

LAMPIRAN

LAMPIRAN 2 BUKTI DETERMINASI HERBA PEGAGAN

HERBARIUM JATINANGOR
LABORATORIUM TAKSONOMI TUMBUHAN
JURUSAN BIOLOGI FMIPA UNPAD
Gedung D2-212, Jl. Raya Bandung Sumedang Km 21 Jatinangor
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LEMBAR IDENTIFIKASI TUMBUHAN

No.30/HB/01/2023.

Herbarium Jatinangor, Laboratorium Taksonomi Tumbuhan, Jurusan Biologi FMIPA UNPAD, dengan ini menerangkan bahwa:

Nama : Julius Muliawan Jaya Putra
NIP/NIM : 211FF04001
Instansi : Universitas Bhakti Kencana.
Telah melakukan identifikasi tumbuhan, dengan No. Koleksi: -
Tanggal Koleksi : 09 Januari 2023
Lokasi : Bandung.

Hasil Identifikasi

Nama Ilmiah : *Centella asiatica* (L.) Urb.
Sinonim : *Centella boninensis* Nakai ex Tuyama
Nama Lokal : Herba Pegagan
Suku/Famili : Apiaceae

Klasifikasi (Hirarki Taksonomi)

Kingdom : Plantae
Divisi : Magnoliophyta
Class : Magnoliopsida
Ordo : Apiales
Famili : Apiaceae
Genus : *Centella*
Species : *Centella asiatica* (L.) Urb.

Referensi:

Backer, C. A. and Bakhuizen v/d Brink R. C Jr. 1963. *Flora of Java*. Wolter-Noordhoff NV. Groningen.
Cronquist, Arthur. 1981. *An Integrated System of Classification of Flowering Plants*. Columbia University Press. New York
The Plant List. *Website Dunia Tumbuhan*. <http://www.theplantlist.org/tpl1.1/record/kew-158489>.

Jatinangor, 10 Januari 2023.

Identifikator,

LABORATORIUM TAKSONOMI TUMBUHAN
JURUSAN BIOLOGI FMIPA-UNPAD

Drs. Joko Kusmoro, M.P.
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LAMPIRAN 3 BUKTI DETERMINASI TEMULAWAK

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LEMBAR IDENTIFIKASI TUMBUHAN

No.31/HB/01/2023.

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NIP/NIM : 211FF04001
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Telah melakukan identifikasi tumbuhan, dengan No. Koleksi: -
Tanggal Koleksi : 09 Januari 2023
Lokasi : Bandung.

Hasil Identifikasi

Nama Ilmiah : *Curcuma zanthorrhiza* Roxb.
Sinonim : -
Nama Lokal : Temu lawak
Suku/Famili : Zingiberaceae

Klasifikasi (Hirarki Taksonomi)

Kingdom : Plantae
Divisi : Magnoliophyta
Class : Liliopsida
Ordo : Zingiberales
Famili : Zingiberaceae
Genus : *Curcuma*
Species : *Curcuma zanthorrhiza* Roxb.

Referensi:

Backer, C. A. and Bakhuizen v/d Brink R. C Jr. 1963. *Flora of Java*. Wolter-Noordhoff NV. Groningen.
Cronquist, Arthur. 1981. *An Integrated System of Classification of Flowering Plants*. Columbia University Press. New York
The Plant List. *Website DuniaTumbuhan*. <http://www.theplantlist.org/tpl1.1/record/kew-158489>.

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LAMPIRAN 4 KARAKTERISASI SIMPLISIA

- **Kadar abu Total**

- **Herba Pegagan**

$$\text{Kadar abu total} = \frac{\text{Bobot krus} + \text{abu sisa pijar} - \text{bobot krus kosong}}{\text{Bobot simplisia}} \times 100\%$$

$$\text{Krus 1} = \frac{39,23 - 39,24}{2} \times 100\% = 10,5 \%$$

$$\text{Krus 2} = \frac{43,61 - 43,61}{2} \times 100\% = 11 \%$$

$$\text{Krus 3} = \frac{38,59 - 38,60}{2} \times 100\% = 10 \%$$

$$\frac{10,5 + 11 + 10}{3} = 10,5 \%$$

Tidak lebih dari 11,6 %

- **Rimpang temulawak**

$$\text{Kadar abu total} = \frac{\text{Bobot krus} + \text{abu sisa pijar} - \text{bobot krus kosong}}{\text{Bobot simplisia}} \times 100\%$$

$$\text{Krus 1} = \frac{39,31 - 39,28}{2} \times 100\% = 1,5\%$$

$$\text{Krus 2} = \frac{43,32 - 43,70}{2} \times 100\% = 0,5\%$$

$$\text{Krus 3} = \frac{38,66 - 38,64}{2} \times 100\% = 1\%$$

$$\frac{1,5 + 0,5 + 1}{3} = 3\%$$

Tidak lebih dari 4,8%

- **Kadar Abu Tidak Larut Asam**

- **Herba Pegagan**

$$\text{Kadar abu tidak larut asam} = \frac{\text{Bobot krus} + \text{abu sisa pijar} - \text{bobot krus kosong}}{\text{Bobot simplisia}} \times 100\%$$

$$\text{Krus 1} = \frac{39,26 - 39,23}{2} \times 100\% = 1,5 \%$$

$$\text{Krus 2} = \frac{43,64 - 43,61}{2} \times 100\% = 1,5 \%$$

$$\text{Krus 3} = \frac{38,62 - 38,59}{2} \times 100\% = 1,5 \%$$

$$\frac{1,5 + 1,5 + 1,5}{3} = 1,5 \%$$

Tidak lebih dari 2,3 %

- Rimpang Temulawak

$$\text{Kadar abu tidak larut asam} = \frac{\text{Bobot krus} + \text{abu sisa pijar} - \text{bobot krus kosong}}{\text{Bobot simplisia}} \times 100\%$$

$$\text{Krus 1} = \frac{39,33 - 39,28}{2} \times 100\% = 2,5\%$$

$$\text{Krus 2} = \frac{43,72 - 43,70}{2} \times 100\% = 1\%$$

$$\text{Krus 3} = \frac{38,68 - 38,64}{2} \times 100\% = 1\%$$

$$\frac{2,5 + 1 + 1}{3} = 1,5\%$$

Tidak lebih dari 0,7%

- **Kadar Air**

$$\text{Kadar air} = \frac{\text{Volume akhir} - \text{Volume awal}}{\text{Bobot simplisia}} \times 100\%$$

- **Herba Pegagan**

$$\text{Toluen 1} = \frac{2,05 - 2}{2} \times 100\% = 2,5\%$$

$$\text{Toluen 1} = \frac{2,15 - 2}{2} \times 100\% = 7,5\%$$

$$\text{Toluen 1} = \frac{14,1 - 14}{2} \times 100\% = 0,5\%$$

$$\frac{2,5 + 7,5 + 0,5}{3} = 3,5 \%$$

- **Rimpang Temulawak**

$$\text{Toluen 1} = \frac{2,05 - 2}{2} \times 100\% = 2,5\%$$

$$\text{Toluen 1} = \frac{14,1 - 14}{2} \times 100\% = 5\%$$

$$\text{Toluen 1} = \frac{2,1 - 2}{2} \times 100\% = 5\%$$

$$\frac{2,5 + 7,5 + 0,5}{3} = 33 \%$$

- **Kadar Sari Larut Air**

- **Herba Pegagan**

$$\text{Kadar sari larut air} = \frac{(\text{Bobot cawan} + \text{sari}) - (\text{Bobot cawan kosong})}{\text{Bobot simplisia}} \times \frac{\text{Volume pelarut}}{\text{Volume yang diuapkan}} \times 100\%$$

$$\text{Cawan 1} = \frac{32,84 - 32,51}{5} \times \frac{100}{20} \times 100\% = 33 \%$$

$$\text{Cawan 2} = \frac{34,94 - 34,59}{5} \times \frac{100}{20} \times 100\% = 35 \%$$

$$\text{Cawan 3} = \frac{31,80 - 31,47}{5} \times \frac{100}{20} \times 100\% = 33 \%$$

$$\frac{33 + 35 + 33}{3} = 33 \%$$

Tidak kurang dari 15,4 %

- **Rimpang Temulawak**

$$\text{Kadar sari larut air} = \frac{(\text{Bobot cawan+sari})-(\text{Bobot cawan kosong})}{\text{Bobot simplisia}} \times \frac{\text{Volume pelarut}}{\text{Volume yang diuapkan}} \times 100\%$$

$$\text{Cawan 1} = \frac{33,77-33,59}{5} \times \frac{100}{20} \times 100\% = 18\%$$

$$\text{Cawan 2} = \frac{38,09-37,94}{5} \times \frac{100}{20} \times 100\% = 15\%$$

$$\text{Cawan 3} = \frac{34,08-33,64}{5} \times \frac{100}{20} \times 100\% = 13\%$$

$$\frac{18+15+13}{3} = 15\%$$

Tidak kurang dari 9,1%

• **Kadar Sari Larut Etanol**

- **Herba Pegagan**

$$\text{Kadar sari larut air} = \frac{(\text{Bobot cawan+sari})-(\text{Bobot cawan kosong})}{\text{Bobot simplisia}} \times \frac{\text{Volume pelarut}}{\text{Volume yang diuapkan}} \times 100\%$$

$$\text{Cawan 1} = \frac{80,51-80,22}{5} \times \frac{100}{20} \times 100\% = 29 \%$$

$$\text{Cawan 2} = \frac{79,04-78,69}{5} \times \frac{100}{20} \times 100\% = 35 \%$$

$$\text{Cawan 3} = \frac{81,69-81,39}{5} \times \frac{100}{20} \times 100\% = 30 \%$$

$$\frac{29+35+30}{3} = 31,3 \%$$

Tidak kurang dari 4,4 %

- **Rimpang Temulawak**

Kadar sari larut air =

$$\frac{(\text{Bobot cawan+sari})-(\text{Bobot cawan kosong})}{\text{Bobot simplisia}} \times \frac{\text{Volume pelarut}}{\text{Volume yang diuapkan}} \times 100\%$$

$$\text{Cawan 1} = \frac{31,90-31,69}{5} \times \frac{100}{20} \times 100\% = 21\%$$

$$\text{Cawan 2} = \frac{32,93-33,73}{5} \times \frac{100}{20} \times 100\% = 20\%$$

$$\text{Cawan 3} = \frac{35,35-35,15}{5} \times \frac{100}{20} \times 100\% = 20\%$$

$$\frac{21+20+20}{3} = 20\%$$

Tidak kurang dari 3,6%

• **Susut Pengeringan**

- Herba Pegagan : 6,810%

- Rimpang Temulawak : 4,311%

LAMPIRAN 5 HASIL SKRINING FITOKIMIA



Pemeriksaan Flavonoid dengan penambahan amil alkohol, ditandai dengan terjadinya perubahan warna kuning atau jingga.



Pemeriksaan saponin dengan penambahan NaOH, ditandai dengan terbentuknya busa yang stabil



Pemeriksaan Tanin dengan penambahan pereaksi gelatin, ditandai dengan terbentuknya endapan putih.



Pemeriksaan Kuinnon dengan penambahan NaOH, ditandai terbentuknya warna merah



Pemeriksaan Triterpenoid/Steroid, ditandai dengan terjadinya perubahan warna merah (triteropenoid) dan warna hijau (steroid)

LAMPIRAN 6 UJI AKTIVITAS ANTIOKSIDAN

1. Pembandingan Vitamin C

konsentrasi	absorbansi	%inhibisi	rata-rata	SD	IC50
4	0,749	8,770	7,917	1,477	7,598
	0,749	8,770			
	0,770	6,212			
5	0,687	16,322	16,443	0,122	
	0,685	16,565			
	0,686	16,443			
6	0,568	30,816	30,572	0,211	
	0,571	30,451			
	0,571	30,451			
7	0,483	41,169	41,332	0,186	
	0,482	41,291			
	0,480	41,535			
8	0,360	56,151	57,004	0,741	
	0,350	57,369			
	0,349	57,491			
9	0,274	66,626	66,585	0,070	
	0,275	66,504			
	0,274	66,626			

Perhitungan %Inhibisi herba pegagan

$$\% \text{Inhibisi} = \frac{\text{Absorban Kontrol} - \text{Absorban Sampel}}{\text{Absorban Kontrol}} \times 100\%$$

➤ 4 PPM

$$\begin{aligned} \% \text{Inhibisi} &= \frac{0,821 - 0,756}{0,821} \times 100\% \\ &= 7,9175\% \end{aligned}$$

➤ 5 PPM

$$\begin{aligned} \% \text{Inhibisi} &= \frac{0,821 - 0,686}{0,821} \times 100\% \\ &= 16,443\% \end{aligned}$$

➤ 6 PPM

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,821 - 0,570}{0,821} \times 100\% \\ &= 30,572\%\end{aligned}$$

➤ 7 PPM

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,821 - 0,481}{0,821} \times 100\% \\ &= 41,332\%\end{aligned}$$

➤ 8 PPM

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,821 - 0,353}{0,821} \times 100\% \\ &= 57,004\%\end{aligned}$$

➤ 9 PPM

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,821 - 0,274}{0,821} \times 100\% \\ &= 66,585\%\end{aligned}$$

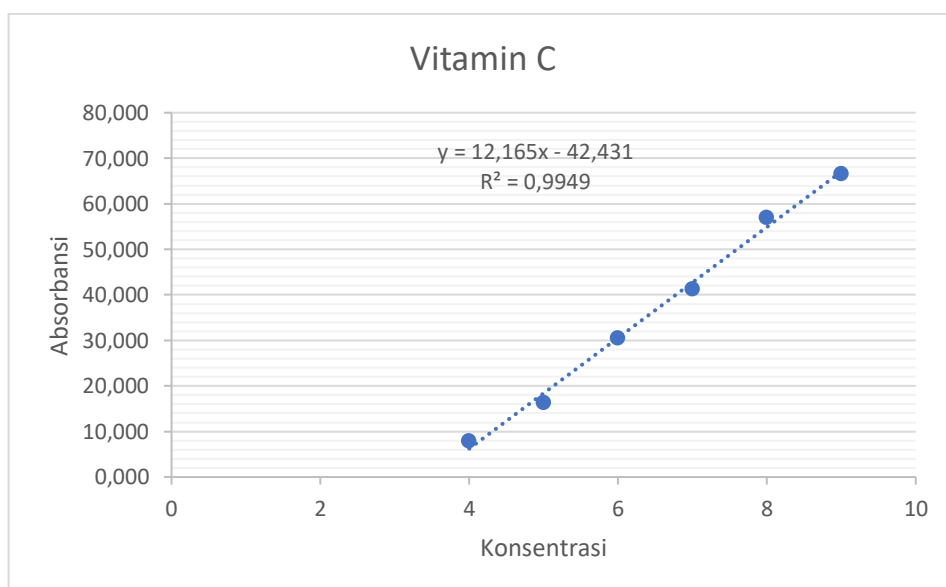
Perhitungan Nilai IC₅₀

$$y = (50 - b) / a$$

$$y = 50; a = 12,165; b = 42,431$$

$$50 = 12,165x - 42,431$$

$$\begin{aligned}\text{IC}_{50} &= \frac{50 + 42,431}{12,165} \\ &= 7,598\end{aligned}$$



2. Ekstrak Tunggal

- Ekstrak Herba Pegagan

Konsentrasi	absorbansi	%inhibisi	rata-rata	SD	IC50
50	0,794	7,243	7,087	0,376	96,109
	0,793	7,360			
	0,799	6,659			
60	0,700	18,224	18,146	0,067	
	0,701	18,107			
	0,701	18,107			
70	0,625	26,986	27,064	0,135	
	0,625	26,986			
	0,623	27,220			
80	0,551	35,631	35,709	0,135	
	0,551	35,631			
	0,549	35,864			
90	0,467	45,444	45,444	0,117	
	0,468	45,327			
	0,466	45,561			
100	0,410	52,103	52,181	0,067	
	0,409	52,220			
	0,409	52,220			

Perhitungan %Inhibisi herba pegagan

$$\% \text{Inhibisi} = \frac{\text{Absorban Kontrol} - \text{Absorban Sampel}}{\text{Absorban Kontrol}} \times 100\%$$

➤ 50 ppm

$$\begin{aligned} \% \text{Inhibisi} &= \frac{0,856 - 0,795}{0,856} \times 100\% \\ &= 7,087\% \end{aligned}$$

➤ 60 ppm

$$\begin{aligned} \% \text{Inhibisi} &= \frac{0,856 - 0,701}{0,856} \times 100\% \\ &= 18,148\% \end{aligned}$$

➤ 70 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,856 - 0,624}{0,856} \times 100\% \\ &= 27,064\%\end{aligned}$$

➤ 80 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,856 - 0,550}{0,856} \times 100\% \\ &= 35,709\%\end{aligned}$$

➤ 90 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,856 - 0,467}{0,856} \times 100\% \\ &= 45,444\%\end{aligned}$$

➤ 100 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,856 - 0,409}{0,856} \times 100\% \\ &= 52,181\%\end{aligned}$$

Perhitungan Nilai IC₅₀

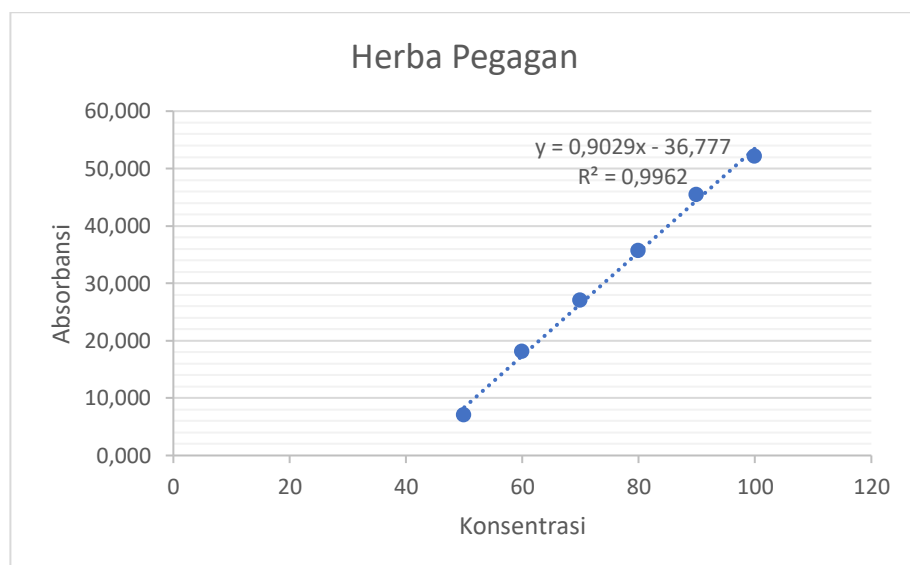
$$y = (50 - b) / a$$

$$y = 50; a = 0,9029; b = 36,777$$

$$50 = 0,9029x + 36,777$$

$$\text{IC}_{50} = \frac{50 + 36,777}{0,9029}$$

$$= 96,109$$



- **Ekstrak Rimpang Temulawak**

konsentrasi	Absorbansi	%inhibisi	rata-rata	SD	IC50
30PPM	0,715	15,385	15,227	0,181	94,151
	0,716	15,266			
	0,718	15,030			
40PPM	0,666	21,183	20,986	0,181	
	0,669	20,828			
	0,668	20,947			
50PPM	0,619	26,746	26,312	0,416	
	0,623	26,272			
	0,626	25,917			
60PPM	0,575	31,953	31,637	0,362	
	0,577	31,716			
	0,581	31,243			
70PPM	0,539	36,213	36,174	0,181	
	0,538	36,331			
	0,541	35,976			
80PPM	0,487	42,367	42,288	0,246	
	0,486	42,485			
	0,490	42,012			
90PPM	0,444	47,456	47,298	0,181	
	0,445	47,337			
	0,447	47,101			
100PPM	0,388	54,083	53,886	0,181	
	0,391	53,728			
	0,390	53,846			

Perhitungan %Inhibisi rimpang temulawak

$$\%Inhibisi = \frac{Absorban\ Kontrol - Absorban\ Sampel}{Absorban\ Kontrol} \times 100\%$$

➤ 30 ppm

$$\begin{aligned}\%Inhibisi &= \frac{0,845 - 0,716}{0,845} \times 100\% \\ &= 15,227\%\end{aligned}$$

- 40 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,845 - 0,668}{0,845} \times 100\% \\ &= 20,986\%\end{aligned}$$
- 50 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,845 - 0,623}{0,845} \times 100\% \\ &= 26,312\%\end{aligned}$$
- 60 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,845 - 0,578}{0,845} \times 100\% \\ &= 31,637\%\end{aligned}$$
- 70 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,845 - 0,539}{0,845} \times 100\% \\ &= 36,174\%\end{aligned}$$
- 80 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,845 - 0,488}{0,845} \times 100\% \\ &= 42,288\%\end{aligned}$$
- 90 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,845 - 0,445}{0,845} \times 100\% \\ &= 47,298\%\end{aligned}$$
- 100 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,845 - 0,390}{0,845} \times 100\% \\ &= 53,886\%\end{aligned}$$

Perhitungan Nilai IC₅₀

$$\begin{aligned}y &= (50-b)/a \\ y &= 50; a = 0,5412; b = 0,9543 \\ 50 &= 0,5412x + 0,9543 \\ \text{IC}_{50} &= \frac{50 + 0,9543}{0,5412} \\ &= 94,151\end{aligned}$$

3. Ekstrak Kombinasi

- Ekstrak Kombinasi Herba Pegagan dan Rimpang Temulawak (1:1)

Konsentrasi	absorbansi	%Inhibisi	rata-rata	SD	IC50
50	0,420	50,413	49,705	0,613	41,884
	0,429	49,351			
	0,429	49,351			
100	0,38	55,136	54,900	0,236	
	0,382	54,900			
	0,384	54,664			
150	0,350	58,678	58,520	0,273	
	0,350	58,678			
	0,354	58,205			
200	0,331	60,921	60,960	0,068	
	0,331	60,921			
	0,330	61,039			
250	0,294	65,289	65,368	0,136	
	0,292	65,525			
	0,294	65,289			
300	0,271	68,005	68,201	0,180	
	0,269	68,241			
	0,268	68,359			

Perhitungan %Inhibisi Kombinasi Herba Pegagan dan Rimpang Temulawak (1:1)

$$\%Inhibisi = \frac{Absorban\ Kontrol - Absorban\ Sampel}{Absorban\ Kontrol} \times 100\%$$

➤ 50 ppm

$$\begin{aligned} \%Inhibisi &= \frac{0,847 - 0,426}{0,847} \times 100\% \\ &= 49,705\% \end{aligned}$$

➤ 100 ppm

$$\begin{aligned} \%Inhibisi &= \frac{0,847 - 0,382}{0,847} \times 100\% \\ &= 54,900\% \end{aligned}$$

➤ 150 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,847 - 0,351}{0,847} \times 100\% \\ &= 58,520\%\end{aligned}$$

➤ 200 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,847 - 0,331}{0,847} \times 100\% \\ &= 60,960\%\end{aligned}$$

➤ 250 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,847 - 0,293}{0,847} \times 100\% \\ &= 65,368\%\end{aligned}$$

➤ 300 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,847 - 0,269}{0,847} \times 100\% \\ &= 68,201\%\end{aligned}$$

Perhitungan Nilai IC₅₀

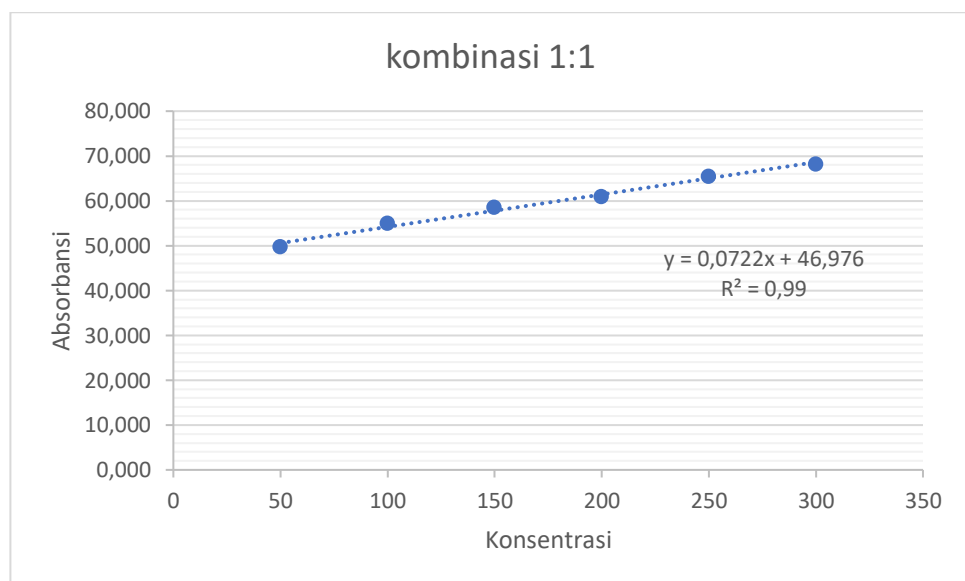
$$y = (50 - b)/a$$

$$y = 50; a = 0,0722; b = 46,976$$

$$50 = 0,0722x + 46,976$$

$$\text{IC}_{50} = \frac{50 - 46,976}{0,0722}$$

$$= 41,884$$



- **Ekstrak Kombinasi Herba Pegagan dan Rimpang Temulawak (1:2)**

Konsentrasi	absorbansi	%Inhibisi	rata-rata	SD	IC50
50	0,461	46,270	46,115	0,269	71,074
	0,461	46,270			
	0,465	45,804			
100	0,380	55,711	55,245	0,534	
	0,383	55,361			
	0,389	54,662			
150	0,334	61,072	61,228	0,178	
	0,333	61,189			
	0,331	61,422			
200	0,280	67,366	67,366	0,233	
	0,282	67,133			
	0,278	67,599			
250	0,216	74,825	74,942	0,117	
	0,214	75,058			
	0,215	74,942			
300	0,159	81,469	81,624	0,135	
	0,157	81,702			
	0,157	81,702			

Perhitungan %Inhibisi Kombinasi Herba Pegagan dan Rimpang Temulawak (1:2)

$$\%Inhibisi = \frac{Absorban\ Kontrol - Absorban\ Sampel}{Absorban\ Kontrol} \times 100\%$$

➤ 50 ppm

$$\begin{aligned}\%Inhibisi &= \frac{0,858 - 0,462}{0,858} \times 100\% \\ &= 46,115\%\end{aligned}$$

➤ 100 ppm

$$\begin{aligned}\%Inhibisi &= \frac{0,858 - 0,384}{0,858} \times 100\% \\ &= 55,245\%\end{aligned}$$

➤ 150 ppm

$$\begin{aligned}\%Inhibisi &= \frac{0,858 - 0,333}{0,858} \times 100\% \\ &= 61,228\%\end{aligned}$$

➤ 200 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,858 - 0,280}{0,858} \times 100\% \\ &= 67,366\%\end{aligned}$$

➤ 250 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,858 - 0,215}{0,858} \times 100\% \\ &= 74,942\%\end{aligned}$$

➤ 300 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,858 - 0,158}{0,858} \times 100\% \\ &= 81,624\%\end{aligned}$$

Perhitungan Nilai IC₅₀

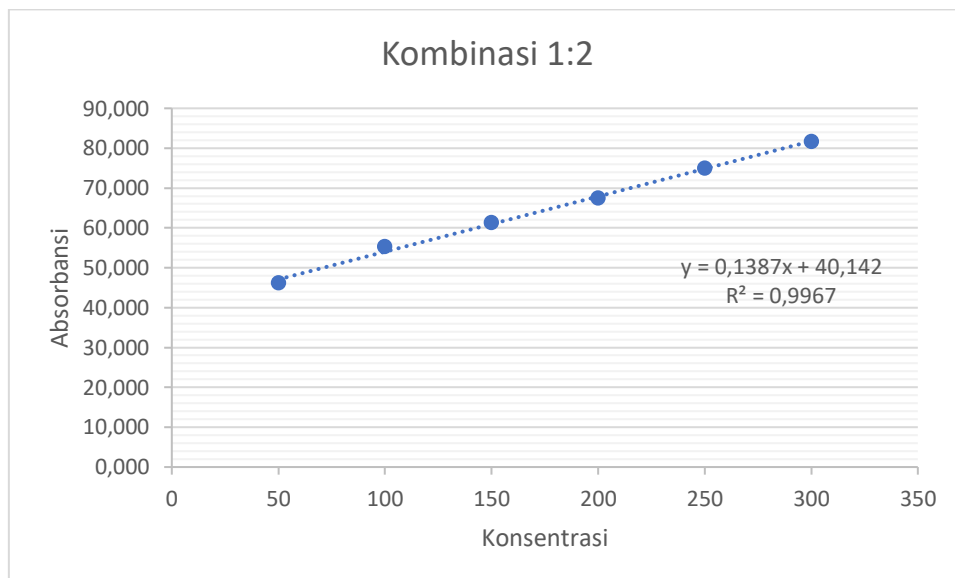
$$y = (50 - b)/a$$

$$y = 50; a = 0,1387; b = 40,142$$

$$50 = 0,1387x + 40,142$$

$$\text{IC}_{50} = \frac{50 - 40,142}{0,1387}$$

$$= 71,074$$



- **Ekstrak Kombinasi Herba Pegagan dan Rimpang Temulawak (2:1)**

konsentrasi	absorbansi	%Inhibisi	rata-rata	SD	IC50
50	0,413	51,469	51,234	0,204	26,335
	0,416	51,116			
	0,416	51,116			
100	0,365	57,109	57,148	0,068	
	0,365	57,109			
	0,364	57,227			
150	0,329	61,340	61,496	0,136	
	0,327	61,575			
	0,327	61,575			
200	0,296	65,217	65,296	0,136	
	0,296	65,217			
	0,294	65,452			
250	0,256	69,918	69,996	0,068	
	0,255	70,035			
	0,255	70,035			
300	0,229	73,090	73,717	0,543	
	0,221	74,031			
	0,221	74,031			

Perhitungan %Inhibisi Kombinasi Herba Pegagan dan Rimpang Temulawak (2:1)

$$\%Inhibisi = \frac{Absorban\ Kontrol - Absorban\ Sampel}{Absorban\ Kontrol} \times 100\%$$

➤ 50 ppm

$$\begin{aligned}\%Inhibisi &= \frac{0,851 - 0,415}{0,851} \times 100\% \\ &= 51,234\%\end{aligned}$$

➤ 100ppm

$$\begin{aligned}\%Inhibisi &= \frac{0,851 - 0,365}{0,851} \times 100\% \\ &= 57,148\%\end{aligned}$$

➤ 150 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,851 - 0,328}{0,851} \times 100\% \\ &= 61,496\%\end{aligned}$$

➤ 200 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,851 - 0,295}{0,851} \times 100\% \\ &= 65,296\%\end{aligned}$$

➤ 250 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,851 - 0,255}{0,851} \times 100\% \\ &= 69,996\%\end{aligned}$$

➤ 300 ppm

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,851 - 0,224}{0,851} \times 100\% \\ &= 73,717\%\end{aligned}$$

Perhitungan Nilai IC₅₀

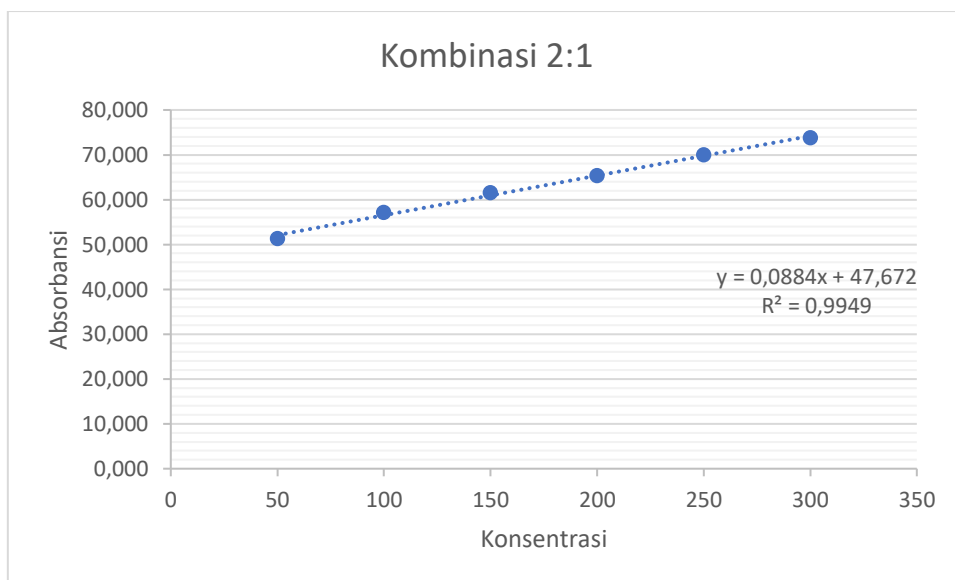
$$y = (50 - b)/a$$

$$y = 50; a = 0,0884; b = 47,672$$

$$50 = 0,0884x + 47,672$$

$$\text{IC}_{50} = \frac{50 - 47,672}{0,0884}$$

$$= 26,335$$



LAMPIRAN 7 BUKTI CEK PLAGIARISME

Mae Maelani			
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LAMPIRAN 8 KARTU BIMBINGAN



No. Dok. 02.64.00/FRM-03/AKD-SPMI



KARTU BIMBINGAN TUGAS AKHIR I/TUGAS AKHIR II

Pembimbing Utama	: Dewi Kumia, M.Si
Nama Mahasiswa	: Mae Maelani
NPM	: 191FF03009
Bidang Ilmu	: Biologi Farmasi

No	Hari/Tanggal	Waktu	Tempat	Materi	Paraf Dosen
1.	Jumat/07 april 2023	11.00	Rumah dosen	Laporan penelitian	
2.	Sabtu/15 april 2023	18.17	Whats App	Laporan Kemajuan TA2	
3.	Selasa/23 mei 2023	12.00	Offline (ruang dosen)	Laporan Penelitian	
4.	Kamis/08 juni 2023	08.30	Offline (lab 1)	Laporan Penelitian	
5.	Kamis/08 juni 2023	12.00	Offline (lab 1)	Pemantauan ekstrak	
6.	Jum'at/09 juni 2023	09.45	Whats App	Pemantauan ekstrak	
7.	Kamis/15 juni 2023	10.00	Offline (lab 1)	Laporan hasil penelitian	
8.	Kamis/22 juni 2023	17.14	Whats'App	Laporan Pemantauan ekstrak	
9.	Jum'at/23 juni 2023	11.00	Offline (lab 2)	Laporan Pemantauan Ekstrak	
10.	Senin/03 juli 2023	12.00	Whats'App	Penampak bercak KLT	
11.	Rabu/05 juli 2023	13.30	Offline (kantor lab)	Uji aktivitas antioksidan herba pegagan	
12.	Jum'at/07 juli 2023	13.30	Offline (kantor lab)	Uji aktivitas antioksidan rimpang temulawak	
13.	Sabtu/08 juli 2023	18.00	Whats'App	Uji aktivitas antioksidan kombinasi 1:1	
14.	Senin/10 juli 2023	17.50	Whats'App	Uji aktivitas antioksidan kombinasi 1:1, 1:2, 2:1	
15.					
16.					

Catatan : Kartu ini harus dibawa setiap kali melakukan bimbingan dan harus diisi oleh dosen pembimbing.

Jl. Soekarno Hatta No 754 Bandung

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KARTU BIMBINGAN TUGAS AKHIR I/TUGAS AKHIR II

Pembimbing Serta	: apt. Asep Roni, M.Si
Nama Mahasiswa	: Mae Maelani
NPM	: 191FF03009
Bidang Ilmu	: Biologi Farmasi

No	Hari/Tanggal	Waktu	Tempat	Materi	Paraf Dosen
1.	Senin/17 april 2023	09.00	zoom	Presentasi laporan kemajuan	A
2	Selasa/23 mei 2023	12.00	Offline (ruang dosen)	Data karakterisasi dan skrining	A
3	Selasa/23 mei 2023	14.00	Offline (ruang dosen)	Laporan kemajuan Ta2	A
4	Senin/05 juni 2023	14.30	Offline (ruang dosen)	Laporan penelitian	A
5	Selasa/06 juni 2023	08.00	Offline (ruang dosen)	KLT	A
6	Selasa/06 juni 2023	15.00	Offline (ruang dosen)	Prosedur DPPH	A
7	Kamis./08 juni 2023	10.30	Offline (ruang dosen)	Pemantauan Ekstrak	A
8	Selasa/13 juni 2023	08.00	Offline (lobby)	Prosedur DPPH	A
9	Rabu/14 juni 2023	13.30	Offline (ruang dosen)	Konsentrasi vit C + DPPH	A
10	Rabu/21 juni 2023	09.30	Offline (ruang dosen)	Uji aktivitas	A
11	Senin/10 juli 2023	14.00	Offline (ruang dosen)	KLT, uji antioksidan	A
12					
13					
14					
15					
16					

Catatan: Kartu ini harus dibawa setiap kali melakukan bimbingan dan harus diisi oleh dosen pembimbing.

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LAMPIRAN 9 DAFTAR RIWAYAT HIDUP

DAFTAR RIWAYAT HIDUP



Nama : Mae Maelani
Tempat/Tanggal Lahir : Subang/05 Mei 2001
Jenis Kelamin : Perempuan
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Kewarganegaraan : Indonesia
Alamat : Jln. Sutaatmadja Gang Panglejar 1 Rt/Rw:32/08 Kel.Karanganyar
Kec.Subang, Kab.Subang
Telepon : 089630496290
Email : maemaelani5@gmail.com

PENDIDIKAN

TK : TK Sekar Wangi
SD : SDN Salep
SMP : SMP Negeri 3 Subang
SMA : SMK Bhakti Kencana Subang
S1 : Bhakti Kencana University