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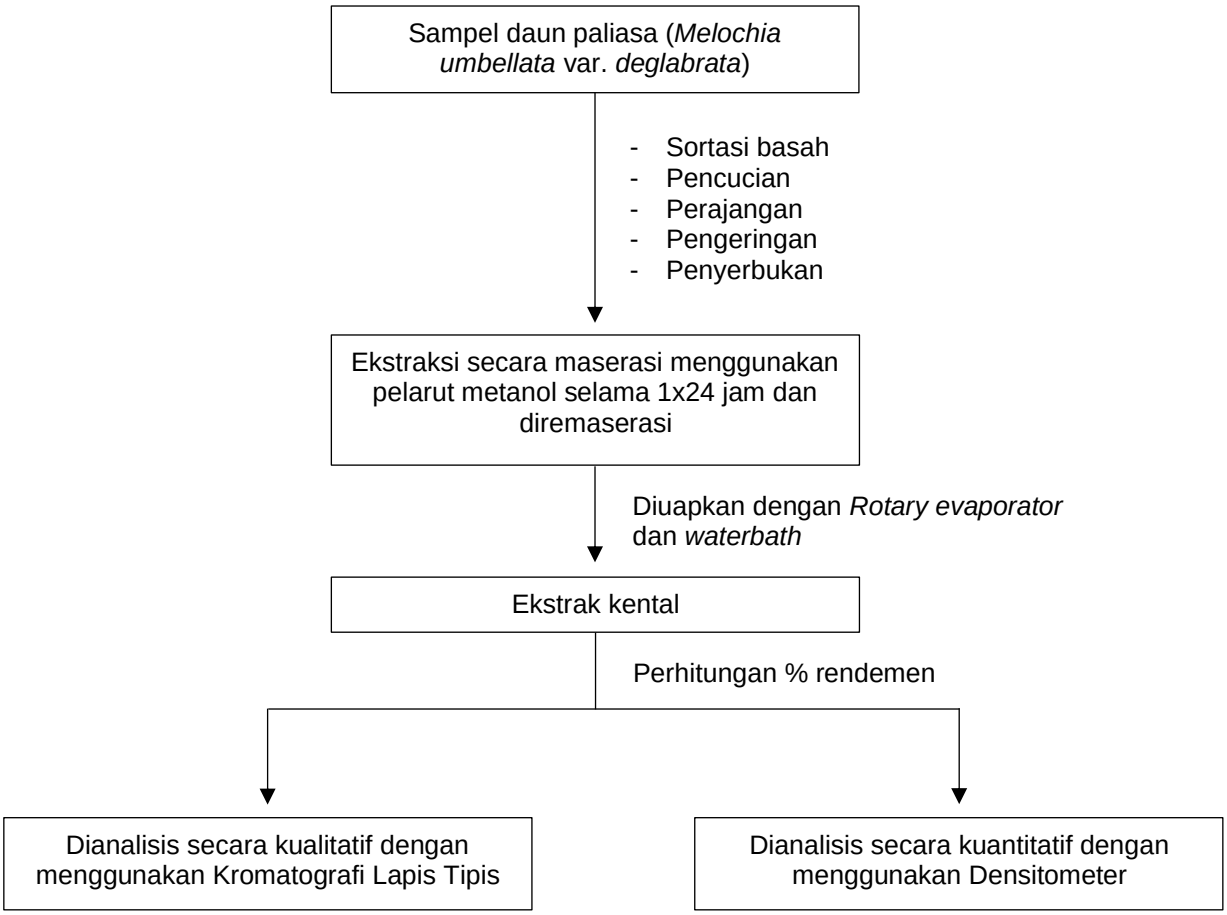
LAMPIRAN

Lampiran 1. Skema Kerja Penelitian



Lampiran 2. Perhitungan

1. Rendemen ekstrak

Tabel 7. Hasil persen rendemen ekstrak

Nama Sampel	Bobot Simplisia (g)	Bobot Ekstrak (g)	Rendemen (%)
M	300,03	39,69	13,2286

Ket:

M = Ekstrak metanol

$$\text{Rendemen (\%)} = \frac{\text{Bobot akhir ekstrak (g)}}{\text{Bobot awal simplisia}} \text{ x } 100\%$$

$$= \frac{39{,}69 \text{ gram}}{300{,}03 \text{ gram}} \text{ x } 100\%$$

$$= 13{,}2286\%$$

2. Susut pengeringan

$$\text{Susut} = \frac{\text{Berat sampel} - [\text{Berat konstan (wadah+sampel)} - \text{Berat konstan (wadah)}]}{\text{Berat sampel}} \text{ x } 100\%$$

$$= \frac{2{,}0002 - (62{,}7435 - 60{,}9009)}{2{,}0002} \text{ x } 100\%$$

$$= 7{,}8792\%$$

3. Nilai Rf

- **Rf Sampel**

  $\text{Rf} = \frac{1{,}9}{8{,}4}$

  $\text{Rf} = 0{,}22$

- **Rf Baku**

  $\text{Rf} = \frac{1{,}9}{8{,}4}$

  $\text{Rf} = 0{,}22$

4. Hasil persen kadar antidesmone

Sampel ekstrak *Melochia umbellata* var. *deglabrata* dibuat dalam konsentrasi 100.000 ppm dengan menimbang 500,1 mg sampel dalam 5 ml kloroform.

Replikasi 1

Luas area = 1345,3

$Y = 104{,}05x + 160{,}56$

$1345{,}3 = 104{,}05x + 160{,}56$

$X = \frac{1.184{,}74}{104{,}05}$

$X = 11{,}3862$ ppm

$\%\ \text{Kadar} = \frac{11{,}3862}{100.000} \times 100\%$

$\%\ \text{Kadar} = 0{,}0114\%$

Replikasi 2

Luas area = 1412

$Y = 104{,}05x + 160{,}56$

$1412 = 104{,}05x + 160{,}56$

$X = \frac{1.251{,}44}{104{,}05}$

$X = 12{,}0272$ ppm

$\%\ \text{Kadar} = \frac{12{,}0272}{100.000} \times 100\%$

$\%\ \text{Kadar} = 0{,}0120\%$

Replikasi 3

Luas area = 1396,4

$Y = 104{,}05x + 160{,}56$

$1396{,}4 = 104{,}05x + 160{,}56$

$X = \frac{1.235{,}84}{104{,}05}$

$X = 11{,}8773$ ppm

$\%\ \text{Kadar} = \frac{11{,}8773}{100.000} \text{ x } 100\%$

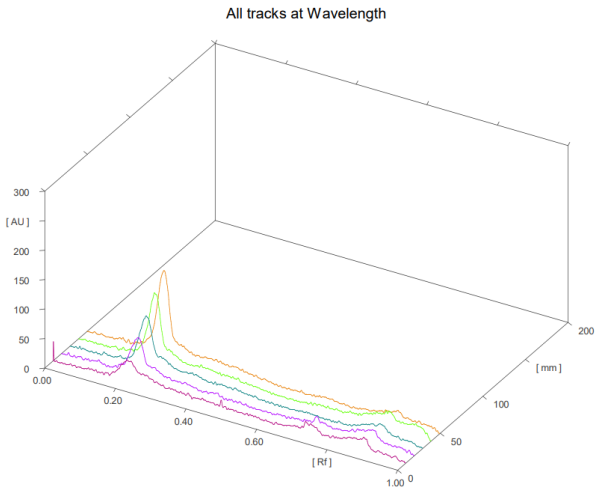
$\%\ \text{Kadar} = 0{,}0119\%$

5. Linearitas

Baku antidesmone dibuat dalam konsentrasi 1000 ppm dengan menimbang 1,0 mg baku antidesmone dalam 1 ml kloroform, lalu diencerkan menjadi konsentrasi 10, 20, 30, 40, dan 50 ppm.

Tabel 8. Data kurva baku antidesmone

Konsentrasi baku antidesmone (µg/ml)	Luas Area
10	933,7
20	2393,7
30	3457,8
40	4583,7
50	5041,1



Gambar 13. Densitogram linearitas

6. LOD dan LOQ

Tabel 9. Data LOD dan LOQ

Konsentrasi	AUC (Y)	Yi	(Yi-Y)	$(Yi-Y)^2$
10	933,7	1201,06	267,36	71481,370
20	2393,7	2241,56	-152,14	23146,580
30	3457,8	3282,06	-175,74	30884,548
40	4583,7	4322,56	-261,14	68194,100
50	5041,1	5363,06	321,96	103658,242
Jumlah $(Y-Yi)^2$				297364,838

Tabel 10. Hasil LOD dan LOQ

Persamaan Garis	Koefisien Korelasi	Simpangan Baku Residual	Batas Deteksi (µg/ml)	Batas Kuantitasi (µg/ml)
y = 104,05x + 160,56	0,9733	314,8358	9,0774	30,2581

$$Sy/x = \sqrt{\frac{\sum(Yi - Y)^2}{n - 2}}$$

$$Sy/x = \sqrt{\frac{297364,838}{5 - 2}}$$

$$Sy/x = 314,8358$$

$$LOD = \frac{3 \times S_y/x}{Sl}$$

$$= \frac{3 \times 314{,}8358}{104{,}05}$$

= 9,0774 µg/ml

$$LOQ = \frac{10 \times S_y/x}{Sl}$$

$$= \frac{10 \times 314{,}8358}{104{,}05}$$

= 30,2581 µg/ml

7. Akurasi

Sampel ekstrak *Melochia umbellata* var. *deglabrata* dibuat dalam konsentrasi 1,5 ppm dengan menimbang 100,0 mg sampel dalam 7,8 ml kloroform.

y = 104,05x + 160,56

Perhitungan konsentrasi sampel + baku 10 ppm

$X1 = \frac{1340{,}9 - 160{,}56}{104{,}05}$ = 11,3440

$X2 = \frac{1417{,}4 - 160{,}56}{104{,}05}$ = 12,0792

$X3 = \frac{1464{,}1 - 160{,}56}{104{,}05}$ = 12,5280

Perhitungan konsentrasi sampel + baku 30 ppm

$X1 = \frac{3650{,}6 - 160{,}56}{104{,}05}$ = 33,5420

$X2 = \frac{3947{,}9 - 160{,}56}{104{,}05}$ = 36,3992

$X3 = \frac{4007{,}7 - 160{,}56}{104{,}05}$ = 36,9740

Perhitungan konsentrasi sampel + baku 50 ppm

X1 = $\frac{6066,2 - 160,56}{104,05}$ = 56,7577

X2 = $\frac{6515,4 - 160,56}{104,05}$ = 61,0749

X3 = $\frac{6532,2 - 160,56}{104,05}$ = 61,2363

Perhitungan *persen recovery*

% *recovery* = $\frac{(C_F - C_A)}{C^* A}$ x 100%

Perhitungan *persen recovery* sampel + baku 10 ppm

% *recovery* X1 = $\frac{(11,3440 - 1,5)}{10}$ x 100% = 98,4400%

% *recovery* X2 = $\frac{(12,0792 - 1,5)}{10}$ x 100% = 105,7920%

% *recovery* X3 = $\frac{(12,5280 - 1,5)}{10}$ x 100% = 110,2800%

Perhitungan *persen recovery* sampel + baku 30 ppm

% *recovery* X1 = $\frac{(33,5420 - 1,5)}{30}$ x 100% = 106,8067%

% *recovery* X2 = $\frac{(36,3992 - 1,5)}{30}$ x 100% = 116,3307%

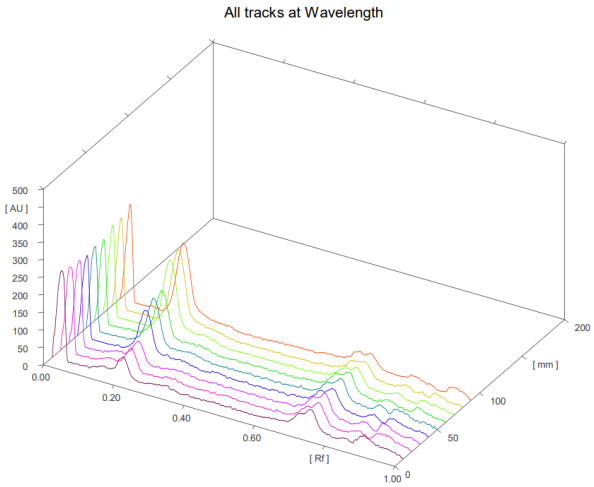
% *recovery* X3 = $\frac{(36,9740 - 1,5)}{30}$ x 100% = 118,2467%

Perhitungan *persen recovery* sampel + baku 50 ppm

% *recovery* X1 = $\frac{(56,7577 - 1,5)}{50}$ x 100% = 110,5154%

% *recovery* X2 = $\frac{(61,0749 - 1,5)}{50}$ x 100% = 119,1498%

% *recovery* X3 = $\frac{(61,2363 - 1,5)}{50}$ x 100% = 119,4726%



Gambar 14. Densitogram akurasi

8. Presisi

Tabel 11. Hasil presisi

Konsentrasi	Replikasi	AUC (X)	(X-Xi)	$(X-Xi)^2$
20 ppm	1	3398,2	-427,633	182870,268
	2	3659	-166,833	27833,361
	3	4208,9	383,067	146740,071
	4	3957,4	131,567	17309,788
	5	3841,6	15,767	248,588
	6	3889,	64,067	4104,538
Rata-Rata (Xi)		3825,8333	**Jumlah**	379106,613
		SD		275,3567
		RSD		0,0720

10 ppm = (untuk 0,001%) = 0,00001

RSD < $2^{(1-0,5 \log C)}$ x 0,67

RSD < $2^{(1-0,5 \log 0,00001)}$ x 0,67

RSD < $2^{(1-0,5 \times (-5))}$ x 0,67

RSD < 7,5802

Maka, untuk konsentrasi 20 ppm simpangan baku relatif yang diperbolehkan tidak boleh melebihi dari 7,58%.

Perhitungan simpangan baku (SD)

$$SD = \sqrt{\frac{\sum(X_i - \bar{X})^2}{n-1}}$$

$$= \sqrt{\frac{379106,613}{6-1}}$$

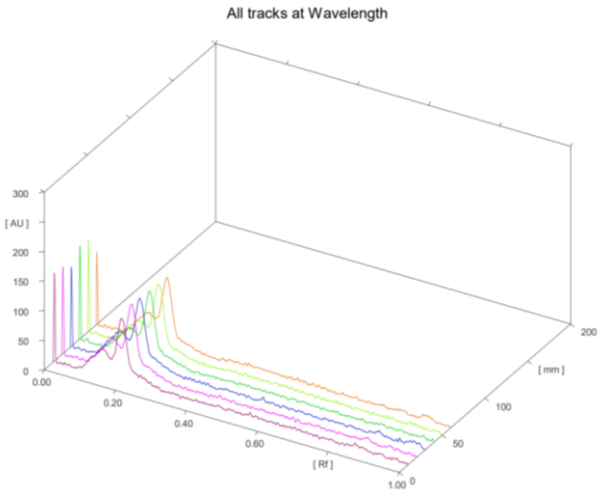
$$= 275,3567$$

Perhitungan simpangan baku relatif (RSD)

$$(RSD) = \frac{SD}{\bar{X}} \times 100\%$$

$$= \frac{275,3567}{3825,8333} \times 100\%$$

$$= 7,20\%$$

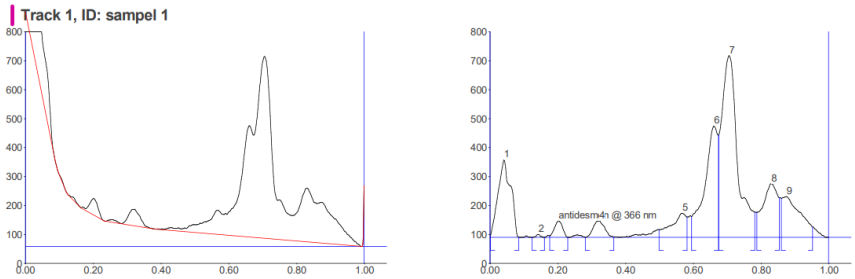


Gambar 15. Densitogram presisi

Lampiran 3. Hasil Analisis KLT-Densitometri

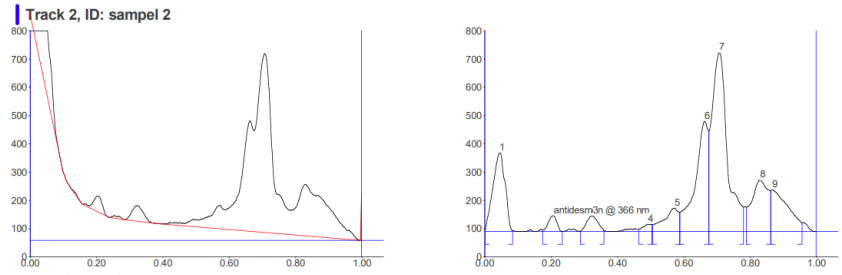
Lampiran 3.1 Analisis Kadar Antidesmone

a. Sampel Replikasi 1



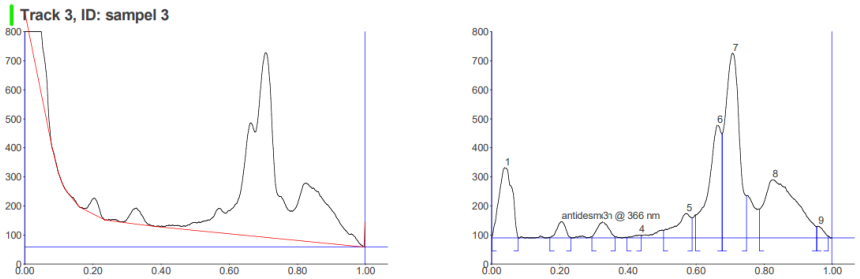
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.00	5.6	0.04	267.3	14.73	0.09	0.5	9766.9	12.92	unknown *
2	0.12	0.0	0.14	10.2	0.56	0.16	0.8	122.6	0.16	unknown *
3	0.18	5.3	0.20	57.2	3.15	0.23	0.1	1345.3	1.78	antidesmon
4	0.28	0.4	0.32	57.4	3.16	0.37	2.0	1890.0	2.50	unknown *
5	0.50	26.8	0.57	84.0	4.63	0.58	70.8	3639.7	4.82	unknown *
6	0.60	71.6	0.66	384.6	21.19	0.67	353.3	14472.2	19.15	unknown *
7	0.68	355.3	0.71	628.0	34.60	0.78	87.1	28825.4	38.14	unknown *
8	0.79	87.1	0.83	185.4	10.21	0.85	138.0	7975.2	10.55	unknown *
9	0.86	135.0	0.88	140.9	7.76	0.95	36.3	7547.9	9.99	unknown *

b. Sampel Replikasi 2



Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.00	4.4	0.04	279.5	15.08	0.08	3.6	9975.6	12.86	unknown *
2	0.18	5.8	0.21	55.6	3.00	0.23	0.5	1412.0	1.82	antidesmon
3	0.29	1.3	0.33	55.6	3.00	0.36	3.1	1852.9	2.39	unknown *
4	0.47	8.7	0.49	26.5	1.43	0.50	24.7	654.0	0.84	unknown *
5	0.51	25.0	0.57	83.1	4.49	0.59	68.7	3629.5	4.68	unknown *
6	0.59	68.8	0.66	390.2	21.06	0.68	357.3	14796.3	19.08	unknown *
7	0.68	357.5	0.71	632.9	34.16	0.78	86.7	28842.0	37.19	unknown *
8	0.79	86.9	0.83	182.0	9.82	0.86	144.4	8940.6	11.53	unknown *
9	0.86	145.1	0.87	147.3	7.95	0.96	30.9	7453.1	9.61	unknown *

c. Sampel Replikasi 3

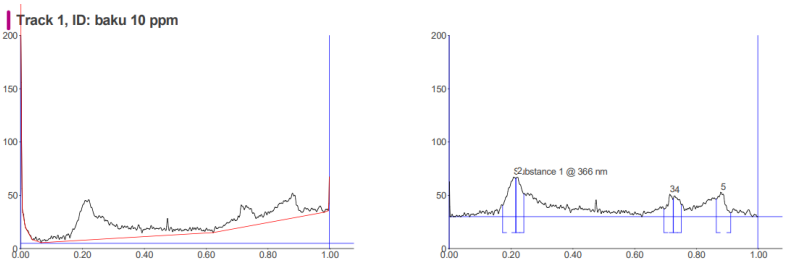


Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.00	4.0	0.04	242.1	14.11	0.08	0.9	9104.9	11.99	unknown *
2	0.17	2.2	0.21	56.2	3.28	0.23	0.6	1396.4	1.84	antidesmon
3	0.29	4.3	0.33	55.4	3.23	0.36	4.2	1809.5	2.38	unknown *
4	0.40	1.5	0.43	10.6	0.61	0.44	8.6	221.9	0.29	unknown *
5	0.51	26.4	0.57	84.5	4.92	0.59	69.6	3755.5	4.94	unknown *
6	0.60	79.1	0.66	389.2	22.69	0.68	358.7	14254.6	18.77	unknown *
7	0.68	359.4	0.71	635.9	37.06	0.75	145.3	25827.9	34.00	unknown *
8	0.79	99.3	0.83	200.9	11.71	0.96	38.8	18827.2	24.79	unknown *
9	0.96	39.0	0.96	40.9	2.38	0.99	6.0	760.1	1.00	unknown *

Lampiran 3.2 Validasi Metode Densitometri

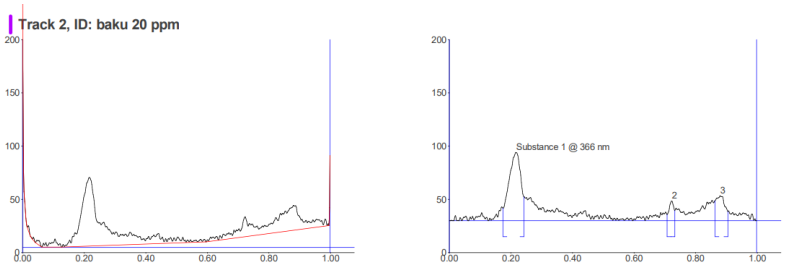
a. Linearitas

- Konsentrasi 10 ppm



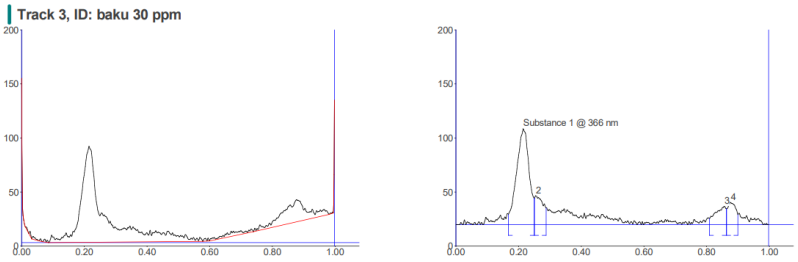
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.17	10.5	0.21	37.4	26.85	0.22	36.0	933.7	32.28	Substance 1
2	0.22	36.1	0.22	37.7	27.06	0.24	21.4	665.6	23.01	unknown *
3	0.70	7.3	0.71	21.0	15.11	0.73	16.3	360.0	12.45	unknown *
4	0.73	17.2	0.73	19.9	14.31	0.75	11.2	363.7	12.57	unknown *
5	0.87	16.7	0.88	23.2	16.67	0.91	3.7	569.2	19.68	unknown *

- Konsentrasi 20 ppm



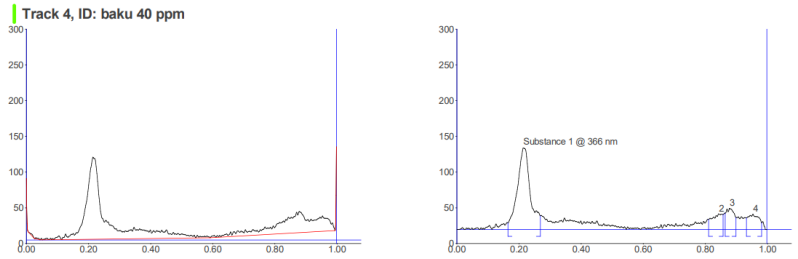
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.17	11.9	0.22	64.4	60.43	0.24	22.5	2393.7	71.59	Substance 1
2	0.71	5.8	0.72	18.7	17.55	0.73	9.6	283.3	8.47	unknown *
3	0.86	18.9	0.88	23.5	22.02	0.91	8.6	666.4	19.93	unknown *

- Konsentrasi 30 ppm



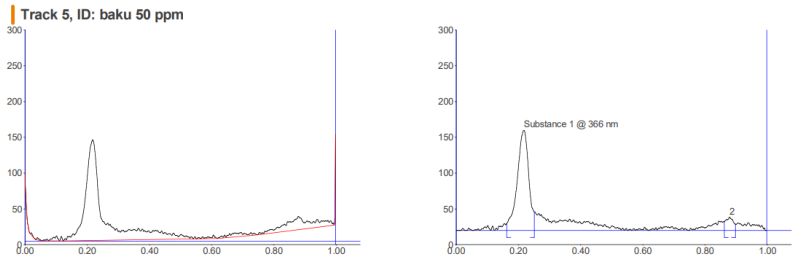
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.17	9.6	0.22	88.8	57.88	0.25	24.3	3457.8	65.90	Substance 1
2	0.25	24.8	0.26	27.0	17.61	0.29	15.6	712.5	13.58	unknown *
3	0.81	5.8	0.86	17.0	11.06	0.86	14.7	552.5	10.53	unknown *
4	0.87	14.7	0.88	20.6	13.44	0.90	9.4	524.6	10.00	unknown *

- Konsentrasi 40 ppm



Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.17	9.2	0.21	114.9	61.05	0.27	19.0	4583.7	67.44	Substance 1
2	0.81	14.1	0.85	22.2	11.80	0.86	20.8	728.8	10.72	unknown *
3	0.87	22.8	0.88	29.7	15.79	0.90	16.7	751.7	11.06	unknown *
4	0.93	16.1	0.96	21.4	11.36	0.98	9.3	732.1	10.77	unknown *

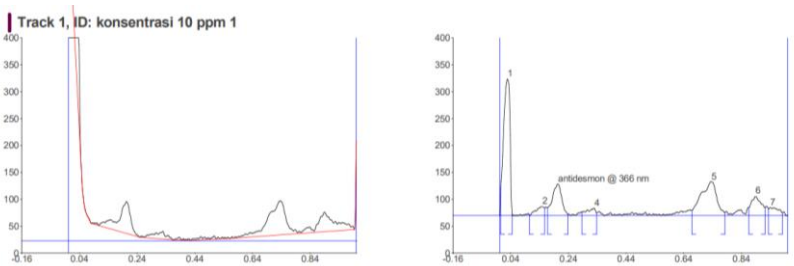
- Konsentrasi 50 ppm



Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.16	9.8	0.22	140.9	88.25	0.25	25.9	5041.1	91.88	Substance 1
2	0.86	12.2	0.88	18.8	11.75	0.90	8.9	445.8	8.12	unknown *

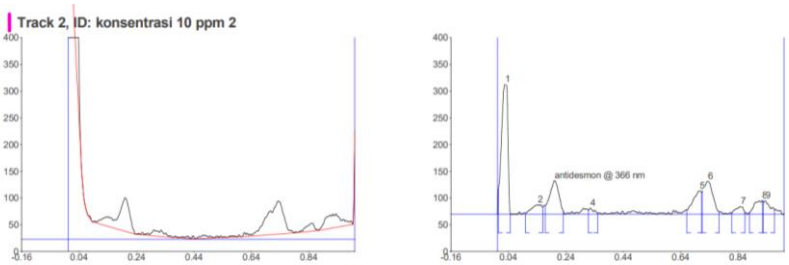
b. Akurasi

- Konsentrasi 10 ppm Replikasi 1



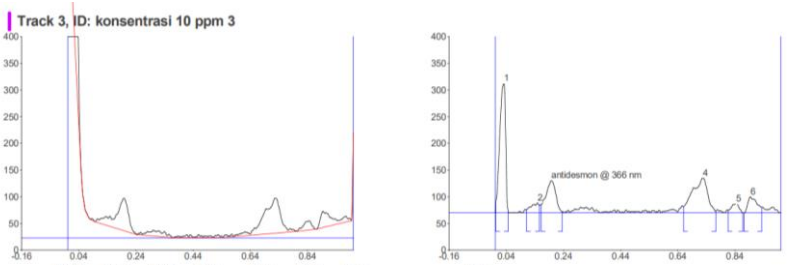
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.00	53.2	0.03	254.2	55.40	0.04	3.0	3971.5	41.48	unknown *
2	0.10	0.9	0.15	17.1	3.74	0.16	14.0	341.1	3.56	unknown *
3	0.17	14.6	0.20	58.9	12.85	0.24	2.6	1340.9	14.00	antidesmon
4	0.29	6.4	0.33	14.1	3.08	0.34	5.0	294.5	3.08	unknown *
5	0.67	9.5	0.74	63.0	13.73	0.78	5.7	2390.0	24.96	unknown *
6	0.87	14.7	0.89	36.4	7.93	0.92	15.1	879.4	9.18	unknown *
7	0.93	12.6	0.94	15.0	3.28	0.98	5.1	358.2	3.74	unknown *

- Konsentrasi 10 ppm Replikasi 2



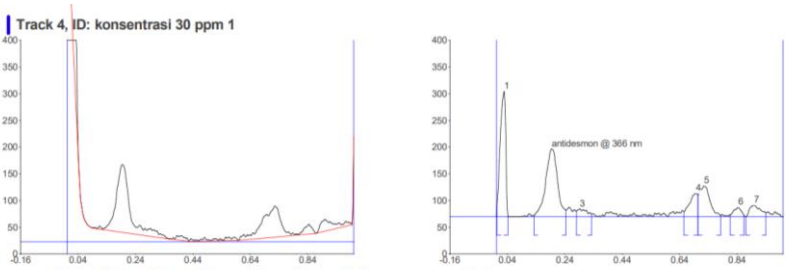
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.00	46.5	0.03	243.1	47.90	0.04	0.8	3780.1	40.47	unknown *
2	0.10	2.0	0.14	18.1	3.57	0.16	13.9	452.0	4.84	unknown *
3	0.17	16.3	0.20	62.9	12.39	0.23	6.3	1417.4	15.17	antidesmon
4	0.32	7.6	0.32	11.9	2.34	0.35	1.9	143.0	1.53	unknown *
5	0.66	8.4	0.71	44.1	8.69	0.71	40.9	911.6	9.76	unknown *
6	0.71	42.0	0.73	61.7	12.16	0.77	4.7	1426.4	15.27	unknown *
7	0.82	2.1	0.85	14.7	2.90	0.86	2.5	274.1	2.93	unknown *
8	0.88	3.1	0.92	25.8	5.09	0.93	25.4	517.1	5.54	unknown *
9	0.93	23.7	0.94	25.2	4.96	0.97	8.7	419.0	4.49	unknown *

- Konsentrasi 10 ppm Replikasi 3



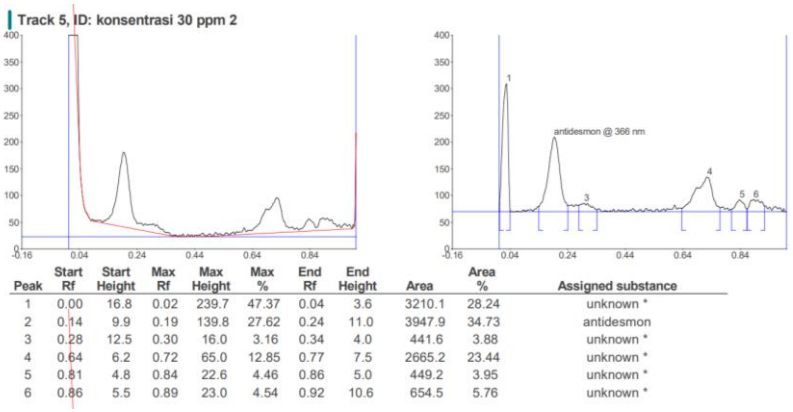
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.00	21.2	0.03	242.3	55.65	0.04	3.2	3498.6	39.84	unknown *
2	0.11	5.7	0.15	19.0	4.36	0.15	13.9	372.1	4.24	unknown *
3	0.16	15.9	0.20	60.7	13.94	0.23	3.1	1464.1	16.67	antidesmon
4	0.66	11.7	0.73	65.3	15.00	0.77	3.3	2435.2	27.73	unknown *
5	0.82	4.9	0.84	17.2	3.95	0.87	0.1	332.8	3.79	unknown *
6	0.87	0.1	0.89	30.9	7.10	0.93	10.6	678.6	7.73	unknown *

- Konsentrasi 30 ppm Replikasi 1



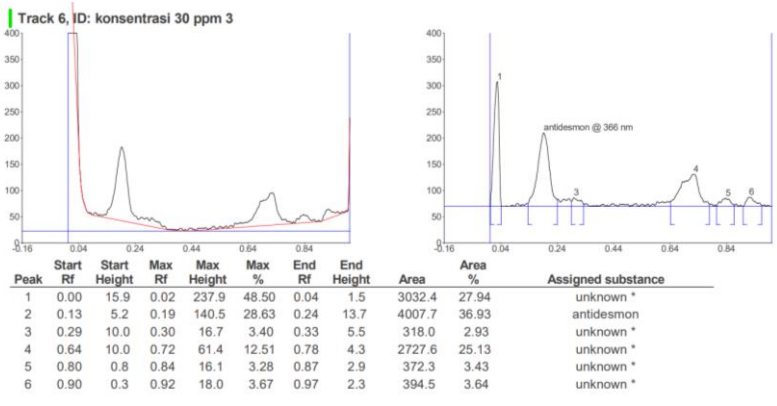
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.00	21.2	0.03	234.9	45.26	0.04	2.5	3139.7	30.20	unknown *
2	0.13	2.8	0.19	127.1	24.49	0.24	12.6	3650.6	35.11	antidesmon
3	0.28	10.2	0.29	14.8	2.85	0.33	5.1	351.2	3.38	unknown *
4	0.65	9.3	0.70	43.7	8.42	0.70	40.9	880.1	8.46	unknown *
5	0.70	41.1	0.72	58.1	11.19	0.78	2.5	1475.3	14.19	unknown *
6	0.82	4.1	0.84	18.2	3.50	0.86	2.7	326.3	3.14	unknown *
7	0.87	0.4	0.90	22.3	4.29	0.94	7.5	573.7	5.52	unknown *

- Konsentrasi 30 ppm Replikasi 2



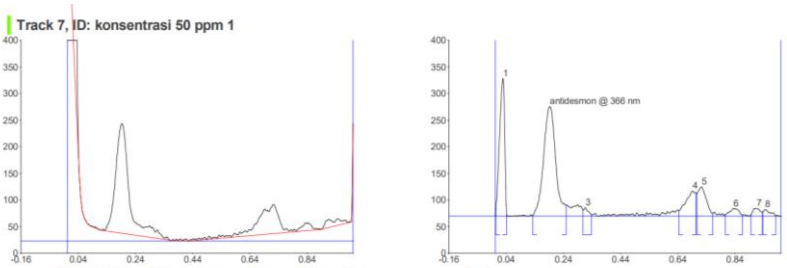
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.00	16.8	0.02	239.7	47.37	0.04	3.6	3210.1	28.24	unknown *
2	0.14	9.9	0.19	139.8	27.62	0.24	11.0	3947.9	34.73	antidesmon
3	0.28	12.5	0.30	16.0	3.16	0.34	4.0	441.6	3.88	unknown *
4	0.64	6.2	0.72	65.0	12.85	0.77	7.5	2665.2	23.44	unknown *
5	0.81	4.8	0.84	22.6	4.46	0.86	5.0	449.2	3.95	unknown *
6	0.86	5.5	0.89	23.0	4.54	0.92	10.6	654.5	5.76	unknown *

- Konsentrasi 30 ppm Replikasi 3



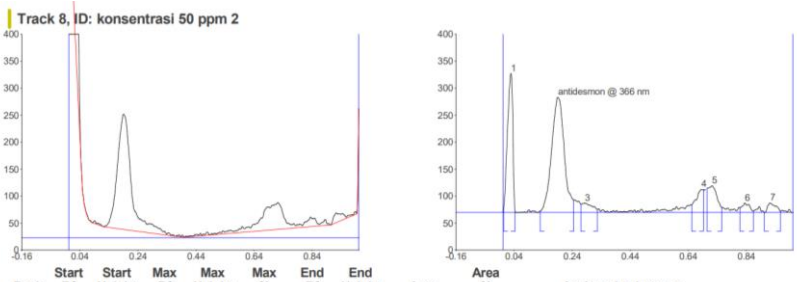
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.00	15.9	0.02	237.9	48.50	0.04	1.5	3032.4	27.94	unknown *
2	0.13	5.2	0.19	140.5	28.63	0.24	13.7	4007.7	36.93	antidesmon
3	0.29	10.0	0.30	16.7	3.40	0.33	5.5	318.0	2.93	unknown *
4	0.64	10.0	0.72	61.4	12.51	0.78	4.3	2727.6	25.13	unknown *
5	0.80	0.8	0.84	16.1	3.28	0.87	2.9	372.3	3.43	unknown *
6	0.90	0.3	0.92	18.0	3.67	0.97	2.3	394.5	3.64	unknown *

- Konsentrasi 50 ppm Replikasi 1



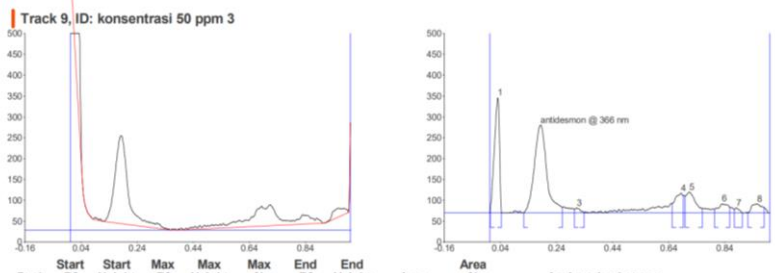
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.00	15.8	0.03	258.7	41.37	0.04	4.6	3240.9	25.67	unknown *
2	0.13	1.0	0.19	205.9	32.93	0.25	20.6	6066.2	48.05	antidesmon
3	0.31	11.4	0.32	15.9	2.55	0.34	2.6	186.2	1.48	unknown *
4	0.64	10.2	0.69	47.7	7.62	0.70	43.9	1150.1	9.11	unknown *
5	0.71	42.1	0.72	55.1	8.81	0.76	5.3	1163.9	9.22	unknown *
6	0.81	3.5	0.83	14.3	2.29	0.87	2.5	334.1	2.65	unknown *
7	0.90	3.3	0.92	15.3	2.44	0.94	7.7	274.0	2.17	unknown *
8	0.94	8.0	0.95	12.4	1.98	0.98	0.8	209.0	1.66	unknown *

- Konsentrasi 50 ppm Replikasi 2



Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.00	9.9	0.03	257.8	41.80	0.04	3.4	3300.9	25.76	unknown *
2	0.13	2.6	0.19	213.5	34.62	0.24	23.3	6515.4	50.85	antidesmon
3	0.27	15.3	0.28	17.4	2.83	0.33	5.7	461.0	3.60	unknown *
4	0.65	14.2	0.68	42.9	6.95	0.69	42.6	758.1	5.92	unknown *
5	0.70	45.0	0.72	49.6	8.04	0.75	9.4	1099.8	8.58	unknown *
6	0.82	9.4	0.83	17.5	2.83	0.86	2.7	326.8	2.55	unknown *
7	0.90	0.3	0.92	18.1	2.93	0.96	2.1	351.8	2.75	unknown *

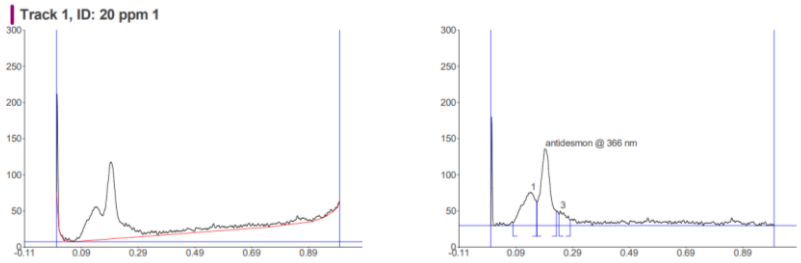
- Konsentrasi 50 ppm Replikasi 3



Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.00	13.2	0.03	276.5	42.30	0.04	2.7	3506.6	25.76	unknown *
2	0.12	0.6	0.18	210.5	32.21	0.26	13.1	6532.2	47.99	antidesmon
3	0.30	8.6	0.31	12.4	1.89	0.34	1.9	164.1	1.21	unknown *
4	0.65	22.5	0.68	47.7	7.29	0.69	42.0	949.6	6.98	unknown *
5	0.70	40.2	0.71	50.1	7.66	0.76	10.4	1209.6	8.89	unknown *
6	0.80	8.7	0.83	22.2	3.39	0.86	13.4	559.3	4.11	unknown *
7	0.87	7.9	0.88	12.5	1.91	0.90	0.1	136.7	1.00	unknown *
8	0.92	1.8	0.96	21.9	3.35	0.98	13.3	552.5	4.06	unknown *

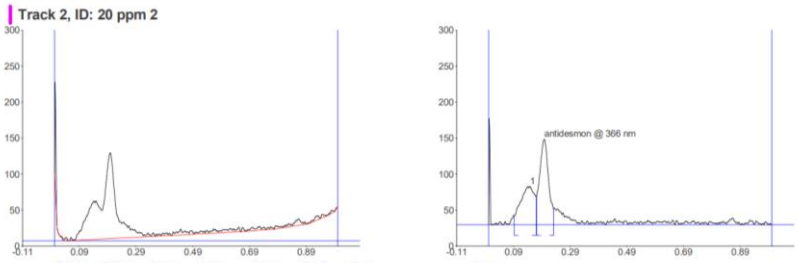
c. Presisi

- Replikasi 1



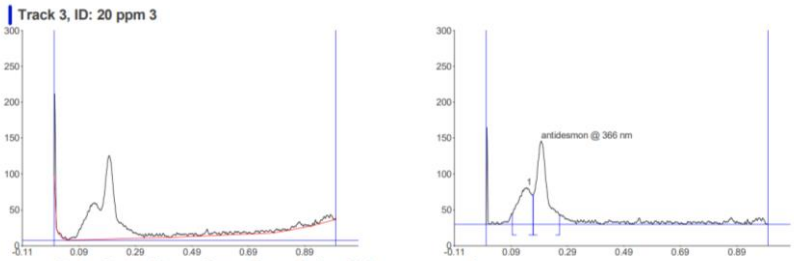
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.08	4.1	0.14	46.2	26.71	0.16	33.1	2121.7	35.32	unknown *
2	0.16	33.2	0.19	106.4	61.60	0.23	19.8	3398.2	56.58	antidesmon
3	0.24	15.8	0.25	20.2	11.70	0.28	8.0	486.6	8.10	unknown *

- Replikasi 2



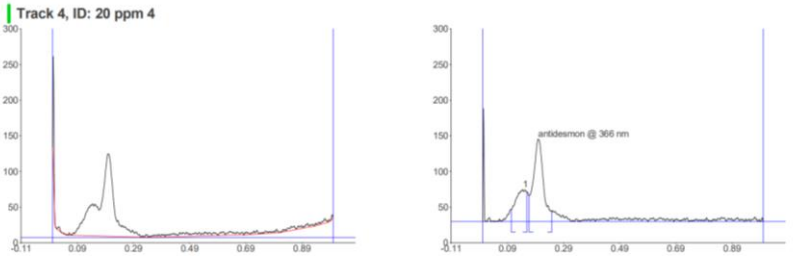
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.09	12.4	0.15	53.5	30.99	0.17	39.5	2538.4	40.96	unknown *
2	0.17	40.1	0.20	119.0	69.01	0.23	22.6	3659.0	59.04	antidesmon

- Replikasi 3



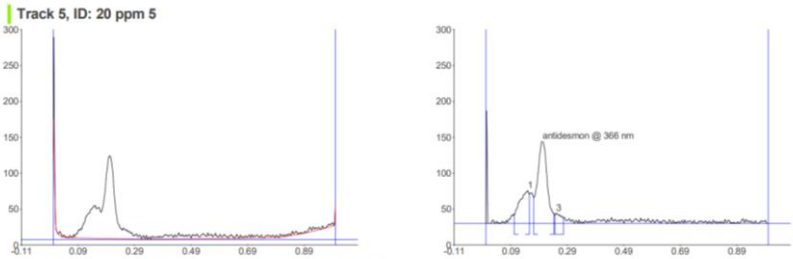
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.09	14.7	0.14	51.2	30.58	0.17	40.3	2378.2	36.10	unknown *
2	0.17	41.0	0.20	116.3	69.42	0.26	12.8	4208.9	63.90	antidesmon

- Replikasi 4



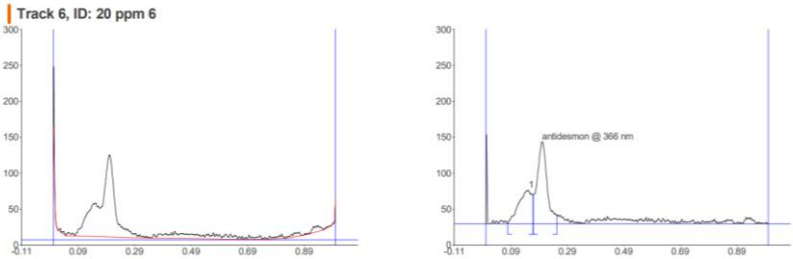
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.10	17.0	0.14	44.8	27.90	0.16	41.1	1665.6	29.62	unknown *
2	0.17	36.4	0.20	115.8	72.10	0.25	14.0	3957.4	70.38	antidesmon

- Replikasi 5



Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.10	12.2	0.15	45.7	26.08	0.15	41.1	1526.8	26.89	unknown *
2	0.17	36.5	0.20	114.9	65.55	0.24	14.2	3841.6	67.67	antidesmon
3	0.24	11.6	0.25	14.7	8.37	0.28	7.7	308.7	5.44	unknown *

- Replikasi 6



Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.08	0.9	0.15	46.7	29.00	0.17	39.4	2142.9	35.52	unknown *
2	0.17	39.8	0.20	114.3	71.00	0.25	11.4	3889.9	64.48	antidesmon

Lampiran 4. Dokumentasi Penelitian

Gambar 16. Pengumpulan sampel

Gambar 17. Pencucian sampel

Gambar 18. Perajangan sampel

Gambar 19. Pengeringan sampel

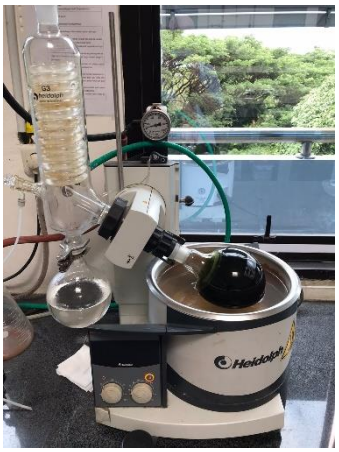
Gambar 20. Penyerbukan sampel

Gambar 21. Penimbangan sampel

Gambar 22. Susut pengeringan sampel

Gambar 23. Ekstraksi sampel

Gambar 24. Penyaringan sampel



Gambar 25. Penguapan pelarut

Gambar 26. Hasil ekstrak

Gambar 27. Penimbangan ekstrak

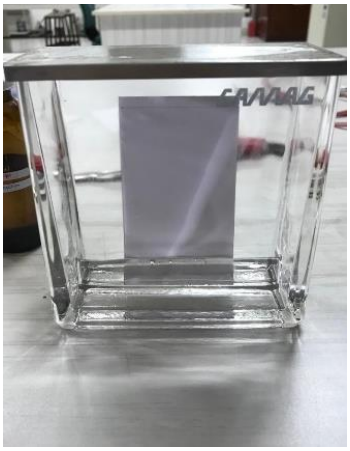
Gambar 28. Penimbangan baku

Gambar 29. Pembuatan larutan uji

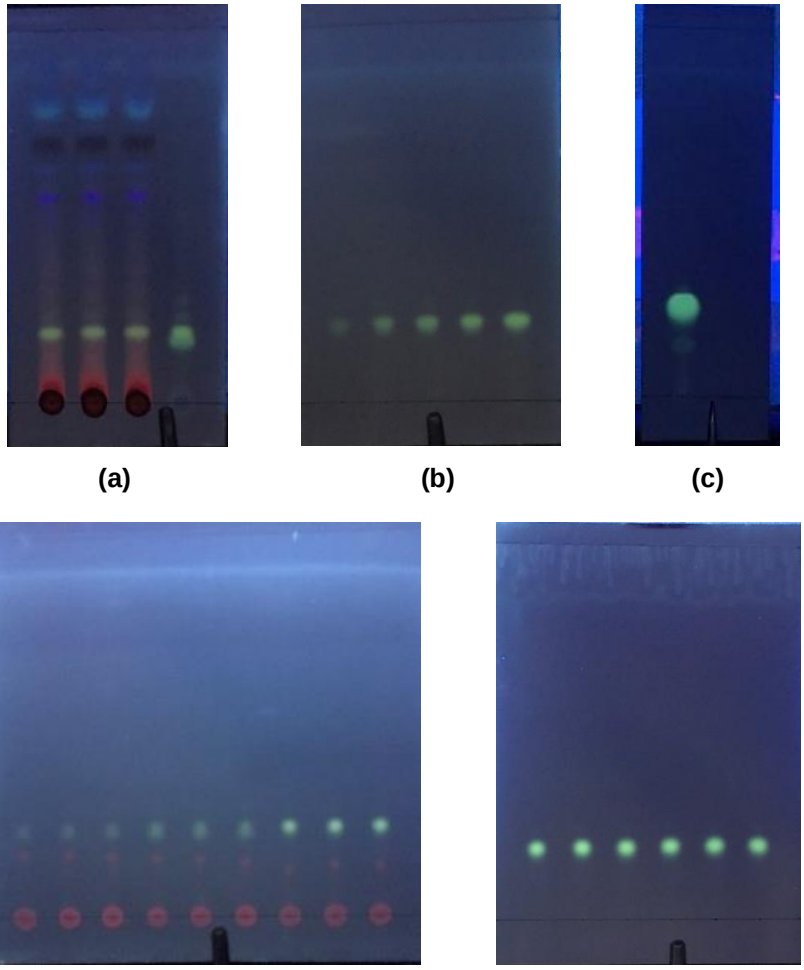
Gambar 30. Pembuatan larutan baku

Gambar 31. Penjenuhan *chamber*

Gambar 32. Penotolan sampel



Gambar 33. Elusi



(a) **(b)** **(c)**

(d) **(e)**

Gambar 34. Profil KLT (a) Sampel ekstrak *Melochia umbellata* var. *deglabrata*, (b) Linearitas, (c) LOD dan LOQ, (d) Akurasi, dan (e) Presisi

Ket:

Fase gerak : KLT Silica gel 60 RP-18 F_{254}S

Fase diam : Metanol : Aquades (4:1)

Lampiran 5. Determinasi Tanaman

LABORATORIUM FARMAKOGNOSI
FAKULTAS FARMASI
UNIVERSITAS HASANUDDIN
KAMPUS UNHAS TAMALANREA, JL. PERINTIS KEMERDEKAAN KM 10
Telp. 0411-588566, 586200, 580216, Ext.1093, Fax. (0411)585188,
MAKASSAR 90245

No : 001/SKIT/Farmakognosi/VI/2023
Lampiran : -
Hal : Hasil Identifikasi Tanaman

Kepada Yth.
Nurul Azizah Hamid (N011191089)
Fakultas Farmasi
Universitas Hasanuddin

Dengan Hormat,

Bersama ini, kami sampaikan hasil identifikasi tanaman Paliasa (*Melochia umbellata* (Houtt.) Stapf) varian deglabrata yang saudara kirimkan. Identifikasi dilakukan oleh kepala laboratorium Farmakognosi Fakultas Farmasi Universitas Hasanuddin dengan hasil sebagai berikut:

Kingdom	: Plantae
Divisi	: Spermatophyta
Kelas	: Magnoliopsida
Ordo	: Malvales
Famili	: Malvaceae
Genus	: Melochia
Spesies	: *Melochia umbellata* var. *deglabrata*

Kunci determinasi : 1b - 6b - 10a - 11a - Melochia - 1b - *Melochia umbellata* (Houtt.) Stapf var. *deglabrata*

Sumber pustaka :

1. Backer, C.A., and Van De Brink, R.C.B. 1963. *Flora of Java* (Spermatophytes Only). 1963.
2. http://www.theplantlist.org/tpl1.1/record/tro-50196180

Makassar, 23 Juni 2023
Kepala Laboratorium Farmakognosi

Abdul Rahim, S.Si., M.Si., Ph.D., Apt
NIP. 197111120081121001