

LAMPIRAN PERHITUNGAN

lampiran 1 Data Perhiutngan

A. Perhitungan Pembuatan Larutan HCl2N dalam 100 ml aquadest

➤ **NHCl Pekat**

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

$$= \frac{10 \times 1,18 \frac{\text{ml}}{\text{g}} \times 37}{36,5 \frac{\text{g}}{\text{molek}}}$$

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

$$= 12 \text{ N}$$

➤ **HCl2N**

$$N1 \times V1 = N2 \times V2$$

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

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

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

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

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

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

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

Diketahui pada etiket larutan BPW ialah 20,07 gram BPW dalam 1000 ml
maka :

$$m = \frac{20,07 \text{ g}}{1000 \text{ ml}} = \frac{m}{3000 \text{ ml}}$$

$$m = \frac{60,210 \text{ gml}}{1000 \text{ ml}}$$

$$m = 60,21 \text{ gram}$$

D. Pembuatan Media PCA (Plate Count Agar) dalam 1500 ml aquadest

Diketahui pada etiket PCA ialah 17,5 gram PCA dalam 1000 ml maka :

$$\frac{17,59}{1000\text{ ml}} = \frac{m}{1500\text{ ml}}$$

$$m = \frac{26,250 \text{ gml}}{1000 \text{ ml}}$$

$$m = 26,25 \text{ gram}$$

E. Tabel Pengamatan Koloni

lampiran 2 Tabel Pengamatan

Tabel 3.9 Hasil Data Pengamatan Tepung

PENGECERAN	SIMPLO	REPLIKASI	DUPLO	REPLIKASI
BLANKO	A1	63	B1	63
	A2	5	B2	5
	A3	13	B3	13

PENGECERAN	SIMPLO	REPLIKASI	DUPLO	REPLIKASI
10 ⁻⁵	A1	TBUD	B1	TBUD
	A2	TBUD	B2	TBUD
	A3	TBUD	B3	TBUD

PENGECERAN	DUPLO	REPLIKASI	DUPLO	REPLIKASI
10 ⁻⁶	A1	65	B1	48
	A2	92	B2	68
	A3	100	B3	120

PENGECERAN	DUPLO	REPLIKASI	DUPLO	REPLIKASI
10 ⁻⁷	A1	38	B1	31
	A2	22	B2	68
	A3	60	B3	104

PENGECERAN	DUPLO	REPLIKASI	DUPLO	REPLIKASI
10 ⁻⁸	A1	18	B1	0
	A2	17	B2	5
	A3	11	B3	0

PENGECERAN	DUPLO	REPLIKASI	DUPLO	REPLIKASI
10 ⁻⁹	A1	14	B1	5
	A2	3	B2	4
	A3	8	B3	4

PENGECERAN	DUPLO	REPLIKASI	DUPLO	REPLIKASI

Tabel 3.9 Hasil Data Pengamatan Pati

PENGECERAN	DUPLO	REPLIKASI	DUPLO	REPLIKASI
BLANKO	A1	0	B1	0
	A2	0	B2	0
	A3	0	B3	0

PENGECERAN	DUPLO	REPLIKASI	DUPLO	REPLIKASI
10 ⁻⁵	A1	TBUD	B1	TBUD
	A2	TBUD	B2	TBUD
	A3	TBUD	B3	TBUD

PENGECERAN	DUPLO	REPLIKASI	DUPLO	REPLIKASI
10 ⁻⁶	A1	184	B1	160
	A2	67	B2	93
	A3	83	B3	58

PENGECERAN	DUPLO	REPLIKASI	DUPLO	REPLIKASI
10 ⁻⁷	A1	35	B1	28
	A2	14	B2	21
	A3	TBUD	B3	TBUD

PENGECERAN	DUPLO	REPLIKASI	DUPLO	REPLIKASI
10 ⁻⁸	A1	26	B1	20
	A2	12	B2	13
	A3	18	B3	15

PENGECERAN	DUPLO	REPLIKASI	DUPLO	REPLIKASI
10 ⁻⁹	A1	25	B1	`21
	A2	41	B2	13
	A3	30	B3	39

PENGECERAN	DUPLO	REPLIKASI	DUPLO	REPLIKASI
10 ⁻¹⁰	A1	24	B1	31

10^{-10}	A1	20	B1	22
	A2	28	B2	55
	A3	29	B3	31

	A2	19	B2	25
	A3	30	B3	23

PENGECERAN	DUPLO	REPLIKASI	DUPLO	REPLIKASI
10^{-11}	A1	17	B1	37
	A2	57	B2	58
	A3	125	B3	89

PENGECERAN	DUPLO	REPLIKASI	DUPLO	REPLIKASI
10^{-11}	A1	23	B1	6
	A2	9	B2	7
	A3	19	B3	17

F. Perhitungan Nilai ALT Pada Tepung dan Pati Pisang Kepok

➤ Tepung

• Replikasi 1

$$\begin{aligned}
 N &= \frac{(\sum C)}{(V \times [n1 + (0,1 \times n2) \times (d)])} \\
 &= \frac{65+48+38+31}{(1 \times [2 + (0,1 \times 2) \times (10-6)])} \\
 &= \frac{182}{2,2 \times 10^{-6}} \\
 &= 82,7 \times 10^6 \\
 &= 8,3 \times 10^7 \text{ CFU/g}
 \end{aligned}$$

• Replikasi 2

$$\begin{aligned}
 N &= \frac{(\sum C)}{(V \times [n1 + (0,1 \times n2) \times (d)])} \\
 &= \frac{92+68+22+68}{(1 \times [2 + (0,1 \times 2) \times (10-6)])} \\
 &= \frac{250}{2,2 \times 10^{-6}} \\
 &= 11,3 \times 10^6 \\
 &= 1,1 \times 10^7 \text{ CFU/g}
 \end{aligned}$$

• Replikasi 3

$$\begin{aligned}
 N &= \frac{(\sum C)}{(V \times [n1 + (0,1 \times n2) \times (d)])} \\
 &= \frac{100+120+60+104}{(1 \times [2 + (0,1 \times 2) \times (10-6)])} \\
 &= \frac{384}{2,2 \times 10^{-6}} \\
 &= 174,5 \times 10^6
 \end{aligned}$$

$$= 1,7 \times 10^8 \text{ CFU/g}$$

➤ **Pati**

- Replikasi 1

$$\begin{aligned} N &= \frac{(\sum C)}{(V \times [n1 + (0,1 \times n2) \times (d)])} \\ &= \frac{184+160+35+28}{(1 \times [2 + (0,1 \times 1) \times (10-6)])} \\ &= \frac{407}{2,2 \times 10^{-6}} \\ &= 185 \times 10^6 \\ &= 1,8 \times 10^8 \text{ CFU/g} \end{aligned}$$

- Replikasi 2

$$\begin{aligned} N &= \frac{(\sum C)}{(V \times [n1 + (0,1 \times n2) \times (d)])} \\ &= \frac{67+93+14+21}{(1 \times [2 + (0,1 \times 2) \times (10-6)])} \\ &= \frac{195}{2,2 \times 10^{-6}} \\ &= 88,6 \times 10^6 \\ &= 8,8 \times 10^7 \text{ CFU/g} \end{aligned}$$

- Replikasi 3

$$\begin{aligned} N &= \frac{(\sum C)}{(V \times [n1 + (0,1 \times n2) \times (d)])} \\ &= \frac{83+58+19+17}{(1 \times [2 + (0,1 \times 2) \times (10-6)])} \\ &= \frac{177}{2,2 \times 10^{-6}} \\ &= 80,4 \times 10^6 \\ &= 8,4 \times 10^7 \text{ CFU/g} \end{aligned}$$