L A M P I R A N

Lampiran 1. Sertifikat *Escherichia coli* ATCC 25922

PRO – Technology

Laboratorium Uji Mikrobiologi

Jalan Cempaka Putih No.69 - Jakarta Pusat

Indonesia

SERTIFIKAT HASIL UJI

1. Bakteri : Stock Strain *Escherichia coli* ATCC 25922
2. *Nomor Uji Bakteri* : Strain V. 1. 2.
3. Tanggal Uji bakteri : 16 – 21 November 2020

Uraian Hasil Uji

Strain V. 1. 2. Biakan Murni dari *Escherichia coli* ATCC 25922

I. Ciri-ciri koloni:
   1. Pewarnaan Gram : Sel batang, menyebar, berwarna merah, Gram negatip.
   2. Pada media Endo Agar : koloni bulat, kecil-kecil, permukaan koloni datar, dan koloni bakteri berwarna merah mengkilap (Kilap Logam).
   3. Di tanam pada media Mac Conkey Agar : koloni bulat, kecil-kecil, permukaan koloni agak datar, dan disekitar koloni media menjadi merah.

II. Uji Fermentasi Karbohidrat dan Biokimia Penegasan

Uji Fermentasi Karbohidrat			Uji Biokimia Penegasan		
1. KIA	A/AG	S (-)	1. GLUKOSA	A (+)	G (+)
2. SIM	(-++)		2. LAKTOSA	A (+)	G (+)
3. LIA	K/K	S (-)	3. MALTOSA	A (+)	G (+)
4. SIMON CITRAT	(-)		4. SUKROSA	A (-)	G (-)
5. LDS	LDC (+)	S(-)			
6. MRVP	MR (+)	VP (-)			
7. UREA	UREASE (-)				
8. PAD	PPA (-)				

Catatan:
1. Hasil Uji ini hanya berlaku untuk contoh yang diuji.

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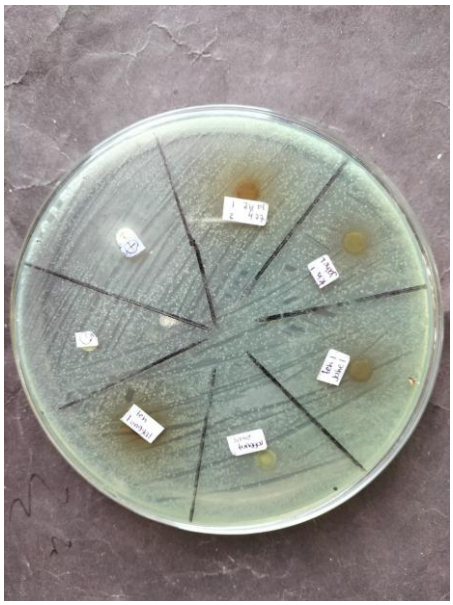
Lampiran 2. Teh hijau yang beredar dipasar

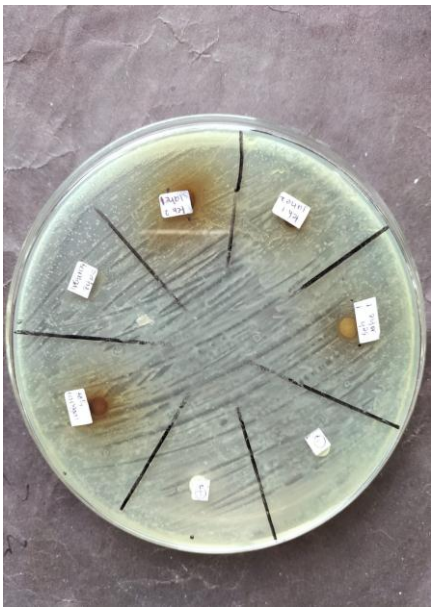
Lampiran 3. Jahe yang beredar dipasar

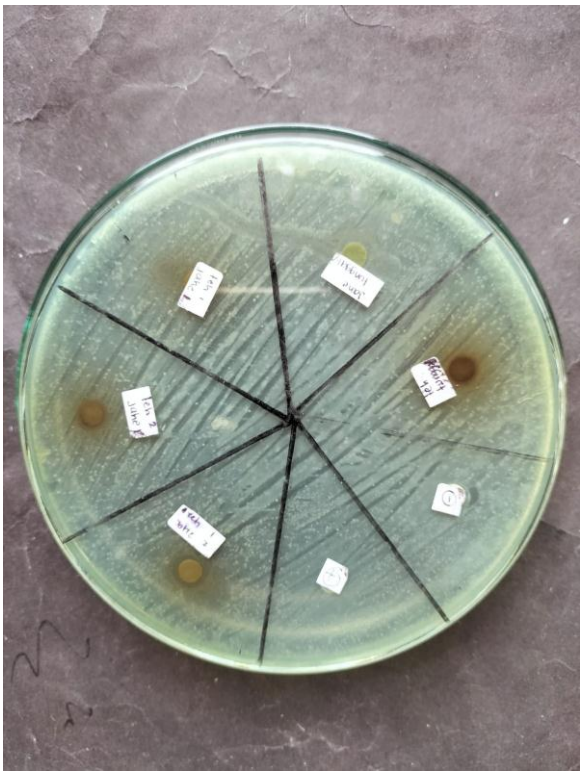
Lampiran 4. Identikasi uji biokimia (LIA, KIA, SIM,CITRAT)

Lampiran 5. Media MHA dan BHI

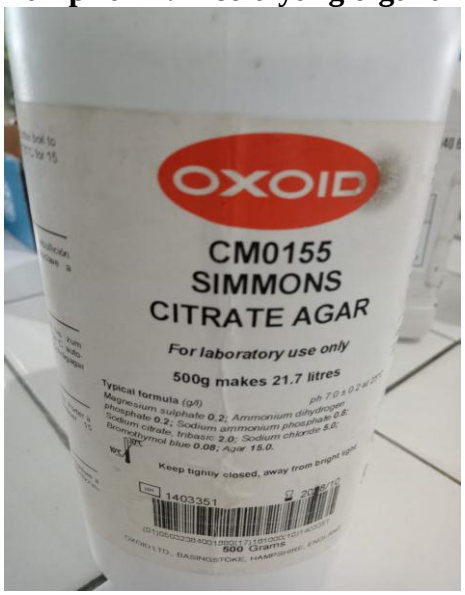
Lampiran 6. Uji aktivitas antibakteri kombinasi jahe dan teh terhadap *e.coli*

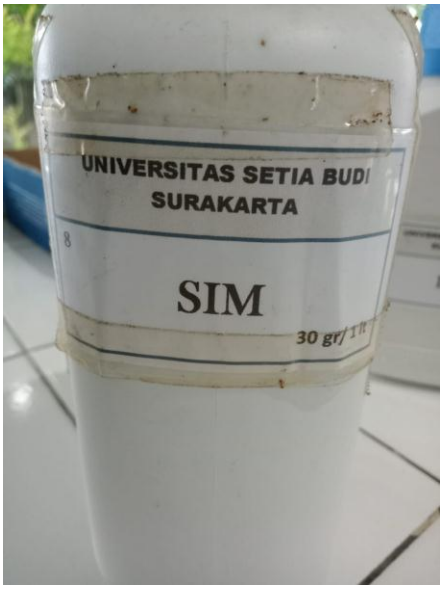






Lampiran 7. Media yang digunakan





Kandungan media CITRAT

1. Magnesium sulphate 0,2 gr
2. Ammonium dihydrogen phosphate 0,2 gr
3. Sodium ammonium Phosphate 0,8 gr
4. Sodium citrate, tribasic 2,0 gr
5. Sodium chloride 5,0 gr
6. Bromothymol blue 0,08 gr
7. Agar 15,0 gr

kandungan media SIM:

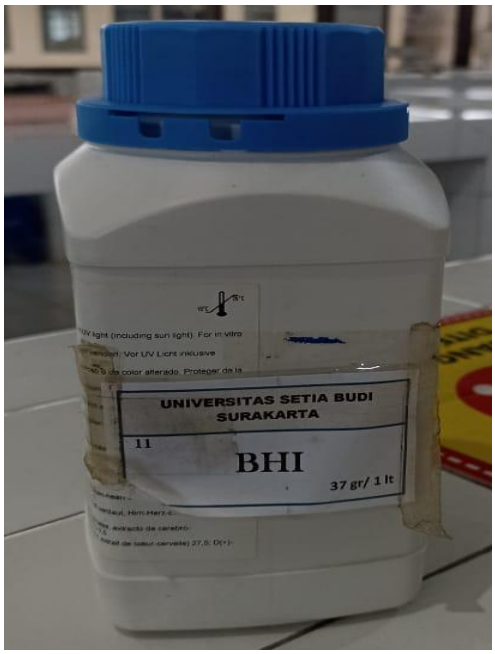
1. Trypton 20 gr
2. Peptone 6,1 gr
3. Ferrous ammonium sulfat 0,2 gr
4. Sodium thiosulphate 0,2 gr
5. Agar 3,5 gr
6. pH 7,3

Kandungan media KIA :

1. Beef extrack 2gr
2. Yeast extrack 3 gr
3. Pepton 15 gr
4. Proteose pepton 5 gr
5. Laktosa 10 gr
6. Dekstrosa 1 gr
7. Ferro sulfat 0,2 gr
8. Natrium klorida 5 gr
9. Natrium thiosulfat 0,3 gr
10. Phenol red 0,024 gr
11. Agar 12 gr

kandungan media LIA:

1. Agar 13,5 gr
2. Nutrilisin 10 gr
3. Gelatin 5 gr
4. Ekstrak ragi 3 gr
5. Glukosa 1 gr
6. Ferri amonium sitrat 0,5gr
7. Natrium tiosulfa pentahidrat 40 gr
8. Indikator bromcresol ungu 20 mg



Kandungan media BHI:

1.	Sari otak sapi	12,5 g
2.	Sari jantung otak sapi	5,0 g
3.	Preteose pepton	10,5 g
4.	Bacto dextrose	2,0 g
5.	NaCl	5,0 g
6.	Dinatrium fosfor	2,5 g
7.	Bacto agar	15 g
8.	Aquadest	1000 ml
9.	pH	7,4

kandungan media MHA:

1. Infus sapi	300,0 gr
2. Peptone	17,5 gr
3. Tepung	1,5 gr
4. Agar	17,5 gr
5. Aquadest ad	1000 ml
6. pH	7,4

Lampiran 8. Lampiran SPSS

Uji Normalitas Penelitian

One-Sample Kolmogorov-Smirnov Test

		kombinsi yang digunakan	diameter daya hambat
N		21	21
Normal Parameters[a,b]	Mean	4.00	18.14
	Std. Deviation	2.049	9.609
Most Extreme Differences	Absolute	.121	.122
	Positive	.121	.113
	Negative	-.121	-.122
Test Statistic		.121	.122
Asymp. Sig. (2-tailed)		.200[c,d]	.200[c,d]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

Lampiran 9. Uji Homogenitas data penelitian

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
diameter daya hambat	Based on Mean	3.398	6	14	.028
	Based on Median	.559	6	14	.756
	Based on Median and with adjusted df	.559	6	6.812	.752
	Based on trimmed mean	3.025	6	14	.041

Lampiran 10. Uji *One Way ANOVA*

ANOVA

diameter daya hambat

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1583.238	6	263.873	14.029	.000
Within Groups	263.333	14	18.810		
Total	1846.571	20			

Lampiran 11. *Post Hoc Test*

Multiple Comparisons

Dependent Variable: diameter daya hambat

Tukey HSD

(I) kombinsi yang digunakan	(J) kombinsi yang digunakan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
teh tunggal	jahe tunggal	3.667	3.541	.937	-8.42	15.76
	teh jahe (1:1)	1.333	3.541	1.000	-10.76	13.42
	teh jahe (1:2)	1.667	3.541	.999	-10.42	13.76
	teh jahe (2:1)	-2.333	3.541	.993	-14.42	9.76
	kontrol positif	-11.333	3.541	.073	-23.42	.76
	konntrol negatif	20.000*	3.541	.001	7.91	32.09
jahe tunggal	teh tunggal	-3.667	3.541	.937	-15.76	8.42
	teh jahe (1:1)	-2.333	3.541	.993	-14.42	9.76
	teh jahe (1:2)	-2.000	3.541	.997	-14.09	10.09
	teh jahe (2:1)	-6.000	3.541	.630	-18.09	6.09
	kontrol positif	-15.000*	3.541	.011	-27.09	-2.91
	konntrol negatif	16.333*	3.541	.006	4.24	28.42
teh jahe (1:1)	teh tunggal	-1.333	3.541	1.000	-13.42	10.76
	jahe tunggal	2.333	3.541	.993	-9.76	14.42
	teh jahe (1:2)	.333	3.541	1.000	-11.76	12.42
	teh jahe (2:1)	-3.667	3.541	.937	-15.76	8.42
	kontrol positif	-12.667*	3.541	.037	-24.76	-.58
	konntrol negatif	18.667*	3.541	.002	6.58	30.76
teh jahe (1:2)	teh tunggal	-1.667	3.541	.999	-13.76	10.42
	jahe tunggal	2.000	3.541	.997	-10.09	14.09
	teh jahe (1:1)	-.333	3.541	1.000	-12.42	11.76
	teh jahe (2:1)	-4.000	3.541	.908	-16.09	8.09
	kontrol positif	-13.000*	3.541	.032	-25.09	-.91
	konntrol negatif	18.333*	3.541	.002	6.24	30.42
teh jahe (2:1)	teh tunggal	2.333	3.541	.993	-9.76	14.42
	jahe tunggal	6.000	3.541	.630	-6.09	18.09
	teh jahe (1:1)	3.667	3.541	.937	-8.42	15.76
	teh jahe (1:2)	4.000	3.541	.908	-8.09	16.09
	kontrol positif	-9.000	3.541	.216	-21.09	3.09
	konntrol negatif	22.333*	3.541	.000	10.24	34.42
kontrol positif	teh tunggal	11.333	3.541	.073	-.76	23.42
	jahe tunggal	15.000*	3.541	.011	2.91	27.09
	teh jahe (1:1)	12.667*	3.541	.037	.58	24.76
	teh jahe (1:2)	13.000*	3.541	.032	.91	25.09
	teh jahe (2:1)	9.000	3.541	.216	-3.09	21.09
	konntrol negatif	31.333*	3.541	.000	19.24	43.42
konntrol negatif	teh tunggal	-20.000*	3.541	.001	-32.09	-7.91
	jahe tunggal	-16.333*	3.541	.006	-28.42	-4.24
	teh jahe (1:1)	-18.667*	3.541	.002	-30.76	-6.58
	teh jahe (1:2)	-18.333*	3.541	.002	-30.42	-6.24
	teh jahe (2:1)	-22.333*	3.541	.000	-34.42	-10.24
	kontrol positif	-31.333*	3.541	.000	-43.42	-19.24

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

Homogeneous Subsets

diameter daya hambat

Tukey HSD[a]

kombinsi yang digunakan	N	Subset for alpha = 0.05		
		1	2	3
konntrol negatif	3	.00		
jahe tunggal	3		16.33	
teh jahe (1:2)	3		18.33	
teh jahe (1:1)	3		18.67	
teh tunggal	3		20.00	20.00
teh jahe (2:1)	3		22.33	22.33
kontrol positif	3			31.33
Sig.		1.000	.630	.073

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.