LAMPIRAN 1.

Sampel: ekstrak *n*-heksana *Sargassum* sp.

Pelarut: *n*-heksana Konsentrasi: 1 g/L

panjang gelombang (nm)	Absorbansi	% Transmitansi	Faktor Eritema	%T x Fe	Faktor Pigmentasi	%T x Fp
292.5	1.8400	1.4450	1.1390	1.6459		
297.5	1.7000	1.9950	6.5100	12.9875		
302.5	1.6400	2.2900	10.0000	22.9000		
307.5	1.6000	2.5120	3.5770	8.9854		
312.5	1.6000	2.5120	0.9730	2.4442		
317.5	1.6000	2.5120	0.5670	1.4243		
322.5	1.5500	2.8180	0.4550	1.2822	1.0790	3.0406
327.5	1.5000	3.1620	0.2890	0.9138	1.0200	3.2252
332.5	1.4500	3.5480	0.1290	0.4577	0.9360	3.3209
337.5	1.4500	3.5480	0.0456	0.1618	0.7980	2.8313
342.5	1.4500	3.5480			0.6690	2.3736
347.5	1.5400	2.8840			0.5700	1.6439
352.5	1.6500	2.2390			0.4880	1.0926
357.5	1.8000	1.5850			0.4560	0.7228
362.5	1.9500	1.1220			0.3560	0.3994
367.5	2.1400	0.7240			0.3100	0.2244
372.5	2.2500	0.5620			0.2600	0.1461
			23.6846	53.2027	6.9420	19.0210

$$\% \text{ Transmisi Eritema} = \frac{53{,}2027}{23{,}6846}$$

$$= 2.31$$

$$\%\text{Transmisi Pigmentasi} = \frac{19{,}0210}{6{,}9420}$$

$$= 2{,}74$$

LAMPIRAN 2.

Sampel: ekstrak etil asetat *Sargassum* sp.

Pelarut: etil asetat konsentrasi: 1g/L

panjang gelombang (nm)	Absorbansi	% Transmitansi	Faktor Eritema	%T x Fe	Faktor Pigmentasi	%T x Fp
292.5	1.3750	4.2170	1.1390	4.8032		
297.5	1.3500	4.4668	6.5100	29.0789		
302.5	1.3750	4.2169	10.0000	42.1690		
307.5	1.3750	4.2170	3.5770	15.0842		
312.5	1.4000	3.9810	0.9730	3.8735		
317.5	1.4250	3.7580	0.5670	2.1308		
322.5	1.4250	3.7580	0.4550	1.7099	1.0790	4.0549
327.5	1.4000	3.9810	0.2890	1.1505	1.0200	4.0606
332.5	1.4000	3.9810	0.1290	0.5135	0.9360	3.7262
337.5	1.3990	3.9900	0.0456	0.1819	0.7980	3.1840
342.5	1.4000	3.9810			0.6690	2.6633
347.5	1.5000	3.1620			0.5700	1.8023
352.5	1.5500	2.8180			0.4880	1.3752
357.5	1.6800	2.0890			0.4560	0.9526
362.5	1.8200	1.5140			0.3560	0.5390
367.5	1.9200	1.2020			0.3100	0.3726
372.5	1.2000	1.0000			0.2600	0.2600
			23.6846	100.6954	6.9420	22.9907

$$\% \text{ Transmisi Eritema} = \frac{100,6954}{23,6846}$$

$$= 4,25$$

$$\% \text{ Transmisi Pigmentasi} = \frac{22,9907}{6,9420}$$

$$= 3,31$$

LAMPIRAN 3.

Sampel: ekstrak metanol *Sargassum* sp.

Pelarut: metanol Konsentrasi: 1g/L

panjang gelombang (nm)	Absorbansi	% Transmitansi	Faktor Eritema	%T x Fe	Faktor Pigmentasi	%T x Fp
292.5	0.1520	70.4600	1.1390	80.2539		
297.5	0.1500	70.7900	6.5100	460.8429		
302.5	0.1500	70.7900	10.0000	707.9000		
307.5	0.1500	70.7900	3.5770	253.2158		
312.5	0.1500	70.7900	0.9730	68.8787		
317.5	0.1500	70.7900	0.5670	40.1379		
322.5	0.1500	70.7900	0.4550	32.2095	1.0790	76.3824
327.5	0.1500	70.7900	0.2890	20.4583	1.0200	72.2058
332.5	0.1500	70.7900	0.1290	9.1319	0.9360	66.2594
337.5	0.1500	70.7900	0.0456	3.2280	0.7980	56.4904
342.5	0.1500	70.7900			0.6690	47.3585
347.5	0.1500	70.7900			0.5700	40.3503
352.5	0.1500	70.7900			0.4880	34.5455
357.5	0.1510	70.6300			0.4560	32.2073
362.5	0.1520	70.4600			0.3560	25.0838
367.5	0.2240	59.7000			0.3100	18.5070
372.5	0.2250	59.5600			0.2600	15.4856
			23.6846	1676.2570	6.9420	484.8760

$$\% \text{ Transmisi Eritema} = \frac{1676{,}2570}{23{,}6846}$$

$$= 70{,}774$$

$$\% \text{ Transmisi Pigmentasi} = \frac{484{,}8760}{6{,}9420}$$

$$= 69{,}847$$

LAMPIRAN 4.

Perhitungan Koefisien Ekstinksi

$$A = \varepsilon . b . c$$

$$\varepsilon = \frac{A}{b.c} , \qquad b = 1 \text{ cm}$$

dengan A adalah absorbansi, c adalah tebal larutan (cm), b adalah konsentrasi (g/cm^3)

1. Ekstrak *n*-heksana

Konsentrasi (c):10^{-4} g/cm^3

Panjang gelombang (nm)	Absorbansi (abs)	ε (abs/g)cm^2
292,5	0,184	$0,184 \times 10^4$
297,5	0,170	$0,170 \times 10^4$
302,5	0.164	0.164×10^4
307,5	0,160	$0,160 \times 10^4$
312,5	0,160	$0,160 \times 10^4$
317,5	0,160	$0,160 \times 10^4$
322,5	0,155	$0,155 \times 10^4$
327,5	0,150	$0,150 \times 10^4$
332,5	0,145	$0,145 \times 10^4$
337,5	0,145	$0,145 \times 10^4$
342,5	0,145	$0,145 \times 10^4$
347,5	0,154	$0,154 \times 10^4$
352,5	0,165	$0,165 \times 10^4$

357,5	0,180	$0,180 \times 10^4$
362,5	0,195	$0,195 \times 10^4$
367,5	0,214	$0,214 \times 10^4$
372,5	0,225	$0,225 \times 10^4$
Total koefisien ekstinksi (ε):		$2,871 \times 10^4$

$$\varepsilon \text{ rata-rata} = \frac{2,871 \times 10^4}{17}$$

$$= 0,1688 \times 10^4$$

2. Ekstrak Etil Asetat

Konsentrasi (c):10^{-4} g/cm^3

Panjang gelombang (nm)	Absorbansi (abs)	ε (abs/g)cm^2
292,5	0,1375	$0,1375 \times 10^4$
297,5	0,1350	$0,1350 \times 10^4$
302,5	0,1375	0.1375×10^4
307,5	0,1375	$0,1375 \times 10^4$
312,5	0,1400	$0,1400 \times 10^4$
317,5	0,1425	$0,1425 \times 10^4$
322,5	0,1425	$0,1425 \times 10^4$
327,5	0,1400	$0,1400 \times 10^4$
332,5	0,1400	$0,1400 \times 10^4$
337,5	0,1399	$0,1399 \times 10^4$

342,5	0,1400	$0,1400 \times 10^4$
347,5	0,1500	$0,1500 \times 10^4$
352,5	0,1550	$0,1550 \times 10^4$
357,5	0,1680	$0,1680 \times 10^4$
362,5	0,1820	$0,1820 \times 10^4$
367,5	0,1920	$0,1920 \times 10^4$
372,5	0,2000	$0,2000 \times 10^4$
Total koefisien ekstinksi (ε):		$2,5794 \times 10^4$

$$\varepsilon \text{ rata-rata} = \frac{2,5794 \times 10^4}{17}$$

$$= 0,1517 \times 10$$

2. Ekstrak Metanol

Konsentrasi 10^{-4} g/cm^3

Panjang gelombang (nm)	Absorbansi (abs)	ε (abs/g)cm^2
292,5	0,152	$0,152 \times 10^4$
297,5	0,150	$0,150 \times 10^4$
302,5	0,150	0.150×10^4
307,5	0,150	$0,150 \times 10^4$
312,5	0,150	$0,150 \times 10^4$
317,5	0,150	$0,150 \times 10^4$
322,5	0,150	$0,150 \times 10^4$

327,5	0,150	$0,150 \times 10^4$
332,5	0,150	$0,150 \times 10^4$
337,5	0,150	$0,150 \times 10^4$
342,5	0,150	$0,150 \times 10^4$
347,5	0,150	$0,150 \times 10^4$
352,5	0,150	$0,150 \times 10^4$
357,5	0,151	$0,151 \times 10^4$
362,5	0,152	$0,152 \times 10^4$
367,5	0,224	$0,224 \times 10^4$
372,5	0,225	$0,225 \times 10^4$
Total koefisien ekstinksi (ε):		$2,704 \times 10^4$

$$\varepsilon \text{ rata-rata} = \frac{2,704 \times 10^4}{17}$$

$$= 0,159 \times 10^4$$