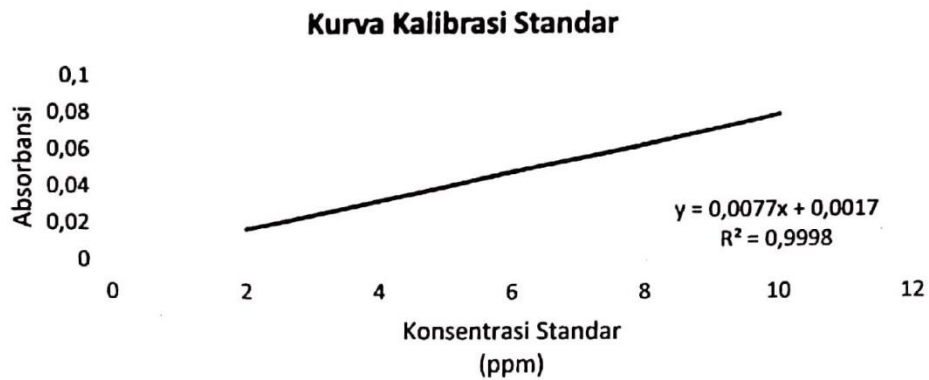


Konsentrasi Standar	Absorbansi Standar
2	0,0169
4	0,0325
6	0,0482
8	0,0627
10	0,0787



Label Sampel	Konsentrasi Sampel	Absorbansi Sampel
A1	0,12987013	0,0027
A2	0,025974026	0,0019
A3	0,064935065	0,0022
A4	0,103896104	0,0025
A5	0,025974026	0,0019
B1	0,181818182	0,0031
B2	0,051948052	0,0021
B3	0,116883117	0,0026
B4	0,155844156	0,0029
B5	0,155844156	0,0029
Buah Bit	0,441558442	0,0051

## LAMPIRAN II PERHITUNGAN

### 1. Pembuatan Larutan

- a. Pembuatan 0,025 M Asam Sitrat ( $C_6H_8O_7$ )

$$\text{Dik: } M = 0,025 \text{ mol/L}$$

$$V = 1 \text{ L}$$

$$BM = 192,13 \text{ gr/mol}$$

$$\text{Dit: } m = \dots \text{ gr?}$$

Penyelesaian:

$$m = M \times V \times BM$$

$$m = 0,025 \text{ mol/L} \times 1 \text{ L} \times 192,13 \text{ gr/mol}$$

$$m = 4,8 \text{ gr}$$

- b. Pembuatan 0,05 M Asam Sitrat ( $C_6H_8O_7$ )

$$\text{Dik: } M = 0,05 \text{ mol/L}$$

$$V = 1 \text{ L}$$

$$BM = 192,13 \text{ gr/mol}$$

$$\text{Dit: } m = \dots \text{ gr?}$$

Penyelesaian:

$$m = M \times V \times BM$$

$$m = 0,05 \text{ mol/L} \times 1 \text{ L} \times 192,13 \text{ gr/mol}$$

$$m = 9,6 \text{ gr}$$

- c. Pembuatan 0,075 M Asam Sitrat ( $C_6H_8O_7$ )

$$\text{Dik: } M = 0,075 \text{ mol/L}$$

$$V = 1 \text{ L}$$

$$BM = 192,13 \text{ gr/mol}$$

$$\text{Dit: } m = \dots \text{ gr?}$$

Penyelesaian:

$$m = M \times V \times BM$$

$$m = 0,075 \text{ mol/L} \times 1 \text{ L} \times 192,13 \text{ gr/mol}$$

$$m = 14,4 \text{ gr}$$

d. Pembuatan 0,00,05 M Asam Sitrat ( $C_6H_8O_7$ )

$$\text{Dik: } M = 0,025 \text{ mol/L}$$

$$V = 1 \text{ L}$$

$$BM = 192,13 \text{ gr/mol}$$

$$\text{Dit: } m = \dots \text{ gr?}$$

Penyelesaian:

$$m = M \times V \times BM$$

$$m = 0,00,05 \text{ Mol/L} \times 1 \text{ L} \times 192,13 \text{ gr/mol}$$

$$m = 19,2 \text{ gr}$$

e. Pembuatan 0,0125 M Asam Sitrat ( $C_6H_8O_7$ )

$$\text{Dik: } M = 0,0125 \text{ mol/L}$$

$$V = 1 \text{ L}$$

$$BM = 192,13 \text{ gr/mol}$$

$$\text{Dit: } m = \dots \text{ gr?}$$

Penyelesaian:

$$m = M \times V \times BM$$

$$m = 0,0125 \text{ mol/L} \times 1 \text{ L} \times 192,13 \text{ gr/mol}$$

$$m = 24,0 \text{ gr}$$

f. Pembuatan HCl 3%

$$\text{Dik: } M_1 = 32\%$$

$$M_2 = 3\%$$

$$V_2 = 1000 \text{ ml}$$

$$\text{Dit: } V_1 = \dots?$$

Penyelesaian:

$$M_1 \cdot V_1 = M_2 \cdot V_2$$

$$32\% \times V_1 = 3\% \times 1000 \text{ ml}$$

$$V_1 = \frac{3\% \times 1000 \text{ ml}}{32\%}$$

$$V_1 = 93,75 \text{ ml}$$

g. Pembuatan  $\text{H}_2\text{SO}_4$  25%

$$\text{Dik: } M_1 = 98\%$$

$$M_2 = 25\%$$

$$V_2 = 1000 \text{ ml}$$

$$\text{Dit: } V_1 = \dots?$$

Penyelesaian:

$$M_1 \cdot V_1 = M_2 \cdot V_2$$

$$98\% \times V_1 = 25\% \times 1000 \text{ ml}$$

$$V_1 = \frac{25\% \times 1000 \text{ ml}}{98\%}$$

$$V_1 = 255,10 \text{ ml}$$

h. Pembuatan  $\text{CH}_3\text{COOH}$  3%

$$\text{Dik: } M_1 = 25\%$$

$$M_2 = 3\%$$

$$V_2 = 500 \text{ ml}$$

$$\text{Dit: } V_1 = \dots?$$

Penyelesaian:

$$M_1 \cdot V_1 = M_2 \cdot V_2$$

$$25\% \times V_1 = 3\% \times 500 \text{ ml}$$

$$V_1 = \frac{3\% \times 500 \text{ ml}}{25\%}$$

$$V_1 = 60 \text{ ml}$$

## 2. Perhitungan Kadar Air

Rumus:

$$\% \text{ Kadar Air} = \frac{(B-C)}{(B-A)} \times 100\%$$

Dimana:

A = Berat cawan kosong (gr)

B = Berat cawan kosong + sampel (sebelum dioven) (gr)

C = Berat cawan + sampel (setelah dioven) (gr)

- a. Permen *Jelly* A1 (Konsentrasi sari buah 70 bit dan 30 jambu biji 8.5 gr gelatin)

Diketahui:

$$\text{Berat cawan kosong (A)} = 29.01$$

$$\text{Berat + sampel (sebelum dioven) (B)} = 32.01$$

$$\text{Berat cawan + sampel (setelah dioven) (C)} = 31.56$$

$$\begin{aligned} \% \text{ Kadar Air} &= \frac{(B-C)}{(B-A)} \times 100\% \\ &= \frac{(32,01-31.56)}{(32.01-29.01)} \times 100\% \\ &= 15 \% \end{aligned}$$

- b. Permen *Jelly* A2 (Konsentrasi sari buah bit 70 dan 30 jambu biji 9.5 gr gelatin)

Diketahui:

$$\text{Berat cawan kosong (A)} = 30.75$$

$$\text{Berat + sampel (sebelum dioven) (B)} = 33.91$$

$$\text{Berat cawan + sampel (setelah dioven) (C)} = 33.31$$

$$\begin{aligned} \% \text{ Kadar Air} &= \frac{(B-C)}{(B-A)} \times 100\% \\ &= \frac{(33.91-33.31)}{(33.91-30.75)} \times 100\% \\ &= 18.99 \% \end{aligned}$$

- c. Permen *Jelly* A3 (Konsentrasi sari buah 70 bit dan 30 jambu biji 10.5 gr gelatin)

Diketahui:

$$\text{Berat cawan kosong (A)} = 28.79$$

$$\text{Berat + sampel (sebelum dioven) (B)} = 31.89$$

$$\text{Berat cawan + sampel (setelah dioven) (C)} = 31.26$$

$$\% \text{ Kadar Air} = \frac{(B-C)}{(B-A)} \times 100\%$$

$$= \frac{(31.89-31.26)}{(31.89-28.79)} \times 100\%$$

$$= 20.32 \%$$

- d. Permen *Jelly* A4 (Konsentrasi sari buah 70 bit dan 30 jambu biji 11.5 gr gelatin)

Diketahui:

Berat cawan kosong (A) = 29.59

Berat + sampel (sebelum dioven) (B) = 32.65

Berat cawan + sampel (setelah dioven) (C) = 32.32

$$\% \text{ Kadar Air} = \frac{(B-C)}{(B-A)} \times 100\%$$

$$= \frac{(32.65-32.32)}{(32.65-29.59)} \times 100\%$$

$$= 10.78 \%$$

- e. Permen *Jelly* A5 (Konsentrasi sari buah 70 bit dan 30 jambu biji 12.5 gr gelatin)

Diketahui:

Berat cawan kosong (A) = 35.44

Berat + sampel (sebelum dioven) (B) = 38.48

Berat cawan + sampel (setelah dioven) (C) = 38.05

$$\% \text{ Kadar Air} = \frac{(B-C)}{(B-A)} \times 100\%$$

$$= \frac{(38.48-38.05)}{(38.48-35.44)} \times 100\%$$

$$= 14.14 \%$$

- f. Permen *Jelly* B1 (Konsentrasi sari buah 60 bit dan 40 jambu biji 8.5 gr gelatin)

Diketahui:

Berat cawan kosong (A) = 29.12

Berat + sampel (sebelum dioven) (B) = 32.45

$$\text{Berat cawan + sampel (setelah dioven) (C)} = 31.79$$

$$\begin{aligned}\% \text{ Kadar Air} &= \frac{(B-C)}{(B-A)} \times 100\% \\ &= \frac{(32.45-31.79)}{(32.45-29.12)} \times 100\% \\ &= 19.82 \%\end{aligned}$$

- g. Permen *Jelly* B2 (Konsentrasi sari buah 60 bit dan 40 jambu biji 9.5 gr gelatin)

Diketahui:

$$\text{Berat cawan kosong (A)} = 30.87$$

$$\text{Berat + sampel (sebelum dioven) (B)} = 33.91$$

$$\text{Berat cawan + sampel (setelah dioven) (C)} = 33.14$$

$$\begin{aligned}\% \text{ Kadar Air} &= \frac{(B-C)}{(B-A)} \times 100\% \\ &= \frac{(33.91-33.14)}{(33.91-30.87)} \times 100\% \\ &= 25.33 \%\end{aligned}$$

- h. Permen *Jelly* B3 (Konsentrasi sari buah 60 bit dan 40 jambu biji 10.5 gr gelatin)

Diketahui:

$$\text{Berat cawan kosong (A)} = 29.70$$

$$\text{Berat + sampel (sebelum dioven) (B)} = 32.83$$

$$\text{Berat cawan + sampel (setelah dioven) (C)} = 32.12$$

$$\begin{aligned}\% \text{ Kadar Air} &= \frac{(B-C)}{(B-A)} \times 100\% \\ &= \frac{(32.83-32.12)}{(32.83-29.70)} \times 100\% \\ &= 22.68 \%\end{aligned}$$

- i. Permen *Jelly* B4 (Konsentrasi sari buah 60 bit dan 40 jambu biji 11.5 gr gelatin)

Diketahui:

$$\text{Berat cawan kosong (A)} = 28.92$$

$$\text{Berat + sampel (sebelum dioven) (B)} = 31.90$$

$$\text{Berat cawan + sampel (setelah dioven) (C)} = 31.33$$

$$\begin{aligned}\% \text{ Kadar Air} &= \frac{(B-C)}{(B-A)} \times 100\% \\ &= \frac{(31.90-31.33)}{(31.90-28.92)} \times 100\% \\ &= 19.13 \%\end{aligned}$$

- j. Permen *Jelly* B5 (Konsentrasi sari buah 60 bit dan 40 jambu biji 12.5 gr gelatin)

Diketahui:

$$\text{Berat cawan kosong (A)} = 31.61$$

$$\text{Berat + sampel (sebelum dioven) (B)} = 35.01$$

$$\text{Berat cawan + sampel (setelah dioven) (C)} = 34.39$$

$$\begin{aligned}\% \text{ Kadar Air} &= \frac{(B-C)}{(B-A)} \times 100\% \\ &= \frac{(35.01-34.39)}{(35.01-31.61)} \times 100\% \\ &= 18.24 \%\end{aligned}$$

### 3. Perhitungan Kadar Abu

Rumus:

$$\% \text{ Kadar Abu} = \frac{(C-A)}{B} \times 100\%$$

Dimana:

A = Berat *crussible* kosong (gr)

B = Berat sampel (gr)

C = Berat *crussible* + abu (gr)

- a. Permen *Jelly* A1 (Konsentrasi sari buah 70 bit dan 30 jambu biji 8.5 gr gelatin)

Diketahui:



$$\text{Berat } crussible \text{ kosong (A)} = 31.47$$

$$\text{Berat sampel (B)} = 3.07$$

$$\text{Berat } crussible \text{ + abu (C)} = 34.49$$

$$\begin{aligned} \% \text{ Kadar Abu} &= \frac{(C-A)}{B} \times 100\% \\ &= \frac{(34.49-31.47)}{3.07} \times 100\% \\ &= 1.63 \% \end{aligned}$$

- b. Permen *Jelly* A2 (Konsentrasi sari buah 70 bit dan 30 jambu biji 9.5 gr gelatin)

Diketahui:

$$\text{Berat } crussible \text{ kosong (A)} = 32.65$$

$$\text{Berat sampel (B)} = 3.12$$

$$\text{Berat } crussible \text{ + abu (C)} = 35.68$$

$$\begin{aligned} \% \text{ Kadar Abu} &= \frac{(C-A)}{B} \times 100\% \\ &= \frac{(35.68-32.65)}{3.12} \times 100\% \\ &= 2.88 \% \end{aligned}$$

- c. Permen *Jelly* A3 (Konsentrasi sari buah 70 bit dan 30 jambu biji 10.5 gr gelatin)

Diketahui:

$$\text{Berat } crussible \text{ kosong (A)} = 33.52$$

$$\text{Berat sampel (B)} = 3.08$$

$$\text{Berat } crussible \text{ + abu (C)} = 36.56$$

$$\begin{aligned} \% \text{ Kadar Abu} &= \frac{(C-A)}{B} \times 100\% \\ &= \frac{(36.56-33.52)}{3.08} \times 100\% \\ &= 1.30 \% \end{aligned}$$

- d. Permen *Jelly* A4 (Konsentrasi sari buah 70 bit dan 30 jambu biji 11.5 gr gelatin)

Diketahui:

$$\text{Berat } crussible \text{ kosong (A)} = 32.73$$

$$\text{Berat sampel (B)} = 3.03$$

$$\text{Berat } crussible \text{ + abu (C)} = 35.68$$

$$\begin{aligned} \% \text{ Kadar Abu} &= \frac{(C-A)}{B} \times 100\% \\ &= \frac{(35.68-32.73)}{3.03} \times 100\% \\ &= 2.64 \% \end{aligned}$$

- e. Permen *Jelly* A5 (Konsentrasi sari buah 70 bit dan 30 jambu biji 12.5 gr gelatin)

Diketahui:

$$\text{Berat } crussible \text{ kosong (A)} = 32.52$$

$$\text{Berat sampel (B)} = 3.14$$

$$\text{Berat } crussible \text{ + abu (C)} = 35.61$$

$$\begin{aligned} \% \text{ Kadar Abu} &= \frac{(C-A)}{B} \times 100\% \\ &= \frac{(35.61-32.52)}{3.14} \times 100\% \\ &= 1.59 \% \end{aligned}$$

- f. Permen *Jelly* B1 (Konsentrasi sari buah 60 bit dan 40 jambu biji 8.5 gr gelatin)

Diketahui:

$$\text{Berat } crussible \text{ kosong (A)} = 33.72$$

$$\text{Berat sampel (B)} = 3.02$$

$$\text{Berat } crussible \text{ + abu (C)} = 36.66$$

$$\% \text{ Kadar Abu} = \frac{(C-A)}{B} \times 100\%$$

$$= \frac{(36.66-33.72)}{3.02} \times 100\%$$

$$= 2.65 \%$$

g. Permen *Jelly* B2 (Konsentrasi sari buah 60 bit dan 40 jambu biji 9.5 gr gelatin)

Diketahui:

$$\text{Berat } crussible \text{ kosong (A)} = 32.56$$

$$\text{Berat sampel (B)} = 3.19$$

$$\text{Berat } crussible \text{ + abu (C)} = 35.68$$

$$\% \text{ Kadar Abu} = \frac{(C-A)}{B} \times 100\%$$

$$= \frac{(35.68-32.56)}{3.19} \times 100\%$$

$$= 2.19 \%$$

h. Permen *Jelly* B3 (Konsentrasi sari buah 60 bit dan 40 jambu biji 10.5 gr gelatin)

Diketahui:

$$\text{Berat } crussible \text{ kosong (A)} = 31.25$$

$$\text{Berat sampel (B)} = 3.28$$

$$\text{Berat } crussible \text{ + abu (C)} = 34.49$$

$$\% \text{ Kadar Abu} = \frac{(C-A)}{B} \times 100\%$$

$$= \frac{(34.49-31.25)}{3.19} \times 100\%$$

$$= 1.22 \%$$

Permen *Jelly* B4 (Konsentrasi sari buah 60 bit dan 40 jambu biji 11.5 gr gelatin)

Diketahui:

$$\text{Berat } crussible \text{ kosong (A)} = 33.68$$

$$\text{Berat sampel (B)} = 3.13$$

$$\text{Berat } crussible \text{ + abu (C)} = 36.75$$

$$\begin{aligned}
 \% \text{ Kadar Abu} &= \frac{(C-A)}{B} \times 100\% \\
 &= \frac{(36.75-33.68)}{3.13} \times 100\% \\
 &= 1.92 \%
 \end{aligned}$$

- i. Permen *Jelly* B5 (Konsentrasi sari buah 60 bit dan 40 jambu biji 12.5 gr gelatin)

Diketahui:

$$\text{Berat } crussible \text{ kosong (A)} = 32.91$$

$$\text{Berat sampel (B)} = 3.28$$

$$\text{Berat } crussible \text{ + abu (C)} = 36.11$$

$$\begin{aligned}
 \% \text{ Kadar Abu} &= \frac{(C-A)}{B} \times 100\% \\
 &= \frac{(36.11-32.91)}{3.28} \times 100\% \\
 &= 2.44 \%
 \end{aligned}$$

#### 4. Perhitungan Kadar Gula Reduksi (D-Glukosa)

Rumus:

$$\% \text{ Kadar Glukosa} = \frac{\text{mg glukosa} \times \text{fp}}{\text{mg sampel}} \times 100\%$$

Dimana:

$$\text{mg glukosa} = \text{volume blanko} - \text{volume sampel (Tabel)}$$

$$\text{fp} = \text{faktor pengenceran}$$

- a. Permen *Jelly* A1 (Konsentrasi sari buah 70 bit dan 30 jambu biji 8.5 gr gelatin)

Diketahui:

$$\text{Berat sampel} = 5012.2$$

$$\text{Volume blanko} = 25,7$$

Volume sampel = 17.4

Ditanya: % Kadar Glukosa

Penyelesaian:

- Volume blanko – Volume titran

$$\begin{aligned}\text{Volume blanko} - \text{Volume titran} &= 25,7 - 17,4 \\ &= 8,2\end{aligned}$$

- mg glukosa (interpolasi dari Tabel )

$$\frac{x - x_1}{x_2 - x_1} = \frac{y - y_1}{y_2 - y_1}$$

$$\frac{8,2 - 8}{9 - 8} = \frac{y - 19,8}{22,4 - 19,8}$$

$$y = 20,12$$

- % Kadar Glukosa

$$\begin{aligned}\% \text{ Kadar Glukosa} &= \frac{\text{mg glukosa} \times \text{fp}}{\text{mg sampel}} \times 100\% \\ &= \frac{20,12 \times 50}{5012,2} \times 100\% \\ &= 20,07 \%\end{aligned}$$

- b. Permen *Jelly* A2 (Konsentrasi sari buah 70 bit dan 30 jambu biji 9.5 gr gelatin)

Diketahui:

Berat sampel = 5029.6

Volume blanko = 25,7

Volume sampel = 17.2

Ditanya: % Kadar Glukosa

Penyelesaian:

- Volume blanko – Volume titran

$$\begin{aligned}\text{Volume blanko} - \text{Volume titran} &= 25,7 - 17,2 \\ &= 8,5\end{aligned}$$

- mg glukosa (interpolasi dari Tabel )

$$\frac{x - x_1}{x_2 - x_1} = \frac{y - y_1}{y_2 - y_1}$$

$$\frac{8.5 - 8}{9 - 8} = \frac{y - 19.8}{22.4 - 19.8}$$

$$y = 20.10$$

- % Kadar Glukosa

$$\% \text{ Kadar Glukosa} = \frac{\text{mg glukosa} \times \text{fp}}{\text{mg sampel}} \times 100\%$$

$$= \frac{20.10 \times 50}{5029.6} \times 100\%$$

$$= 19.98 \%$$

- c. Permen *Jelly* A3 (Konsentrasi sari buah 70 bit dan 30 jambu biji 10.5 gr gelatin)

Diketahui:

$$\text{Berat sampel} = 5027.3$$

$$\text{Volume blanko} = 25,7$$

$$\text{Volume sampel} = 16$$

Ditanya: % Kadar Glukosa

Penyelesaian:

- Volume blanko – Volume sampel

$$\text{Volume blanko} - \text{Volume sampel} = 25,7 - 16$$

$$= 9.7$$

- mg glukosa (interpolasi dari Tabel )

$$\frac{x - x_1}{x_2 - x_1} = \frac{y - y_1}{y_2 - y_1}$$

$$\frac{9.7 - 9}{10 - 9} = \frac{y - 22.4}{25 - 22.4}$$

$$y = 24.22$$

- % Kadar Glukosa

$$\% \text{ Kadar Glukosa} = \frac{\text{mg glukosa} \times \text{fp}}{\text{mg sampel}} \times 100\%$$

$$= \frac{24.22 \times 50}{5027.3} \times 100\%$$

$$= 24.09 \%$$

- d. Permen *Jelly* A4 (Konsentrasi sari buah 70 bit dan 30 jambu biji 11.5 gr gelatin)

Diketahui:

Berat sampel = 50.34.1

Volume blanko = 25,7

Volume sampel = 17.8

Ditanya: % Kadar Glukosa

Penyelesaian:

- Volume blanko – Volume sampel

$$\text{Volume blanko} - \text{Volume sampel} = 25,7 - 17,8$$

$$= 7,9$$

- mg glukosa (interpolasi dari Tabel )

$$\frac{x - x_1}{x_2 - x_1} = \frac{y - y_1}{y_2 - y_1}$$

$$\frac{7,9 - 7}{8 - 7} = \frac{y - 17,2}{19,8 - 17,2}$$

$$y = 19,54$$

- % Kadar Glukosa

$$\% \text{ Kadar Glukosa} = \frac{\text{mg glukosa} \times \text{fp}}{\text{mg sampel}} \times 100\%$$

$$= \frac{19,54 \times 50}{5034,1} \times 100\%$$

$$= 19,41 \%$$

- e. Permen *Jelly* A5 (Konsentrasi sari buah 70 bit dan 30 jambu biji 12.5 gr gelatin)

Diketahui:

Berat sampel = 5092.3

Volume blanko = 25,7

Volume sampel = 14

Ditanya: % Kadar Glukosa

Penyelesaian:

- Volume blanko – Volume sampel

$$\begin{aligned}\text{Volume blanko} - \text{Volume sampel} &= 25,7 - 14 \\ &= 11,7\end{aligned}$$

- mg glukosa (interpolasi dari Tabel )

$$\begin{aligned}\frac{x - x_1}{x_2 - x_1} &= \frac{y - y_1}{y_2 - y_1} \\ \frac{11,7 - 11}{12 - 11} &= \frac{y - 27,6}{30,3 - 27,6} \\ y &= 29,49\end{aligned}$$

- % Kadar Glukosa

$$\begin{aligned}\% \text{ Kadar Glukosa} &= \frac{\text{mg glukosa} \times \text{fp}}{\text{mg sampel}} \times 100\% \\ &= \frac{35,7 \times 50}{5092,3} \times 100\% \\ &= 28,96 \%\end{aligned}$$

- f. Permen *Jelly* B1 (Konsentrasi sari buah 60 bit dan 40 jambu biji 8.5 gr gelatin)

Diketahui:

$$\text{Berat sampel} = 5088,1$$

$$\text{Volume blanko} = 25,7$$

$$\text{Volume sampel} = 15,2$$

Ditanya: % Kadar Glukosa

Penyelesaian:

- Volume blanko – Volume sampel

$$\begin{aligned}\text{Volume blanko} - \text{Volume sampel} &= 25,7 - 15,2 \\ &= 10,5\end{aligned}$$

- mg glukosa (interpolasi dari Tabel )

$$\frac{x - x_1}{x_2 - x_1} = \frac{y - y_1}{y_2 - y_1}$$



$$\frac{10.5 - 10}{11 - 10} = \frac{y - 25}{27.6 - 25}$$

$$y = 26.3$$

- % Kadar Glukosa

$$\begin{aligned} \text{\% Kadar Glukosa} &= \frac{\text{mg glukosa} \times \text{fp}}{\text{mg sampel}} \times 100\% \\ &= \frac{26.3 \times 50}{5088.1} \times 100\% \\ &= 25.84\% \end{aligned}$$

- g. Permen *Jelly* B2 (Konsentrasi sari buah 60 bit dan 40 jambu biji 9.5 gr gelatin)

Diketahui:

$$\text{Berat sampel} = 5032.3$$

$$\text{Volume blanko} = 25,7$$

$$\text{Volume sampel} = 16.2$$

Ditanya: % Kadar Glukosa

Penyelesaian:

- Volume blanko – Volume sampel

$$\begin{aligned} \text{Volume blanko} - \text{Volume sampel} &= 25,7 - 16.2 \\ &= 9.5 \end{aligned}$$

- mg glukosa (interpolasi dari Tabel )

$$\begin{aligned} \frac{x - x_1}{x_2 - x_1} &= \frac{y - y_1}{y_2 - y_1} \\ \frac{9.5 - 9}{10 - 9} &= \frac{y - 22.4}{25 - 22.4} \\ y &= 23.7 \end{aligned}$$

- % Kadar Glukosa

$$\text{\% Kadar Glukosa} = \frac{\text{mg glukosa} \times \text{fp}}{\text{mg sampel}} \times 100\%$$

$$= \frac{23.18 \times 50}{5032.3} \times 100\%$$

$$= 23.55 \%$$

- h. Permen *Jelly* B3 (Konsentrasi sari buah 60 bit dan 40 jambu biji 10.5 gr gelatin)

Diketahui:

Berat sampel = 5008.6

Volume blanko = 25,7

Volume sampel = 14.6

Ditanya: % Kadar Glukosa

Penyelesaian:

- Volume blanko – Volume sampel

$$\text{Volume blanko} - \text{Volume sampel} = 25,7 - 14,6$$

$$= 11,1$$

- mg glukosa (interpolasi dari Tabel )

$$\frac{x - x_1}{x_2 - x_1} = \frac{y - y_1}{y_2 - y_1}$$

$$\frac{11,1 - 11}{12 - 11} = \frac{y - 27,6}{30,3 - 27,6}$$

$$y = 27,87$$

- % Kadar Glukosa

$$\% \text{ Kadar Glukosa} = \frac{\text{mg glukosa} \times \text{fp}}{\text{mg sampel}} \times 100\%$$

$$= \frac{27,87 \times 50}{5008,6} \times 100\%$$

$$= 27,76 \%$$

- i. Permen *Jelly* B (Konsentrasi sari buah 60 bit dan 40 jambu biji gr gelatin)

Diketahui:

Berat sampel = 5077.2

Volume blanko = 25,7

Volume sampel = 17.8

Ditanya: % Kadar Glukosa

Penyelesaian:

- Volume blanko – Volume sampel

$$\begin{aligned}\text{Volume blanko} - \text{Volume sampel} &= 25,7 - 17,8 \\ &= 7,9\end{aligned}$$

- mg glukosa (interpolasi dari Tabel )

$$\begin{aligned}\frac{x - x_1}{x_2 - x_1} &= \frac{y - y_1}{y_2 - y_1} \\ \frac{7,9 - 7}{8 - 7} &= \frac{y - 17,2}{19,8 - 17,2} \\ y &= 19,54\end{aligned}$$

- % Kadar Glukosa

$$\begin{aligned}\% \text{ Kadar Glukosa} &= \frac{\text{mg glukosa} \times \text{fp}}{\text{mg sampel}} \times 100\% \\ &= \frac{19,54 \times 50}{5077,2} \times 100\% \\ &= 19,24\end{aligned}$$

- j. Permen *Jelly* B5 (Konsentrasi sari buah 60 bit dan 40 jambu biji 12.5 gr gelatin)

Diketahui:

Berat sampel = 5055.3

Volume blanko = 25,7

Volume sampel = 18.5

Ditanya: % Kadar Glukosa

Penyelesaian:

- Volume blanko – Volume sampel

$$\text{Volume blanko} - \text{Volume sampel} = 25,7 - 18,5$$

$$= 7.2$$

- mg glukosa (interpolasi dari Tabel )

$$\frac{x - x_1}{x_2 - x_1} = \frac{y - y_1}{y_2 - y_1}$$
$$\frac{7.2 - 7}{8 - 7} = \frac{y - 17.2}{19.8 - 17.2}$$

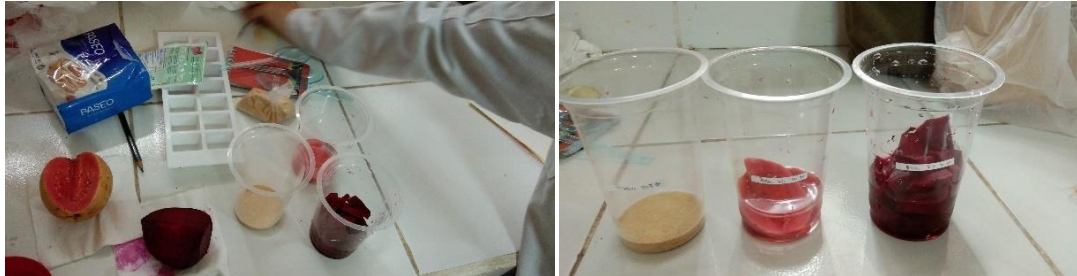
$$y = 17.72$$

- % Kadar Glukosa

$$\% \text{ Kadar Glukosa} = \frac{\text{mg glukosa} \times \text{fp}}{\text{mg sampel}} \times 100\%$$
$$= \frac{17.72 \times 50}{5055.3} \times 100\%$$
$$= 17.53 \%$$

## **5. Organoleptik (Uji Kesukaan)**

### LAMPIRAN III



Gambar 10. Persiapan sampel



Gambar 11. Ekstrak sari buah



Gambar 12. Pengentalan gelatin



Gambar 13. Proses pembuatan permen jelly



Gambar 14. Pencetakan permen jelly



Gambar 15. Analisa kadar air



Gambar 16. Analisa kadar abu





Gambar 17. Analisa logam Pb



Gambar 18. Analisa kadar gula total





















