



UNIVERSITAS MUHAMMADIYAH SURABAYA
FAKULTAS ILMU KESEHATAN

Program Studi : Keperawatan S1 dan D3 - Analis Kesehatan D3 - Kebidanan D3
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Nomor : 187.1/IL.3.AU/F/FIK/2013
Lampiran : -
Perihal : Permohonan ijin Penelitian

Kepada Yth.
Kepala Baristan (Balai Riset dan Standarisasi Industri) Surabaya
Di Tempat

Assalamu'alaikum Wr. Wb.

Dalam rangka menyelesaikan tugas akhir berupa KTI, Mahasiswa Program Studi D3 Analis Kesehatan Fakultas Ilmu Kesehatan Universitas Muhammadiyah Surabaya tahun akademik 2012/2013, atas nama mahasiswa :


Nama : Mufarrijah
NIM : 09038
Judul KTI : Pengaruh perasan jahe terhadap pertumbuhan jamur trichopyton rubrum

Bermaksud untuk melakukan Penelitian Selama 2 minggu di Baristan (Balai riset dan standarisasi industri) Surabaya. Sehubungan dengan hal tersebut kami mohon dengan hormat agar Bapak/Ibu berkenan memberikan ijin Penelitian. Demikian atas perkenan dan perhatian serta kerjasama yang baik kami sampaikan terima kasih.

Wassalamu'alaikum Wr. Wb.

Surabaya, 1 Mei 2013
Dekan




Nur Mukarromah, SKM, M Kes



BALAI PENELITIAN DAN KONSULTASI INDUSTRI
LABORATORIUM
PENELITIAN DAN KONSULTASI INDUSTRI
SURABAYA - JAWA TIMUR

REPORT

Certificate of Analysis

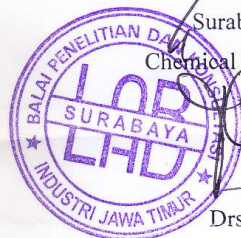
No. : 03 931/KI/V-2013
Code : Penelitian
Sample Sender : Mhs.03 Analisis Kes.UMUH Surabaya
Sample Name : Perasan Jahe Gajah-Kutu Air/Tricopython rubrum
Test : Jumlah koloni
Sample Brand :
Sample Identity : Cairan kental keoklatan
Sample Accepted : 25 April 2013

Chemical laboratory test result is :

Kode	Jum.kol		
	1.	2.	3.
0	$2,3 \cdot 10^5$	$1,8 \cdot 10^5$	$2,1 \cdot 10^5$
10	$1,8 \cdot 10^3$	$2,1 \cdot 10^3$	$1,7 \cdot 10^3$
20	$2,2 \cdot 10^2$	$3,0 \cdot 10^2$	$1,7 \cdot 10^2$
30	$1,5 \cdot 10$	$2,1 \cdot 10$	$1,9 \cdot 10$
40	$1,1 \cdot 10$	$1,3 \cdot 10$	$1,2 \cdot 10$
50	6	4	5
60	2	3	2
70	1	2	2
80	2	1	1
90	1	2	1
100	1	0	1

Surabaya, 13 Mei 2013

Chemical Laboratory Researcher



Drs. M. Fatoni, MS

Laboratory office Jl. Ketintang Baru XVII No. 14
Fax/Telp. 031-8281941, Bank BCA - Bank Jatim
Surabaya

Lampiran 4: Data Hasil Uji SPSS

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
koloni yang tumbuh	33	100,0%	0	,0%	33	100,0%
konsentrasi	33	100,0%	0	,0%	33	100,0%

Descriptives

		Statistic	Std. Error	
koloni yang tumbuh	Mean	18982,36	10549,299	
	95% Confidence Interval for Mean	Lower Bound Upper Bound	-2505,858 40470,58	
	5% Trimmed Mean	8751,43		
	Median	5,00		
	Variance	3672494,206,676		
	Std. Deviation	60601,107		
	Minimum	0		
	Maximum	230000		
	Range	230000		
	Interquartile Range	193,50		
	Skewness	3,041	,409	
	Kurtosis	7,850	,798	
	konsentrasi	Mean	6,00	,559
		95% Confidence Interval for Mean	Lower Bound Upper Bound	4,867 7,143
		5% Trimmed Mean	6,00	
		Median	6,00	
		Variance	10,313	
Std. Deviation		3,211		
Minimum		1		
Maximum		11		
Range		10		
Interquartile Range		6,00		
Skewness		,000	,409	
Kurtosis		-1,221	,798	

Tests of Normality

	Kolmogorov-Smirnov(a)			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
koloni yang tumbuh	,519	33	,000	,342	33	,000
konsentrasi	,098	33	,200(*)	,942	33	,077

* This is a lower bound of the true significance.

a Lilliefors Significance Correction

Test of Homogeneity of Variances

koloni jamur yang tumbuh

Levene Statistic	df1	df2	Sig.
5,979	10	22	,000

ANOVA

koloni jamur yang tumbuh

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	548818,293	10	54881,829	764,689	,000
Within Groups	1578,944	22	71,770		
Total	550397,237	32			

Multiple Comparisons

Dependent Variable: koloni jamur yang tumbuh

Tukey HSD

(I) konsentrasi	(J) konsentrasi	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
100%	90%	-,4714	6,91714	1,000	-25,1989	24,2561
	80%	-,4714	6,91714	1,000	-25,1989	24,2561
	70%	-,6095	6,91714	1,000	-25,3369	24,1180
	60%	-,8535	6,91714	1,000	-25,5810	23,8740
	50%	-1,5619	6,91714	1,000	-26,2893	23,1656
	40%	-2,7954	6,91714	1,000	-27,5229	21,9320
	30%	-3,6048	6,91714	1,000	-28,3323	21,1226

90%	20%	-14,3971	6,91714	,600	-39,1246	10,3304
	100%	-				
		42,4944(*	6,91714	,000	-67,2219	-17,7669
)				
	kontrol (+)	-				
		453,3683(*	6,91714	,000	-478,0957	-428,6408
)				
	100%	,4714	6,91714	1,000	-24,2561	25,1989
	80%	,0000	6,91714	1,000	-24,7275	24,7275
	70%	-,1381	6,91714	1,000	-24,8655	24,5894
	60%	-,3821	6,91714	1,000	-25,1096	24,3454
	50%	-1,0904	6,91714	1,000	-25,8179	23,6370
	40%	-2,3240	6,91714	1,000	-27,0515	22,4034
	30%	-3,1334	6,91714	1,000	-27,8609	21,5941
20%	-13,9257	6,91714	,643	-38,6532	10,8018	
80%	100%	-				
		42,0230(*	6,91714	,000	-66,7505	-17,2955
)				
	kontrol (+)	-				
		452,8969(*	6,91714	,000	-477,6243	-428,1694
)				
	100%	,4714	6,91714	1,000	-24,2561	25,1989
	90%	,0000	6,91714	1,000	-24,7275	24,7275
	70%	-,1381	6,91714	1,000	-24,8655	24,5894
	60%	-,3821	6,91714	1,000	-25,1096	24,3454
	50%	-1,0904	6,91714	1,000	-25,8179	23,6370
	40%	-2,3240	6,91714	1,000	-27,0515	22,4034
	30%	-3,1334	6,91714	1,000	-27,8609	21,5941
	20%	-13,9257	6,91714	,643	-38,6532	10,8018
70%	100%	-				
		42,0230(*	6,91714	,000	-66,7505	-17,2955
)				
	kontrol (+)	-				
		452,8969(*	6,91714	,000	-477,6243	-428,1694
)				
	100%	,6095	6,91714	1,000	-24,1180	25,3369
	90%	,1381	6,91714	1,000	-24,5894	24,8655
	80%	,1381	6,91714	1,000	-24,5894	24,8655
	60%	-,2440	6,91714	1,000	-24,9715	24,4834
	50%	-,9524	6,91714	1,000	-25,6798	23,7751
	40%	-2,1860	6,91714	1,000	-26,9134	22,5415
	30%	-2,9953	6,91714	1,000	-27,7228	21,7321
	20%	-13,7876	6,91714	,655	-38,5151	10,9398
100%	-					
	41,8849(*	6,91714	,000	-66,6124	-17,1575	
)					

		kontrol (+)	-				
			452,7588(	6,91714	,000	-477,4863	-428,0313
			*)				
60%	100%		,8535	6,91714	1,000	-23,8740	25,5810
	90%		,3821	6,91714	1,000	-24,3454	25,1096
	80%		,3821	6,91714	1,000	-24,3454	25,1096
	70%		,2440	6,91714	1,000	-24,4834	24,9715
	50%		-,7084	6,91714	1,000	-25,4358	24,0191
	40%		-1,9419	6,91714	1,000	-26,6694	22,7855
	30%		-2,7513	6,91714	1,000	-27,4788	21,9761
	20%		-13,5436	6,91714	,677	-38,2711	11,1839
	100%		-				
			41,6409(*	6,91714	,000	-66,3684	-16,9134
)				
		kontrol (+)	-				
			452,5148(	6,91714	,000	-477,2422	-427,7873
			*)				
50%	100%		1,5619	6,91714	1,000	-23,1656	26,2893
	90%		1,0904	6,91714	1,000	-23,6370	25,8179
	80%		1,0904	6,91714	1,000	-23,6370	25,8179
	70%		,9524	6,91714	1,000	-23,7751	25,6798
	60%		,7084	6,91714	1,000	-24,0191	25,4358
	40%		-1,2336	6,91714	1,000	-25,9610	23,4939
	30%		-2,0430	6,91714	1,000	-26,7704	22,6845
	20%		-12,8353	6,91714	,737	-37,5627	11,8922
	100%		-				
			40,9326(*	6,91714	,000	-65,6600	-16,2051
)				
		kontrol (+)	-				
			451,8064(	6,91714	,000	-476,5339	-427,0789
			*)				
40%	100%		2,7954	6,91714	1,000	-21,9320	27,5229
	90%		2,3240	6,91714	1,000	-22,4034	27,0515
	80%		2,3240	6,91714	1,000	-22,4034	27,0515
	70%		2,1860	6,91714	1,000	-22,5415	26,9134
	60%		1,9419	6,91714	1,000	-22,7855	26,6694
	50%		1,2336	6,91714	1,000	-23,4939	25,9610
	30%		-,8094	6,91714	1,000	-25,5369	23,9181
	20%		-11,6017	6,91714	,831	-36,3291	13,1258
	100%		-				
			39,6990(*	6,91714	,000	-64,4264	-14,9715
)				
		kontrol (+)	-				
			450,5728(	6,91714	,000	-475,3003	-425,8454
			*)				
30%	100%		3,6048	6,91714	1,000	-21,1226	28,3323

	90%	3,1334	6,91714	1,000	-21,5941	27,8609
	80%	3,1334	6,91714	1,000	-21,5941	27,8609
	70%	2,9953	6,91714	1,000	-21,7321	27,7228
	60%	2,7513	6,91714	1,000	-21,9761	27,4788
	50%	2,0430	6,91714	1,000	-22,6845	26,7704
	40%	,8094	6,91714	1,000	-23,9181	25,5369
	20%	-10,7923	6,91714	,882	-35,5198	13,9352
	100%	-				
		38,8896(*	6,91714	,000	-63,6171	-14,1621
)				
	kontrol (+)	-				
		449,7634(*	6,91714	,000	-474,4909	-425,0360
)				
20%	100%	14,3971	6,91714	,600	-10,3304	39,1246
	90%	13,9257	6,91714	,643	-10,8018	38,6532
	80%	13,9257	6,91714	,643	-10,8018	38,6532
	70%	13,7876	6,91714	,655	-10,9398	38,5151
	60%	13,5436	6,91714	,677	-11,1839	38,2711
	50%	12,8353	6,91714	,737	-11,8922	37,5627
	40%	11,6017	6,91714	,831	-13,1258	36,3291
	30%	10,7923	6,91714	,882	-13,9352	35,5198
	100%	-				
		28,0973(*	6,91714	,017	-52,8248	-3,3698
)				
	kontrol (+)	-				
		438,9712(*	6,91714	,000	-463,6986	-414,2437
)				
100%	100%	42,4944(*	6,91714	,000	17,7669	67,2219
)				
	90%	42,0230(*	6,91714	,000	17,2955	66,7505
)				
	80%	42,0230(*	6,91714	,000	17,2955	66,7505
)				
	70%	41,8849(*	6,91714	,000	17,1575	66,6124
)				
	60%	41,6409(*	6,91714	,000	16,9134	66,3684
)				
	50%	40,9326(*	6,91714	,000	16,2051	65,6600
)				
	40%	39,6990(*	6,91714	,000	14,9715	64,4264
)				
	30%	38,8896(*	6,91714	,000	14,1621	63,6171
)				
	20%	28,0973(*	6,91714	,017	3,3698	52,8248
)				
	kontrol (+)	-	6,91714	,000	-435,6013	-386,1464

		410,8739(*)				
kontrol (+)	100%	453,3683(*)	6,91714	,000	428,6408	478,0957
	90%	452,8969(*)	6,91714	,000	428,1694	477,6243
	80%	452,8969(*)	6,91714	,000	428,1694	477,6243
	70%	452,7588(*)	6,91714	,000	428,0313	477,4863
	60%	452,5148(*)	6,91714	,000	427,7873	477,2422
	50%	451,8064(*)	6,91714	,000	427,0789	476,5339
	40%	450,5728(*)	6,91714	,000	425,8454	475,3003
	30%	449,7634(*)	6,91714	,000	425,0360	474,4909
	20%	438,9712(*)	6,91714	,000	414,2437	463,6986
	100%	410,8739(*)	6,91714	,000	386,1464	435,6013

* The mean difference is significant at the .05 level.

koloni jamur yang tumbuh

Tukey HSD

Konsentras i	N	Subset for alpha = .05		
		1	2	3
100%	3	,6667		
90%	3	1,1381		
80%	3	1,1381		
70%	3	1,2761		
60%	3	1,5202		
50%	3	2,2285		
40%	3	3,4621		
30%	3	4,2715		
20%	3	15,0638		
100% kontrol (+)	3		43,1611	454,0349
Sig.		,600	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a Uses Harmonic Mean Sample Size = 3,000.

Lampiran 5: Foto Dokumentasi

Foto Dokumentasi Penelitian :



Biakan murni jamur *Trichopyton rubrum*



Biakan murni jamur *Trichopyton rubrum*



Gambar jahe putih



Suspensi *Trichopyton rubrum* $1,5 \times 10^8$ CFU



Api bunsen



Inkubator



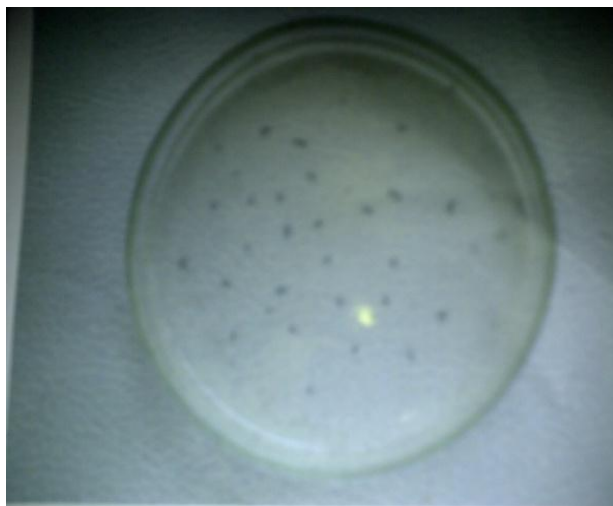
Pertumbuhan koloni jamur *Trichopyton rubrum*



Pertumbuhan koloni jamur *Trichopyton rubrum*



Pertumbuhan koloni jamur *Trichopyton rubrum*



Pertumbuhan koloni jamur *Trichopyton rubrum*

Lampiran 6: Pembuatan Media

PEMBUATAN MEDIA PDA (*Potato Dextrose Agar*)

1. Pembuatan Media *Potato Dextrose Agar* (SGA).

Komposisi :

- Bubuk kentang/potato starch.....4 gram
- Dextrose.....20 gram
- Agar.....15 gram
- Ph.....5,5 – 7,8

Perhitungan :

$$561\text{ml untuk 33 plate} \longrightarrow 17 \times 33 = 561\text{ml aquades}$$

$$PDA \text{ (33 Plate)} \longrightarrow \frac{65}{1000} \times 561 = 36,4 \text{ gram}$$

$$\text{Choraphenol} \longrightarrow 250 \text{ mg chloraphenol} + 10 \text{ ml Pz}$$

$$\text{Choraphenol} \longrightarrow \frac{2}{1000} \times 561 = 1,122 \text{ ml}$$

Cara Pembuatan :

- Ditimbang 36,4 gram *PDA* kemudian dimasukkan dalam Erlenmeyer.
- Ditambahkan aquadest sebanyak 561 ml sedikit demi sedikit sambil diaduk.
- Dipanaskan dengan nyala api tidak terlalu besar hingga larut.
- Disterilkan dalam autoclave pada suhu 121°C, dengan tekanan selama 15 menit.

- Tambahkan larutan Chlorophenol 1,122 ml secara steril, kemudian campur dan homogenkan
- Tuang *PDA* kurang lebih 17 ml ke dalam petridish secara steril
- Kemudian diamkan media sampai padat lalu di simpan di kulkas



Gambar Media *PDA*