

## Lampiran 1. Spesifikasi Media Penelitian

1. Spesifikasi media *de Man Rogosa Sharpe (MRS) broth* (Pronadisa Cat. 1215.00)

<b>Komponen</b>	<b>Jumlah (g/l)</b>
Bacteriological peptone	10,0
Beef extract	8,0
Yeast extract	4,0
Dextrose	20,0
Tween-80	1,0
Dipotassium phosphate	2,0
Sodium acetate	5,0
Ammonium citrate	2,0
Magnesium sulfate	0,2
Manganese sulfate	0,05

Cara pembuatan:

1. melarutkan 52,2 gram dalam 1 liter akuades
  2. mensterilisasi dalam autoklaf 121°C (1 atm), 15 menit.
2. Spesifikasi *Nutrient agar* (Pronadisa Cat. 1060.00)

<b>Komponen</b>	<b>Jumlah (g/l)</b>
Gelatine pepton	5,0
Beef extract	3,0
Bacteriological agar	15,0

Cara pembuatan:

1. melarutkan 23 gram dalam 1 liter akuades
  2. memanaskan di atas bunsen hingga jernih
  3. mensterilisasi dalam autoklaf 121°C (1 atm), 15 menit.
3. Spesifikasi *MH agar* (Pronadisa Cat.1058.00)

<b>Komponen</b>	<b>Jumlah (g/l)</b>
Beef infusion	2,0
Corn starch	1,5
Acid casein peptone	17,5
Bacteriological agar	17,0

Cara pembuatan:

1. melarutkan 38 gram dalam 1 liter akuades
  2. memanaskan di atas api bunsen hingga jernih
  3. mensterilisasi dalam autoklaf 121°C (1 atm), 15 menit.
4. Spesifikasi MH *broth* (Merck Cat. 10293)

<b>Komponen</b>	<b>Jumlah (g/l)</b>
Infusion from meat	2,0
Casein hydrolysate	17,5
Starch	1,5

Cara pembuatan:

1. Melarutkan 21 gram dalam 1 liter akuades
2. Memanaskan di atas api bunsen hingga jernih
3. Mensterilisasi dalam autoklaf 121°C (1 atm), 15 menit.

## Lampiran 2. Perhitungan pemakaian teh hijau (% b/v)

1. 25 % ekstrak

$$25\% = \frac{x}{20} \times 100\%$$

$$4x = 20$$

$$x = 5 \text{ g}$$

→ 5 g bubuk teh dalam 15 ml air

2. 20 % ekstrak

$$20\% = \frac{x}{20} \times 100\%$$

$$5x = 20$$

$$x = 4 \text{ g}$$

→ 4 g bubuk teh dalam 16 ml air

3. 15 % ekstrak

$$15\% = \frac{x}{20} \times 100\%$$

$$\frac{3}{20} = \frac{x}{20}$$

$$x = 3 \text{ g}$$

→ 3 g bubuk teh dalam 17 ml air

4. 10 % ekstrak

$$10\% = \frac{x}{20} \times 100\%$$

$$10x = 20$$

$$x = 2 \text{ g}$$

→ 2 g bubuk teh dalam 18 ml air

5. 5 % ekstrak

$$5\% = \frac{x}{20} \times 100\%$$

$$\frac{1}{20} = \frac{x}{20}$$

$$x = 1 \text{ g}$$

→ 1 g bubuk teh dalam 19 ml air

# Lampiran 3. Spesifikasi Bubuk Teh Hijau

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## CERTIFICATE OF ANALYSIS

### 成分規格表

DATE : 2009/05/29

PRODUCT : MACHA POWDER 金牌抹茶粉

#### PRODUCT SPECIFICATION 產品說明

Appearance 外觀 : Green powder 綠色粉末  
Solubility 溶解度 : Dispersible in water 可溶於水  
Applicable Scope 使用範圍 : Foodstuff 限食品加工用  
Dosage 使用量 : Consider before apply 視實際需求適量使用

#### PHYSICAL PROPERTY 特性分析

Heavy Metals(as Pb) 重金屬 : Maximum 10ppm 極大值  
Total Plate Count(cfu/g) 總生菌數 : <6000  
Escherichia coli 大腸桿菌 : Negative  
Yeasts(cfu/g) 酵母 : <100  
Moulds(cfu/g) 黴菌 : <100

STORAGE CONDITIONS 保存條件 : Tightly sealed and store in a cool dry place.  
請置於乾燥陰涼處

SHELF LIFE 保存期限 : One year 一年

PRODUCT COMPONENTS 產品成分 : Nature Macha Grounds Powder 天然抹茶研磨粉

Manufacture Procedure: Raw Materials→Packing

Authorized Signature \_\_\_\_\_

#### Note:

The information and recommendations made herein are based on our own information and research; and whilst they are believed to be accurate, they should be taken as a guide only. However, nothing stated herein is to be taken as a warranty expressed or implied regarding the non-infringement of any relevant patents, the accuracy of the information and/or recommendations for their particular purposes. Purchasers should make their own tests and/or patent searches to determine the suitability, stability, shelf-life and/or compatibility. No responsibility is accepted for any product once it is incorporated and/or mixed and/or diluted with other ingredients.  
This is a computer printout and has therefore not been signed by hand.

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**Lampiran 4. Data Pengukuran Zona Hambat Ekstrak Bubuk Teh Hijau terhadap Bakteri Patogen (cm)**

- *Staphylococcus aureus*

Ulangan	Konsentrasi Ekstrak Bubuk Teh Hijau					Jumlah
	5%	10%	15%	20%	25%	
1	0.97	1.08	1.23	1.31	1.71	6.30
2	0.97	1.07	1.28	1.34	1.69	6.35
3	0.98	1.12	1.23	1.36	1.80	6.49
<b>Jumlah</b>	2.92	3.27	3.74	4.01	5.20	19.14
<b>Rata-rata</b>	0.97	1.09	1.25	1.34	1.73	-
<b>SD</b>	0.0058	0.0265	0.0289	0.0252	0.0586	-

**Tabel ANAVA**

Sumber variasi	Derajat bebas	JK	KT	F hitung	F tabel
<b>Konsentrasi teh</b>	4	1.1097	0.2774	8.8063*	3.48
<b>Galat</b>	10	0.3154	0.0315	-	-
<b>Total</b>	14	1.3351	-	-	-

Keterangan:

F hitung (8.8063) > F tabel (3.48) menunjukkan bahwa ada pengaruh perbedaan konsentrasi ekstrak bubuk teh hijau terhadap besar zona hambat *Staphylococcus aureus*.

### Uji DMRT Zona Hambat *Staphylococcus aureus*

Sy = 0,1025

p	2	3	4	5
rp	3.15	3.30	3.37	3.43
Rp	0.3229	0.3383	0.3454	0.3516

Perlakuan	Rata-rata	Notasi
5%	0.97	a
10%	1.09	ab
15%	1.25	ab
20%	1.34	b
25%	1.73	bc

- *Bacillus subtilis*

Ulangan	Konsentrasi Ekstrak Bubuk Teh Hijau					Jumlah
	5%	10%	15%	20%	25%	
1	0.89	1.10	1.19	1.24	1.37	5.79
2	0.96	1.07	1.19	1.21	1.35	5.78
3	0.92	1.14	1.23	1.25	1.34	5.88
<b>Jumlah</b>	2.77	3.31	3.61	3.70	4.06	17.45
<b>Rata-rata</b>	0.92	1.10	1.20	1.23	1.35	-
<b>SD</b>	0.0351	0.0351	0.0231	0.0208	0.0153	-

Tabel ANAVA

Sumber variasi	Derajat bebas	JK	KT	F hitung	F tabel
<b>Konsentrasi teh</b>	4	0.3114	0.0779	106.71*	3.48
<b>Galat</b>	10	$7.3 \times 10^{-3}$	$7.3 \times 10^{-4}$	-	-
<b>Total</b>	14	0.3187	-	-	-

Keterangan:

F hitung (8.8063) > F tabel (3.48) menunjukkan bahwa ada pengaruh perbedaan konsentrasi ekstrak bubuk teh hijau terhadap besar zona hambat *Bacillus subtilis*.

### Uji DMRT Zona Hambat *Bacillus subtilis*

Sy = 0,0156

p	2	3	4	5
rp	3.15	3.30	3.37	3.43
Rp	0.0491	0.0515	0.0526	0.5035

Perlakuan	Rata-rata	Notasi
5%	0.92	a
10%	1.10	b
15%	1.20	bc
20%	1.23	bc
25%	1.35	bcd



**Lampiran 5. Data Angka Lempeng Total (ALT) Bakteri Yogurt dan Bakteri Patogen**

Jenis Bakteri	Jumlah Koloni per Pengenceran					Standart Plate Count (CFU/ml)
	10 <sup>-6</sup>	10 <sup>-7</sup>	10 <sup>-8</sup>	10 <sup>-9</sup>	10 <sup>-10</sup>	
<i>Streptococcus thermophilus</i>	TBUD	334	38	1	-	3.6 x 10 <sup>9</sup>
<i>Lactobacillus bulgaricus</i>	TBUD	258	19	0	-	2.6 x 10 <sup>9</sup>
<i>Escherichia coli</i>	TBUD	TBUD	234	49	9	2.3 x 10 <sup>10</sup>
<i>Staphylococcus aureus</i>	TBUD	TBUD	413	48	2	4.8 x 10 <sup>10</sup>
<i>Bacillus subtilis</i>	57	15	1	1	-	5.7 x 10 <sup>7</sup>