

LAMPIRAN

Lampiran 1 Perhitungan

A. Perhitungan Pembuatan Larutan HCl 2N dalam 100 ml aquadest

- **N HCl Pekat**

$$= \frac{10 \times \text{massa jenis} \times \%}{BE}$$

$$= \frac{10 \times 1,8 \text{ g/ml} \times 37}{36,5 \text{ g/molek}}$$

$$= 11,96, \text{ N}$$

$$= 12 \text{ N}$$

- **HCl 2N**

$$N_1 \times V_1 = N_2 \times V_2$$

$$12 \times \text{ml} = 2 \times 100 \text{ ml}$$

$$\text{ml} = \frac{200}{12}$$

$$\text{ml} = 16,6$$

B. Perhitungan Pembuatan Larutan NaOH 1N dalam 100 ml aquades

$$\begin{aligned} 1 \text{ N NaOH} &= \frac{m}{Mr} \times \frac{1000}{V} \times a \\ &= \frac{m}{40 \text{ g/mol}} \times \frac{1000}{100} \times 1 \end{aligned}$$

$$\begin{aligned} m \text{ NaOH} &= \frac{40}{10} \\ &= 4 \text{ gram} \end{aligned}$$

C. Pembuatan Larutan BPW (*Buffered Peptone Water*) dalam 3000 ml aquadest

$$\begin{aligned} &= \frac{20,07 \text{ g}}{1000 \text{ ml}} = \frac{m}{3000 \text{ ml}} \\ &= m = \frac{60.210 \text{ gml}}{1000 \text{ ml}} \\ &= m = 60,21 \text{ gram} \end{aligned}$$

D. Perhitungan Nilai AKK Pada Pati Pisang Kepok Steril

- **Replikasi 1**

$$\begin{aligned}N &= \frac{\sum c}{V \times 1,1 \times d} \\N &= \frac{32+4}{1 \times 1,1 \times 10^{-3}} \\N &= \frac{36}{1,1 \times 10^{-3}} \\N &= 3,3 \times 10^4 \text{ CFU/g}\end{aligned}$$

- **Replikasi 2**

$$\begin{aligned}N &= \frac{\sum c}{V \times 1,1 \times d} \\N &= \frac{33+3}{1 \times 1,1 \times 10^{-3}} \\N &= \frac{36}{1,1 \times 10^{-3}} \\N &= 3,3 \times 10^4 \text{ CFU/g}\end{aligned}$$

- **Replikasi 3**

$$\begin{aligned}N &= \frac{\sum c}{V \times 1,1 \times d} \\N &= \frac{21+4}{1 \times 1,1 \times 10^{-3}} \\N &= \frac{25}{1,1 \times 10^{-3}} \\N &= 2,3 \times 10^4 \text{ CFU/g}\end{aligned}$$

E. Perhitungan Nilai AKK Pada Pati Pisang Kepok Non Steril

- **Replikasi 1**

$$\begin{aligned}N &= \frac{\sum c}{V \times 1,1 \times d} \\N &= \frac{15+0}{1 \times 1,1 \times 10^{-3}} \\N &= \frac{15}{1,1 \times 10^{-3}} \\N &= 1,4 \times 10^4 \text{ CFU/g}\end{aligned}$$

- **Replikasi 2**

$$N = \frac{\sum c}{V \times 1,1 \times d}$$

$$N = \frac{20+2}{1 \times 1,1 \times 10^{-3}}$$

$$N = \frac{22}{1,1 \times 10^{-3}}$$

$$N = 2,0 \times 10^4 \text{ CFU/g}$$

- **Replikasi 3**

$$N = \frac{\sum c}{V \times 1,1 \times d}$$




$$N = \frac{20+1}{1 \times 1,1 \times 10^{-3}}$$

$$N = \frac{21}{1,1 \times 10^{-3}}$$



$$N = 1,9 \times 10^4 \text{ CFU/g}$$

Lampiran 2 Dokumentasi Penelitian

A. Sterilisasi Pati Pisang Kepok

		
Penimbangan pati pisang kepok	Proses pemasukan pati dalam uv box	Dipaparkan sinar UV


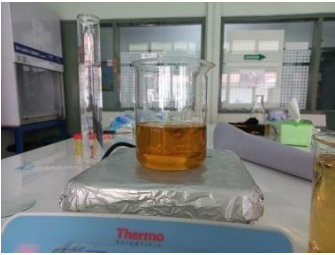

B. Pembuatan Larutan NaOH 1 N

	
Penimbangan NaOH	Pelarutan NaOH dengan Aquadest



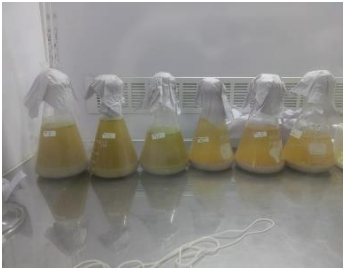
C. Pembuatan Larutan HCl 2N


Pengenceran HCl Pekat




D. Pembuatan Larutan BPW (*Buffered Peptone Water*)

		
Penimbangan BPW	Pelarutan larutan BPW	Pengaturan pH hingga 7,2 dengan larutan HCl

E. Pembuatan Suspensi Sampel

		
Penimbangan sampel	Penambahan 225 ml larutan BPW kemudian dilakukan pengadukan	Sampel setelah dibiarkan selama 10 menit




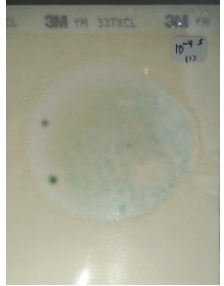

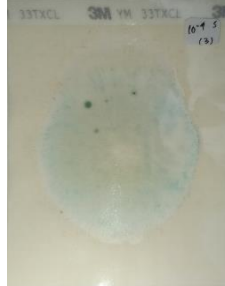



F. Pengenceran Sampel

		
Tabung reaksi yang telah diisi 9 ml larutan BPW	Pengambilan 1 ml dari pengenceran 10^{-1}	Dimasukkan 1 ml pengenceran 10^{-1} ke dalam tabung reaksi (10^{-2}). Dilakukan hingga pengenceran 10^{-5}










G. Pengujian AKK dengan metode petrifilm

			
<p>Pemipetan 1 ml pengenceran 10^{-3} - 10^{-5}</p>	<p>Hasil inokulasi sampel pada petrifilm AKK</p>	<p>Inkubasi petrifilm AKK</p>	<p>Pengamatan dan perhitungan koloni AKK</p>

H. Pengamatan koloni pada pati pisang kepok steril

		
<p>10^{-3} Replikasi 1</p>	<p>10^{-3} Replikasi 2</p>	<p>10^{-3} Replikasi 3</p>
		
<p>10^{-4} Replikasi 1</p>	<p>10^{-4} Replikasi 2</p>	<p>10^{-4} Replikasi 3</p>
		
<p>10^{-5} Replikasi 1</p>	<p>10^{-5} Replikasi 2</p>	<p>10^{-5} Replikasi 3</p>

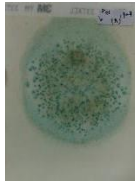
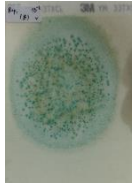
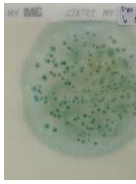
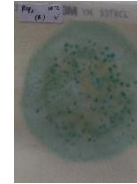
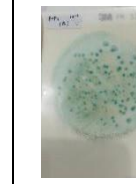
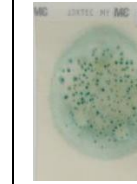
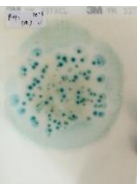

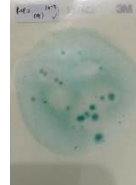
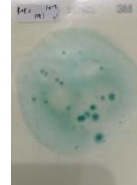
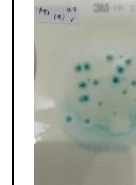
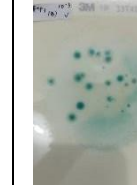
I. Pengamatan koloni pada pati pisang kepok non steril

		
10 ⁻³ Replikasi 1	10 ⁻³ Replikasi 2	10 ⁻³ Replikasi 3
		
10 ⁻⁴ Replikasi 1	10 ⁻⁴ Replikasi 2	10 ⁻⁴ Replikasi 3
		
10 ⁻⁵ Replikasi 1	10 ⁻⁵ Replikasi 2	10 ⁻⁵ Replikasi 3

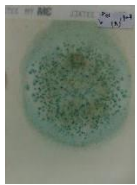
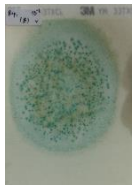
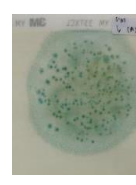
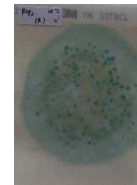
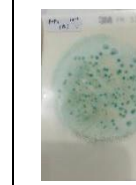
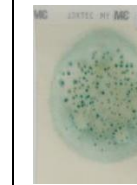
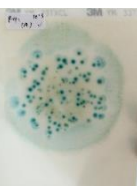

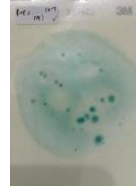
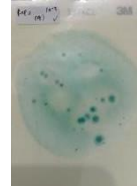
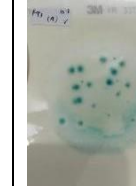
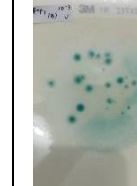
J. Blanko petrifilm AKK



K. Pengamatan koloni uji pendahuluan (Steril)

					
$10^{-2}_{(R1)A}$	$10^{-2}_{(R1)B}$	$10^{-2}_{(R2)A}$	$10^{-2}_{(R2)B}$	$10^{-2}_{(R3)A}$	$10^{-2}_{(R3)B}$
					
$10^{-3}_{(R1)A}$	$10^{-3}_{(R1)B}$	$10^{-3}_{(R2)A}$	$10^{-3}_{(R2)B}$	$10^{-3}_{(R3)A}$	$10^{-3}_{(R3)B}$

L. Pengamatan koloni uji pendahuluan (Non Steril)

					
$10^{-2}_{(R1)A}$	$10^{-2}_{(R1)B}$	$10^{-2}_{(R2)A}$	$10^{-2}_{(R2)B}$	$10^{-2}_{(R3)A}$	$10^{-2}_{(R3)B}$
					
$10^{-3}_{(R1)A}$	$10^{-3}_{(R1)B}$	$10^{-3}_{(R2)A}$	$10^{-3}_{(R2)B}$	$10^{-3}_{(R3)A}$	$10^{-3}_{(R3)B}$

M. Blanko uji pendahuluan

