

## LAMPIRAN

**1. Perhitungan pembuatan ekstrak etil asetat dan metanol**

- Pembuatan ekstrak etil asetat

$$\begin{aligned} \text{Berat cawan porselin : sebelum (0,754) dan sesudah (0,797)} \\ \rightarrow (0,797 - 0,754) \\ = 0,042 \text{ gram} \end{aligned}$$

$$\begin{aligned} \text{Konsentrasi PPM} &= \frac{\Delta \text{Berat cawan porselin}}{100 \text{ mL}} = \frac{0,042}{100 \text{ mL}} \times 1000 \\ &= \frac{42}{100 \text{ mL}} \\ &= \mathbf{0,42 \text{ PPM}} \end{aligned}$$

- Pembuatan ekstrak metanol

$$\begin{aligned} \text{Berat cawan porselin : sebelum (0,784) dan sesudah (0,892)} \\ \rightarrow (0,892 - 0,784) \\ = 0,108 \text{ gram} \end{aligned}$$

$$\begin{aligned} \text{Konsentrasi PPM} &= \frac{\Delta \text{Berat cawan porselin}}{100 \text{ mL}} = \frac{0,108}{100 \text{ mL}} \times 1000 \\ &= \frac{108}{100 \text{ mL}} \\ &= \mathbf{1,08 \text{ PPM}} \end{aligned}$$

**2. Perhitungan pembuatan konsentrasi garam empedu *bile salt***

- Konsentrasi 0,3%  $\rightarrow$  0,3 gram / 100 mL  $\rightarrow$  0,03(2) gram/100 mL  
 $\rightarrow$  0,06 gram/ 20 mL
- Konsentrasi 0,5%  $\rightarrow$  0,3 gram / 100 mL  $\rightarrow$  0,05(2) gram/100 mL  
 $\rightarrow$  0,1 gram/ 20 mL
- Konsentrasi 1%  $\rightarrow$  0,3 gram / 100 mL  $\rightarrow$  0,1 (2) gram/100 mL  
 $\rightarrow$  0,2 gram/ 20 mL
- Konsentrasi 2%  $\rightarrow$  0,3 gram / 100 mL  $\rightarrow$  0,2 (2) gram/100 mL  
 $\rightarrow$  0,4 gram/ 20 mL

Spesifikasi alat-alat yang digunakan di laboratorium

 <p>A stainless steel waterbath cap with a digital display on the front showing '37.0' and '75.0'.</p>	 <p>A stainless steel incubator with its door open, showing internal shelves and a heating element.</p>
 <p>A hand holding a blue pipette tip over a blue vortex mixer.</p>	 <p>A white centrifuge with its lid open, showing a rotor with blue tubes.</p>
 <p>A white and black compound microscope.</p>	 <p>A digital pH meter with a glass electrode and a display showing '4.56'.</p>
 <p>A black and silver microwave oven.</p>	 <p>A blue and white fume hood (Lemari asam).</p>



Timbangan analitik



Spektrofotometri



Laminar air flow



Micropipet dan tips



Tube sentrifugasi, micro-tube dan rak tabung



Gelas kimia



Pipet gun/ Pipet tembak



Corong pisah

**Pengujian Software IBM SPSS statistics versi 24**

**1. OD<sub>660</sub> nm pertumbuhan yeast BL20 pada berbagai pH**

**Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
0 jam	.371	4	.	.779	4	.070
24 jam	.397	4	.	.720	4	.019

**Frequency**

		Statistics	
		0 jam	24 jam
N	Valid	4	4
	Missing	0	0
Mean		.267800	1.639450
Std. Deviation		.0903618	.9301579
Minimum		.2039	.2508
Maximum		.4015	2.2118
Percentiles	25	.209375	.685775
	50	.232900	2.047600
	75	.361125	2.184975

**Dependent test/ paired sample test**

		Paired Samples Statistics			
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	0 jam	.267800	4	.0903618	.0451809
	24 jam	1.639450	4	.9301579	.4650790

		Paired Samples Correlations		
		N	Correlation	Sig.
Pair 1	0 jam & 24 jam	4	-.991	.009

		Paired Samples Test							
		Paired Differences		95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	Lower				Upper
Pair 1	0 jam - 24 jam	-1.3716500	1.0197892	.5098946	-2.9943622	.2510622	-2.690	3	.074

**2. OD<sub>660</sub> nm pertumbuhan yeast BL20 pada berbagai konsentrasi *bile salt***

**Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
0 jam	.345	4	.	.872	4	.304
24 jam	.216	4	.	.959	4	.773

**Frequency**

**Statistics**

		0 jam	24 jam
N	Valid	4	4
	Missing	0	0
Mean		.258900	2.028600
Std. Deviation		.0639237	.1674377
Minimum		.1991	1.8168
Maximum		.3495	2.1949
Percentiles	25	.210200	1.857275
	50	.243500	2.051350
	75	.323000	2.177175

**Dependent test/ paired sample test**

**Paired Samples Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	0 jam	.258900	4	.0639237	.0319619
	24 jam	2.028600	4	.1674377	.0837188

**Paired Samples Correlations**

		N	Correlation	Sig.
Pair 1	0 jam & 24 jam	4	.618	.382

**Paired Samples Test**

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	0 jam - 24 jam	-1.7697000	.1374507	.0687254	-1.9884148	-1.5509852	-25.750	3	.000