitas daun jarak (*jatropha curcas linn*) sebagai anticacing *ascaridia galli* dan pengaruhnya terhadap performa ayam lokal. *Media Peternakan*, 33(2), 108–114. <https://doi.org/10.5398/medpet.2010.33.2.108>
- Susanty Simaremartye, E. (2014). Skrining Fitokimia Ekstrak Etanol Daun Gatal (*Laportea decumana* (Roxb.) Wedd). *Pharmacy*, 11(01), 98–107.
- Tarbiat, B., Jansson, D. S., & Höglund, J. (2015). Environmental Tolerance Of The Free-Living Stages Of The Poultry Roundworm (*Ascaridia Gallii*) [Uppsala: Swedish University of Agricultural Sciences]. In *Veterinary Parasitology*. <https://doi.org/10.1016/j.vetpar.2015.01.024>
- Yudiatmoko, C. . (2010). *Daya Anthelmintika Infusa Daun Macarangan tanarius L. Terhadap Cacing Usus Ayam (Ascaridia galli) Betina Secara In Vitro [Skripsi]*. Yogyakarta: Universitas Sanata Dharma.
- Zhao, W. T., Guo, Y. N., Zhang, L. P., & Li, L. (2016). Ultrastructure of *Ascaridia galli* (Schrank, 1788) (Nematoda: Ascaridida) from the endangered green peafowl *Pavo muticus* Linnaeus (Galliformes: Phasianidae). *Acta Parasitologica*, 61(1), 66–73. <https://doi.org/10.1515/ap-2016-0007>

## LAMPIRAN

**Lampiran 1. Mortalitas cacing *Acaridia galli* dalam ekstrak daun jarak pagar (*Jatropha curcas linn*)**

Waktu (menit)	Mortalitas cacing								
	EDJ 10%			EDJ 15%			EDJ 20%		
	U1	U2	U3	U1	U2	U3	U1	U2	U3
10	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0
50	0	0	0	0	1	0	2	0	1
60	0	0	0	2	2	1	3	2	3
70	0	0	0	3	3	2	5	5	5
80	0	0	0	4	4	4	5	5	5
90	0	0	0	5	5	5	5	5	5
100	0	0	0	5	5	5	5	5	5
110	0	0	0	5	5	5	5	5	5
120	0	0	0	5	5	5	5	5	5
130	0	0	0	5	5	5	5	5	5
140	2	1	1	5	5	5	5	5	5
150	2	1	1	5	5	5	5	5	5
160	2	3	1	5	5	5	5	5	5
170	3	3	3	5	5	5	5	5	5
180	5	4	4	5	5	5	5	5	5
190	5	5	5	5	5	5	5	5	5

GET

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FILE='D:\Statsco.id\2020 Juli\Hasri Probit\data hasri
ainun.sav'.
```

```
DATASET NAME DataSet1 WINDOW=FRONT.
```

```
NEW FILE.
```

```
DATASET NAME DataSet2 WINDOW=FRONT.
```

```
NPAR TESTS
```

```
/K-W=Waktu_kematian BY Perlakuan(1 5)
```

```
/MISSING ANALYSIS.
```

## NPar Tests

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	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax		NPAR TESTS /K-W=Waktu_kematian BY Perlakuan(1 5) /MISSING ANALYSIS.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02
	Number of Cases Allowed <sup>a</sup>	224694

a. Based on availability of workspace memory.

[DataSet2]

## Lampiran 2. Kruskal-Wallis Test

Ranks			
	Perlakuan	N	Mean Rank
Waktu_kematian	1.00	3	14.00
	2.00	3	8.00
	3.00	3	11.00
	4.00	3	5.00
	5.00	3	2.00
	Total		15

Test Statistics <sup>a,b</sup>	
	Waktu_kematian
Chi-Square	13.846
df	4
Asymp. Sig.	.008

a. Kruskal Wallis Test

b. Grouping Variable: Perlakuan

## NPAR TESTS

```

/M-W= Waktu_kematian BY Perlakuan(1 2)
/MISSING ANALYSIS.

```

**NPar Tests Kontrol (-) vs Kontrol (+)****Notes**

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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax	NPAR TESTS /M-W= Waktu_kematian BY Perlakuan(1 2) /MISSING ANALYSIS.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02
	Number of Cases Allowed <sup>a</sup>	224694

a. Based on availability of workspace memory.

**Lampiran 3. Mann-Whitney Test****Ranks**

	Perlakuan	N	Mean Rank
Waktu_kematian	1.00	3	5.00
	2.00	3	2.00
Total		6	

**Test Statistics<sup>a</sup>**

	Waktu_kematian
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.121
Asymp. Sig. (2-tailed)	.034
Exact Sig. [2*(1-tailed Sig.)]	.100 <sup>b</sup>

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

## NPAR TESTS

/M-W= Waktu\_kematian BY Perlakuan(1 3)

/MISSING ANALYSIS.

**NPar Tests Kontrol (-) vs EDJ10%****Notes**

Output Created	06-JUL-2020 06:57:53		
Comments			
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	N of Rows in Working Data File	15	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.	
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.	
Syntax	NPAR TESTS /M-W= Waktu_kematian BY Perlakuan(1 3) /MISSING ANALYSIS.		
Resources	Processor Time	00:00:00.02	
	Elapsed Time	00:00:00.02	
	Number of Cases Allowed <sup>a</sup>	224694	

a. Based on availability of workspace memory.

**Mann-Whitney Test****Mann-Whitney Test****Ranks**

	Perlakuan	N	Mean Rank	Sum of Ranks
Waktu_kematian	1.00	3	5.00	15.00
	3.00	3	2.00	6.00
Total		6		

**Test Statistics<sup>a</sup>**

	Waktu_kematian
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.121
Asymp. Sig. (2-tailed)	.034
Exact Sig. [2*(1-tailed Sig.)]	.100 <sup>b</sup>

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

NPART TESTS

/M-W= Waktu\_kematian BY Perlakuan(1 4)  
/MISSING ANALYSIS.

### NPar Tests Kontrol (-) vs EDJ 15%

#### Notes

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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax		NPART TESTS /M-W= Waktu_kematian BY Perlakuan(1 4) /MISSING ANALYSIS.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02
	Number of Cases Allowed <sup>a</sup>	224694

a. Based on availability of workspace memory.

### Mann-Whitney Test

#### Ranks

	Perlakuan	N	Mean Rank	Sum of Ranks
Waktu_kematian	1.00	3	5.00	15.00
	4.00	3	2.00	6.00
	Total	6		

#### Test Statistics<sup>a</sup>

	Waktu_kematian
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.236
Asymp. Sig. (2-tailed)	.025
Exact Sig. [2*(1-tailed Sig.)]	.100 <sup>b</sup>

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

## NPAR TESTS

/M-W= Waktu\_kematian BY Perlakuan(1 5)  
/MISSING ANALYSIS.

**NPar Tests Kontrol (-) vs EDJ20%****Notes**

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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.	
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.	
Syntax	NPAR TESTS /M-W= Waktu_kematian BY Perlakuan(1 5) /MISSING ANALYSIS.		
Resources	Processor Time	00:00:00.00	
	Elapsed Time	00:00:00.00	
	Number of Cases Allowed <sup>a</sup>	224694	

a. Based on availability of workspace memory.

**Mann-Whitney Test****Ranks**

	Perlakuan	N	Mean Rank
Waktu_kematian	1.00	3	5.00
	5.00	3	2.00
	Total	6	

**Test Statistics<sup>a</sup>**

	Waktu_kematian
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.236
Asymp. Sig. (2-tailed)	.025
Exact Sig. [2*(1-tailed Sig.)]	.100 <sup>b</sup>

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

NPAR TESTS

/M-W= Waktu\_kematian BY Perlakuan(2 3)

/MISSING ANALYSIS.

**NPar Tests Kontrol (+) vs EDJ10%****Notes**

Output Created		06-JUL-2020 06:59:57
Comments		
Input	Active Dataset	DataSet2
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	Weight	<none>
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	N of Rows in Working Data File	15
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax		NPAR TESTS /M-W= Waktu_kematian BY Perlakuan(2 3) /MISSING ANALYSIS.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02
	Number of Cases Allowed <sup>a</sup>	224694

a. Based on availability of workspace memory.

**Mann-Whitney Test****Ranks**

	Perlakuan	N	Mean Rank	Sum of Ranks
Waktu_kematian	2.00	3	2.00	6.00
	3.00	3	5.00	15.00
	Total	6		

**Test Statistics<sup>a</sup>**

	Waktu_kematian
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.023
Asymp. Sig. (2-tailed)	.043
Exact Sig. [2*(1-tailed Sig.)]	.100 <sup>b</sup>

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

NPAR TESTS

/M-W= Waktu\_kematian BY Perlakuan(2 4)

/MISSING ANALYSIS.

**NPar Tests Kontrol (+) vs EDJ15%****Notes**

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	N of Rows in Working Data File	15
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax		NPAR TESTS /M-W= Waktu_kematian BY Perlakuan(2 4) /MISSING ANALYSIS.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00
	Number of Cases Allowed <sup>a</sup>	224694

a. Based on availability of workspace memory.

**Mann-Whitney Test****Ranks**

	Perlakuan	N	Mean Rank
Waktu_kematian	2.00	3	2.00
	4.00	3	5.00
Total		6	

**Test Statistics<sup>a</sup>**

	Waktu_kematian
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.121
Asymp. Sig. (2-tailed)	.034
Exact Sig. [2*(1-tailed Sig.)]	.100 <sup>b</sup>

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

NPAR TESTS

/M-W= Waktu\_kematian BY Perlakuan(2 5)

/MISSING ANALYSIS.

## NPar Tests Kontrol (+) vs EDJ20%

### Notes

Output Created	06-JUL-2020 07:01:04		
Comments			
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	N of Rows in Working Data File	15	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.	
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.	
Syntax	NPAR TESTS /M-W= Waktu_kematian BY Perlakuan(2 5) /MISSING ANALYSIS.		
Resources	Processor Time	00:00:00.00	
	Elapsed Time	00:00:00.02	
	Number of Cases Allowed <sup>a</sup>	224694	

a. Based on availability of workspace memory.

## Mann-Whitney Test

### Ranks

	Perlakuan	N	Mean Rank	Sum of Ranks
Waktu_kematian	2.00	3	5.00	15.00
	5.00	3	2.00	6.00
Total		6		

### Test Statistics<sup>a</sup>

	Waktu_kematian
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.121
Asymp. Sig. (2-tailed)	.034
Exact Sig. [2*(1-tailed Sig.)]	.100 <sup>b</sup>

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

NPAR TESTS

/M-W= Waktu\_kematian BY Perlakuan(3 4)

/MISSING ANALYSIS.

**NPar Tests EDJ10% vs EDJ15%****Notes**

Output Created	06-JUL-2020 07:01:32		
Comments			
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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.	
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.	
Syntax	NPAR TESTS /M-W= Waktu_kematian BY Perlakuan(3 4) /MISSING ANALYSIS.		
Resources	Processor Time		00:00:00.00
	Elapsed Time		00:00:00.00
	Number of Cases Allowed <sup>a</sup>		224694

a. Based on availability of workspace memory.

**Mann-Whitney Test****Ranks**

	Perlakuan	N	Mean Rank	Sum of Ranks
Waktu_kematian	3.00	3	5.00	15.00
	4.00	3	2.00	6.00
Total		6		

**Test Statistics<sup>a</sup>**

	Waktu_kematian
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.121
Asymp. Sig. (2-tailed)	.034
Exact Sig. [2*(1-tailed Sig.)]	.100 <sup>b</sup>

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

NPAR TESTS

/M-W= Waktu\_kematian BY Perlakuan(3 5)  
/MISSING ANALYSIS.

### NPar Tests EDJ10% vs EDJ15%

#### Notes

Output Created		06-JUL-2020 07:02:00
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	15
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax		NPAR TESTS /M-W= Waktu_kematian BY Perlakuan(3 5) /MISSING ANALYSIS.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03
	Number of Cases Allowed <sup>a</sup>	224694

a. Based on availability of workspace memory.

### Mann-Whitney Test

#### Ranks

	Perlakuan	N	Mean Rank	Sum of Ranks
Waktu_kematian	3.00	3	5.00	15.00
	5.00	3	2.00	6.00
Total		6		

#### Test Statistics<sup>a</sup>

	Waktu_kematian
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.121
Asymp. Sig. (2-tailed)	.034
Exact Sig. [2*(1-tailed Sig.)]	.100 <sup>b</sup>

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

NPAR TESTS

/M-W= Waktu\_kematian BY Perlakuan(4 5)  
/MISSING ANALYSIS.

## NPar Tests EDJ15% vs EDJ20%

### Notes

Output Created		06-JUL-2020 07:02:53
Comments		
Input	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	15
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax		NPAR TESTS /M-W= Waktu_kematian BY Perlakuan(4 5) /MISSING ANALYSIS.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02
	Number of Cases Allowed <sup>a</sup>	224694

a. Based on availability of workspace memory.

### Mann-Whitney Test

#### Ranks

	Perlakuan	N	Mean Rank
Waktu_kematian	4.00	3	5.00
	5.00	3	2.00
Total		6	

#### Test Statistics<sup>a</sup>

	Waktu_kematian
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.236
Asymp. Sig. (2-tailed)	.025
Exact Sig. [2*(1-tailed Sig.)]	.100 <sup>b</sup>

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

## Lampiran 4. Hasil uji Analisis Probit

### LC 50

**Parameter Estimates**

	Parameter	Estimate	Std. Error	Z	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
PROBIT <sup>a</sup>	Perlakuan	2.558	.246	10.417	.000	2.077	3.039
	Intercept	3.224	.216	14.916	.000	3.008	3.441

a. PROBIT model:  $\text{PROBIT}(p) = \text{Intercept} + \text{BX}$  (Covariates X are transformed using the base 10.000 logarithm.)

**Chi-Square Tests**

		Chi-Square	df <sup>b</sup>	Sig.
PROBIT	Pearson Goodness-of-Fit Test	2442.904	529	.000 <sup>a</sup>

a. Since the significance level is less than .150, a heterogeneity factor is used in the calculation of confidence limits.

b. Statistics based on individual cases differ from statistics based on aggregated cases.

**Confidence Limits**

	Probability	95% Confidence Limits for Perlakuan			95% Confidence Limits for log(Perla		
		Estimate	Lower Bound	Upper Bound	Estimate	Lower Bound	Upper Bound
PROBIT <sup>a</sup>	.010	.007	.001	.016	-2.170	-3.057	
	.020	.009	.001	.019	-2.063	-2.878	
	.030	.010	.002	.021	-1.996	-2.764	
	.040	.011	.002	.023	-1.945	-2.679	
	.050	.012	.002	.025	-1.903	-2.610	
	.060	.014	.003	.026	-1.868	-2.551	
	.070	.015	.003	.028	-1.837	-2.499	
	.080	.015	.004	.029	-1.810	-2.452	
	.090	.016	.004	.030	-1.785	-2.410	
	.100	.017	.004	.032	-1.761	-2.371	
	.150	.022	.006	.037	-1.666	-2.211	
	.200	.026	.008	.042	-1.589	-2.083	
	.250	.030	.011	.047	-1.524	-1.974	
	.300	.034	.013	.051	-1.465	-1.875	
	.350	.039	.016	.056	-1.411	-1.784	
	.400	.044	.020	.061	-1.360	-1.698	
	.450	.049	.024	.067	-1.310	-1.615	
	.500	.055	.029	.072	-1.260	-1.533	

.550	.061	.035	.079	-1.211	-1.452
.600	.069	.043	.086	-1.161	-1.369
.650	.078	.052	.094	-1.110	-1.285
.700	.088	.064	.103	-1.055	-1.196
.750	.101	.079	.115	-.997	-1.103
.800	.117	.099	.131	-.931	-1.005
.850	.140	.124	.160	-.855	-.907
.900	.174	.153	.219	-.760	-.815
.910	.183	.160	.237	-.736	-.795
.920	.194	.168	.260	-.711	-.775
.930	.207	.177	.288	-.684	-.753
.940	.222	.187	.323	-.653	-.729
.950	.241	.198	.369	-.617	-.702
.960	.265	.213	.432	-.576	-.671
.970	.298	.232	.524	-.525	-.634
.980	.349	.260	.679	-.458	-.584
.990	.446	.311	1.022	-.351	-.507

a. A heterogeneity factor is used.

b. Logarithm base = 10.

## LT 50

### Parameter Estimates

	Parameter	Estimate	Std. Error	Z	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
PROBIT <sup>a</sup>	Waktu_kematian	.021	.001	19.094	.000	.018	.02
	Intercept	-1.978	.123	-16.127	.000	-2.101	-1.85

a. PROBIT model:  $\text{PROBIT}(p) = \text{Intercept} + BX$

### Chi-Square Tests

	Chi-Square	df <sup>b</sup>	Sig.
PROBIT Pearson Goodness-of-Fit Test	554.425	529	.215 <sup>a</sup>

a. Since the significance level is greater than .150, no heterogeneity factor is used in the calculation of confidence limits.

b. Statistics based on individual cases differ from statistics based on aggregated cases.

**Confidence Limits**

	Probability	95% Confidence Limits for Waktu_kematian		
		Estimate	Lower Bound	Upper Bound
PROBIT	.010	-16.892	-31.567	-4.777
	.020	-3.663	-16.930	7.327
	.030	4.731	-7.656	15.019
	.040	11.045	-.688	20.814
	.050	16.181	4.974	25.533
	.060	20.552	9.788	29.555
	.070	24.385	14.005	33.086
	.080	27.817	17.777	36.251
	.090	30.939	21.205	39.133
	.100	33.812	24.356	41.789
	.150	45.708	37.367	52.823
	.200	55.162	47.652	61.648
	.250	63.273	56.422	69.272
	.300	70.557	64.243	76.174
	.350	77.306	71.433	82.627
	.400	83.711	78.193	88.813
	.450	89.908	84.666	94.865
	.500	96.006	90.964	100.894
	.550	102.104	97.183	107.002
	.600	108.301	103.419	113.291
	.650	114.706	109.778	119.878
	.700	121.455	116.390	126.909
	.750	128.739	123.435	134.586
	.800	136.850	131.188	143.229
	.850	146.304	140.126	153.400
	.900	158.200	151.262	166.309
	.910	161.073	153.938	169.441
	.920	164.195	156.839	172.848
	.930	167.627	160.023	176.601
	.940	171.460	163.574	180.799
	.950	175.831	167.615	185.593
	.960	180.967	172.355	191.235
	.970	187.282	178.171	198.182
	.980	195.675	185.887	207.432

.990	208.904	198.019	222.040
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## Kontrol

### LC 50

#### Parameter Estimates

	Parameter	Estimate	Std. Error	Z	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
PROBIT <sup>a</sup>	Konsentrasi	-4.877	.179	-27.283	.000	-5.228	-4.527
	Intercept	-12.273	.450	-27.248	.000	-12.723	-11.823

a. PROBIT model:  $\text{PROBIT}(p) = \text{Intercept} + \text{BX}$  (Covariates X are transformed using the base 10.000 logarithm.)

#### Chi-Square Tests

		Chi-Square	df <sup>b</sup>	Sig.
PROBIT	Pearson Goodness-of-Fit Test	1431.366	352	.000 <sup>a</sup>

a. Since the significance level is less than .150, a heterogeneity factor is used in the calculation of confidence limits.

b. Statistics based on individual cases differ from statistics based on aggregated cases.

#### Confidence Limits

	Probability	95% Confidence Limits for Konsentrasi			95% Confidence Limits for log(Kons)		
		Estimate	Lower Bound	Upper Bound	Estimate	Lower Bound	Upper Bound
PROBIT <sup>a</sup>	.010	.009	.008	.011	-2.039	-2.105	
	.020	.008	.007	.010	-2.095	-2.155	
	.030	.007	.007	.009	-2.131	-2.186	
	.040	.007	.006	.008	-2.157	-2.210	
	.050	.007	.006	.008	-2.179	-2.229	
	.060	.006	.006	.007	-2.198	-2.246	
	.070	.006	.005	.007	-2.214	-2.260	
	.080	.006	.005	.007	-2.228	-2.273	
	.090	.006	.005	.007	-2.241	-2.285	
	.100	.006	.005	.006	-2.254	-2.296	
	.150	.005	.005	.006	-2.304	-2.342	
	.200	.005	.004	.005	-2.344	-2.378	
	.250	.004	.004	.005	-2.378	-2.410	
	.300	.004	.004	.004	-2.409	-2.439	
	.350	.004	.003	.004	-2.437	-2.467	
	.400	.003	.003	.004	-2.464	-2.493	

.450	.003	.003	.003	-2.491	-2.519
.500	.003	.003	.003	-2.516	-2.546
.550	.003	.003	.003	-2.542	-2.572
.600	.003	.003	.003	-2.568	-2.600
.650	.003	.002	.003	-2.595	-2.629
.700	.002	.002	.003	-2.624	-2.660
.750	.002	.002	.002	-2.655	-2.694
.800	.002	.002	.002	-2.689	-2.732
.850	.002	.002	.002	-2.729	-2.777
.900	.002	.001	.002	-2.779	-2.834
.910	.002	.001	.002	-2.791	-2.848
.920	.002	.001	.002	-2.804	-2.863
.930	.002	.001	.002	-2.819	-2.880
.940	.001	.001	.002	-2.835	-2.898
.950	.001	.001	.002	-2.854	-2.919
.960	.001	.001	.002	-2.875	-2.944
.970	.001	.001	.001	-2.902	-2.975
.980	.001	.001	.001	-2.937	-3.016
.990	.001	.001	.001	-2.993	-3.081

a. A heterogeneity factor is used.

b. Logarithm base = 10.

## LT50

### Kontrol Positif

#### Parameter Estimates

	Parameter	Estimate	Std. Error	Z	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
PROBIT <sup>a</sup>	Waktu	.044	.005	8.179	.000	.034	.055
	Intercept	-5.116	.637	-8.030	.000	-5.754	-4.479

a. PROBIT model:  $\text{PROBIT}(p) = \text{Intercept} + BX$

#### Chi-Square Tests

		Chi-Square	df <sup>b</sup>	Sig.
PROBIT	Pearson Goodness-of-Fit Test	14.918	175	1.000 <sup>a</sup>

a. Since the significance level is greater than .150, no heterogeneity factor is used in the calculation of confidence limits.

b. Statistics based on individual cases differ from statistics based on aggregated cases.

**Confidence Limits**

	Probability	95% Confidence Limits for Waktu		
		Estimate	Lower Bound	Upper Bound
PROBIT	.010	62.810	45.145	74.138
	.020	68.947	53.063	79.241
	.030	72.841	58.068	82.498
	.040	75.770	61.821	84.960
	.050	78.152	64.864	86.973
	.060	80.180	67.446	88.693
	.070	81.958	69.705	90.207
	.080	83.551	71.721	91.569
	.090	84.998	73.549	92.813
	.100	86.331	75.228	93.963
	.150	91.849	82.120	98.780
	.200	96.235	87.513	102.692
	.250	99.998	92.060	106.128
	.300	103.377	96.066	109.292
	.350	106.508	99.697	112.304
	.400	109.479	103.061	115.245
	.450	112.353	106.231	118.174
	.500	115.182	109.265	121.142
	.550	118.011	112.212	124.198
	.600	120.886	115.120	127.389
	.650	123.857	118.041	130.773
	.700	126.988	121.034	134.423
	.750	130.367	124.181	138.445
	.800	134.129	127.602	143.008
	.850	138.515	131.501	148.414
	.900	144.033	136.305	155.319
	.910	145.366	137.453	157.000
	.920	146.814	138.694	158.831
	.930	148.406	140.053	160.849
	.940	150.184	141.565	163.110
	.950	152.212	143.283	165.695
	.960	154.594	145.293	168.741

.970	157.524	147.753	172.496
.980	161.417	151.006	177.504
.990	167.554	156.106	185.426

### Kontrol Negatif

#### Parameter Estimates

	Parameter	Estimate	Std. Error	Z	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
PROBIT <sup>a</sup>	Waktu	.023	.002	10.762	.000	.019	.028
	Intercept	-11.924	1.111	-10.734	.000	-13.035	-10.813

a. PROBIT model:  $\text{PROBIT}(p) = \text{Intercept} + BX$

#### Chi-Square Tests

		Chi-Square	df <sup>b</sup>	Sig.
PROBIT	Pearson Goodness-of-Fit Test	28.025	175	1.000 <sup>a</sup>

a. Since the significance level is greater than .150, no heterogeneity factor is used in the calculation of confidence limits.

b. Statistics based on individual cases differ from statistics based on aggregated cases.

#### Confidence Limits

	Probability	95% Confidence Limits for Waktu		
		Estimate	Lower Bound	Upper Bound
PROBIT	.010	410.278	386.580	427.190
	.020	421.932	400.626	437.250
	.030	429.325	409.512	443.658
	.040	434.887	416.181	448.495
	.050	439.411	421.592	452.442
	.060	443.262	426.188	455.812
	.070	446.638	430.210	458.775
	.080	449.661	433.802	461.436
	.090	452.410	437.063	463.863
	.100	454.941	440.058	466.103
	.150	465.420	452.379	475.457
	.200	473.747	462.056	483.008
	.250	480.892	470.247	489.596
	.300	487.308	477.493	495.622
	.350	493.253	484.093	501.321
	.400	498.895	490.238	506.846

.450	504.353	496.062	512.313
.500	509.725	501.668	517.819
.550	515.097	507.149	523.451
.600	520.555	512.591	529.299
.650	526.197	518.093	535.468
.700	532.142	523.769	542.090
.750	538.558	529.777	549.355
.800	545.702	536.347	557.564
.850	554.030	543.882	567.256
.900	564.509	553.222	579.592
.910	567.039	555.460	582.589
.920	569.789	557.884	585.853
.930	572.812	560.542	589.448
.940	576.188	563.502	593.472
.950	580.039	566.869	598.071
.960	584.563	570.813	603.485
.970	590.125	575.648	610.157
.980	597.518	582.052	619.046
.990	609.171	592.108	633.096

## Lampiran 5. Dokumentasi Kegiatan

### 1. Pemetikan Daun Jarak Pagar



### 2. Pembersihan Daun Jarak Pagar



### 3. Pengeringan Daun Jarak Pagar



### 4. Pembuatan simplisia Daun Jarak Pagar dengan blender



### 5. Maserasi



## 6. Filtrasi



## 7. Penguapan dengan hairdryer



## 8. Pembuatan konsentrasi ekstrak Daun Jarak Pagar



(Membuat larutan NaCMC 0,5%)



(Menimbang ekstrak daun jarak pagar berdasarkan variasi konsentrasi)



(Larutan ekstrak daun jarak pagar)

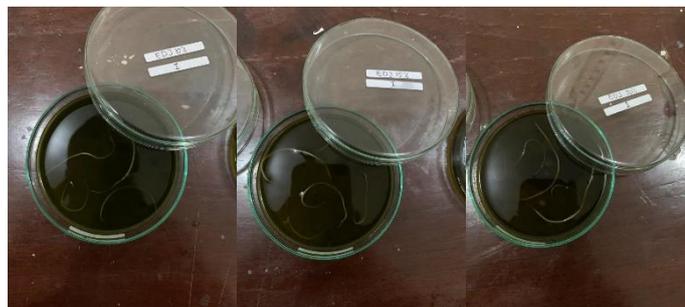
## 9. Persiapan sampel



## 10. Pengamatan



(Kontrol negative dan Kontrol positif)



(Replikasi 1 EDJ 10%, 15%, dan 20%)



(Replikasi 2 EDJ 10%, 15%, dan 20%)



(Replikasi 3 EDJ 10%, 15%, dan 20%)