LAMPIRAN

Perhitungan

Perhitungan Pembuatan Media

Pembuatan media untuk duplo (2 replikasi) = $\frac{22{,}5\ x\ 780}{1000}$ = 17,5 gram

Perhitungan Pembuatan Larutan Bufferfield's Phosphale Bufferered

KH2PO4 = $\frac{34}{500}$ x $\frac{x}{400}$ = $\frac{34\ x\ 400}{500}$ = 27,2 gram

Perhitungan Hasil ALT

Hasil Nilai Perhitungan Metode ALT:

$$xc = \frac{\sum C}{n1+(0{,}1\ x\ n2)}$$

dengan
- Xc = Jumlah mikroorganisme
- $\sum c$ = Jumlah semua koloni pada semua cawan yang dihitung
- n1 = Jumlah cawan pada pengenceran pertama
- n2 = Jumlah cawan pada pengenceran kedua

$$N = \frac{X\ C}{V\ X\ d}$$

dengan
- N = Total keseluruhan koloni produk
- Xc = Jumlah mikroorganisme
- v = Volume Tiap Pengenceran
- d = Pengenceran Terendah

$$\text{ALT} = \frac{N}{S}$$

dengan
- N = Hasil total keseluruhan koloni produk
- S = Sampel yang digunakan pengujian

1. *Hair Powder*: $Xc = \frac{\Sigma C}{n1+(0,1\ x\ n2)}$

$$Xc = \frac{208+153}{1+(0,1\ x\ 1)}$$

$$Xc = \frac{361}{1,1}$$

$$Xc = 328,18$$

$$N = \frac{X\ C}{V\ X\ d}$$

$$N = \frac{328,18}{1\ X\ 10^{-1}}$$

$$N = 328,18\ x\ 10^{1}$$

$$\textbf{ALT} = \frac{N}{S}$$

$$ALT = \frac{328,18\ x\ 10^{1}}{10\ gram}$$

$$ALT = 32,818\ x\ 10^{1}$$

$ALT = 3,2818\ x\ 10^{2}$ atau $3\ x\ 10^{2}$ *CFU*/gram

2. *Oil Based*: $Xc = \frac{\Sigma C}{n1+(0,1\ x\ n2)}$

$$Xc = \frac{145+132}{1+(0,1\ x\ 1)}$$

$$Xc = \frac{277}{1,1}$$

$$Xc = 251,81$$

$$N = \frac{X\ C}{V\ X\ d}$$

$$N = \frac{251,81}{1\ X\ 10^{-2}}$$

$$N = 251,81\ x\ 10^{2}$$

$$\textbf{ALT} = \frac{N}{S}$$

$$ALT = \frac{251,81\ x\ 10^{2}}{10\ gram}$$

$$ALT = 25,181x\ 10^{2}$$

$ALT = 2,5181\ x\ 10^{3}$ atau $2,5\ x\ 10^{3}$ *CFU*/gram

3. *Clay*: $Xc = \frac{\Sigma C}{n1+(0,1\ x\ n2)}$

$Xc = \frac{47+27+30}{1+(0,1\ x\ 2)}$

$Xc = \frac{104}{1,2}$

Xc = 86,66

$N = \frac{X\ C}{V\ X\ d}$

$N = \frac{86,66}{1\ X\ 10^{-3}}$

$N = 86,66\ x\ 10^3$

ALT $= \frac{N}{S}$

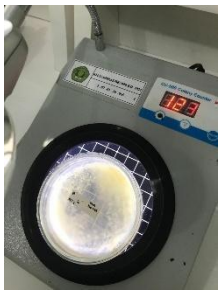
$ALT = \frac{86,66\ x\ 10^3}{10\ gram}$

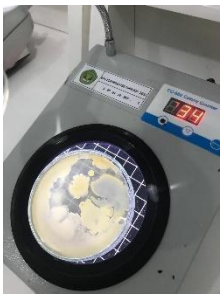
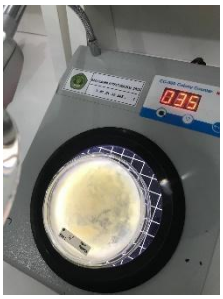
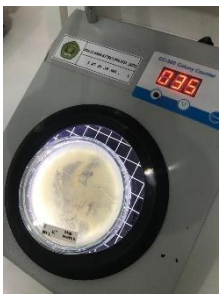
$ALT = 86,66\ x\ 10^3$

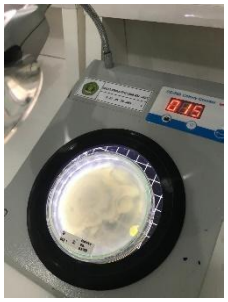
$ALT = 8,666\ x\ 10^4$ atau $9\ x\ 10^4$ *CFU*/gram

Dokumentasi Penelitian

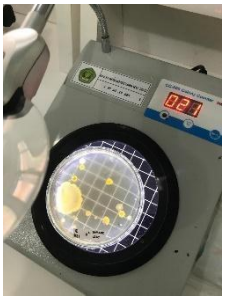
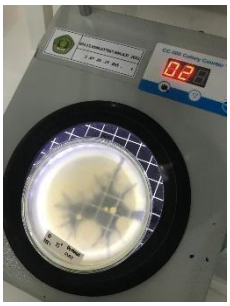
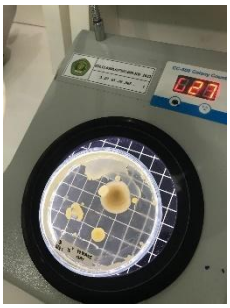
Uji Cemaran Mikroba (ALT) Replikasi 1

Sampel	Pengenceran	Jumlah Koloni	Dokumentasi
Blanko	0	0	
Hair Powder	10^{-1}	*spreader*	

Hair Powder	10^{-2}	34	
Hair Powder	10^{-3}	*spreader*	
Hair Powder	10^{-4}	*spreader*	
Hair Powder	10^{-5}	*spreader*	
Hair Powder	10^{-6}	*spreader*	

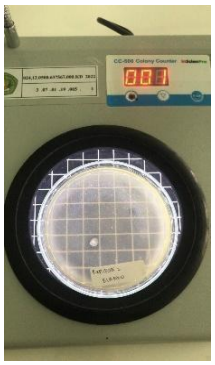
Sampel	Pengenceran	Jumlah Koloni	Dokumentasi
Oil Based	10^{-1}	*spreader*	
Oil Based	10^{-2}	60	
Oil Based	10^{-3}	*spreader*	
Oil Based	10^{-4}	31	
Oil Based	10^{-5}	88	

Oil Based	10^{-6}	51	

Sampel	Pengenceran	Jumlah Koloni	Dokumentasi
Clay	10^{-1}	*spreader*	
Clay	10^{-2}	21	
Clay	10^{-3}	*spreader*	
Clay	10^{-4}	27	

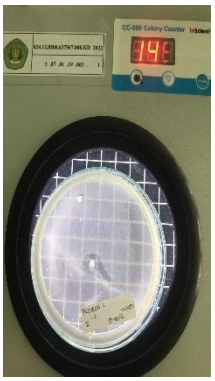
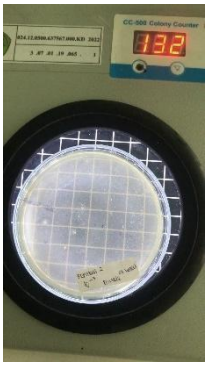
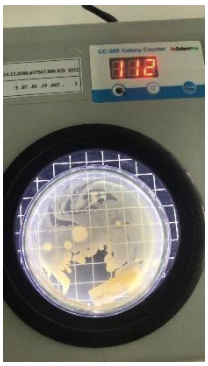
Clay	10^{-5}	*spreader*	
Clay	10^{-6}	*spreader*	

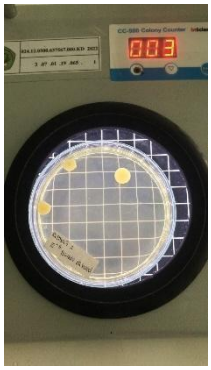
Uji Cemaran Mikroba (ALT) Replikasi 2

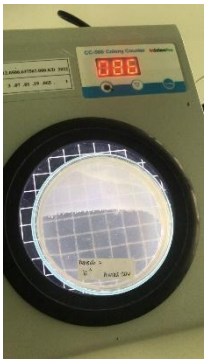
Sampel	Pengenceran	Jumlah Koloni	Dokumentasi
Blanko	0	1	
Hair Powder	10^{-1}	208	

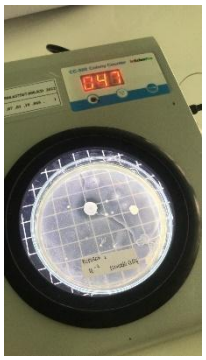
Hair Powder	10^{-2}	153	
Hair Powder	10^{-3}	136	
Hair Powder	10^{-4}	*spreader*	
Hair Powder	10^{-5}	30	
Hair Powder	10^{-6}	*spreader*	

Sampel	Pengenceran	Jumlah Koloni	Dokumentasi

Oil Based	10^{-1}	*spreader*	
Oil Based	10^{-2}	145	
Oil Based	10^{-3}	132	
Oil Based	10^{-4}	*spreader*	

Oil Based	10^{-5}	*spreader*	
Oil Based	10^{-6}	3	

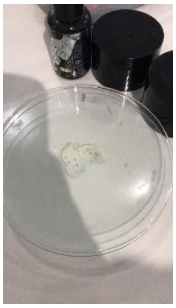
Sampel	Pengenceran	Jumlah Koloni	Dokumentasi
Clay	10^{-1}	*spreader*	
Clay	10^{-2}	52	

Clay	10^{-3}	47	
Clay	10^{-4}	30	
Clay	10^{-5}	*spreader*	
Clay	10^{-6}	*spreader*	

Pengujian Fisik pH

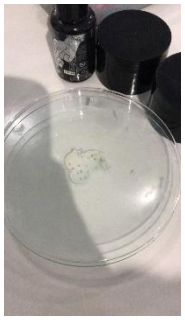
Sampel	Hasil pH	Dokumentasi
Hair Powder		
Oil Based		
Clay		

Pengujian Fisik Homogenitas

Sampel	Pengujian	Dokumentasi
Hair Powder	Kaca Arloji	
Oil Based	Kaca Arloji	

Clay	Kaca Arloji	

Pengujian Fisik Daya Sebar

Sampel	Dokumentasi
Hair Powder	
Oil Based	
Clay	