Lampiran 1.1 Perhitungan uji aktivitas antioksidan

a. Pembuatan Larutan induk DPPH

Konsetrasi Larutan DPPH 5 mg dalam 50 ml

Konsentrasi = 5mg

Volume = 50 ml= 0,05 L

Ppm $= \frac{mg}{L}$

x $= \frac{5mg}{0{,}005\ L}$

x = 100 mg/L

b. Penyiapan larutan stok sampel uji (1000 ppm)

Larutan stok sampel uji = 50 mg

Volume = 50 ml = 0,05 liter

Ppm $= \frac{mg}{L}$

x $= \frac{5mg}{0{,}005\ L}$

x = 1000 mg/L

c. Perhitungan pengenceran larutan stok sampel uji

Perhitungan pengenceran larutan stok ekstrak dan minyak atsiri daun cengkeh 1000 ppm dengan konsentrasi (10 ppm, 20 ppm, 30 ppm , 40 ppm , 50 ppm) dalam labu ukur 5 ml.

10 ppm = $\frac{10\ ppm \times 5\ ml}{1000\ ppm}$ = 0,05 ml

20 ppm = $\frac{20\ ppm \times 5\ ml}{1000\ ppm}$ = 0,1 ml

30 ppm = $\frac{30\ ppm \times 5\ ml}{1000\ ppm}$ = 0,15 ml

40 ppm = $\frac{40\ ppm \times 5\ ml}{1000\ ppm}$ = 0,2 ml

50 ppm = $\frac{50\ ppm \times 5\ ml}{1000\ ppm}$ = 0,25 ml

d. Perhitungan nilai IC50 minyak atsiri daun cengkeh

Perhitungan nilai IC50 dengan konsentrasi (10 ppm, 20 ppm, 30 ppm , 40 ppm , 50 ppm)

10 ppm = $\frac{0,304 \times 0,074}{0,304}$ x100%

= 75,657

20 ppm = $\frac{0,304-0,178}{0,304}$ x100%

= 41,447

30ppm = $\frac{0,304-0,18}{0,304}$ x100%

=40,789

40ppm = $\frac{0,304-0}{0,304}$ x100%

= 100

50ppm = $\frac{0,304 \times 0,037}{0,304}$ x100%

=87,8228

y= 0,829 x + 44,276

50= 0,829 x +44,276

x= $\frac{50-44,276}{0,829}$

= $\frac{5,724}{0,829}$

= 6,904 < 50 (sangat kuat)

e. Perhitungan nilai IC50 ekstrak daun cengkeh

Perhitungan nilai IC50 dengan konsentrasi (10 ppm, 20 ppm, 30 ppm , 40 ppm , 50 ppm)

10 ppm = $\frac{0,304-(-0,056)}{0,304}$ x100%

= 118,421

20 ppm = $\frac{0,304-0,142}{0,304}$ x100%

= 53,289

30ppm = $\frac{0,304-0,108}{0,304}$ x100%

= 64,473

40ppm = $\frac{0,304-(-0,026)}{0,304}$ x100%

= 108,552

50ppm = $\frac{0,304 \times 0,037}{0,304}$ x100%

=87,8228

y= 0,,2303 x + 82,488

50= 0,2303 x +823,488

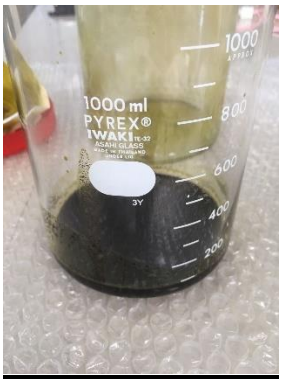
x= $\frac{50-823,488}{0,2303}$

= -141,068 < 50 (sangat kuat

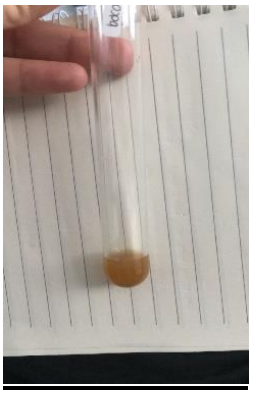
= 6,904 < 50 (sangat kuat)

Lampiran

NO.	**Gambar Sampel**	**Ket**
1.	Daun cengkeh 	Pengeringan

2.	simplisia 	Daun cengkeh yang sudah di blender
3. 4.	Ekstrak  <u>Meserasi</u> 	Hasil rotari Meserasi

Lampiran

NO.	Gambar Sampel	Ket
1.	Alkaloid (Mayer) 	+
2.	Alkaloid (bochardat) 	+

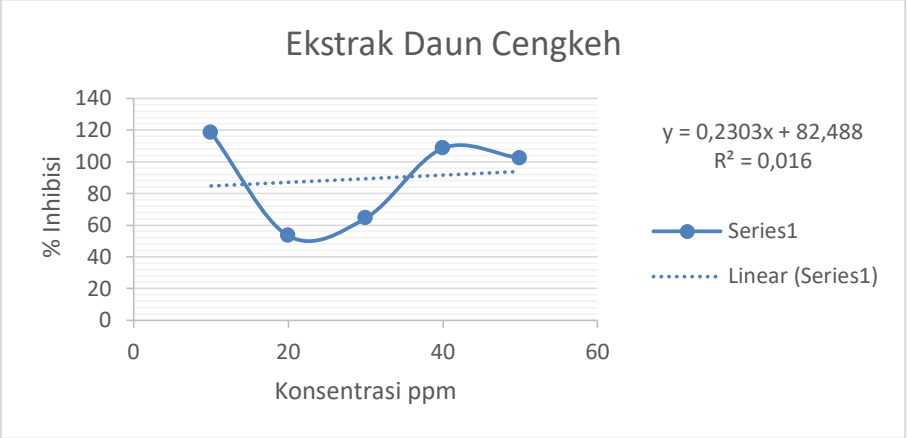
3.	Alkaloid (dragendroff) 	+

4.	<u>Flavonoid</u> 	+
5.	Saponin 	+

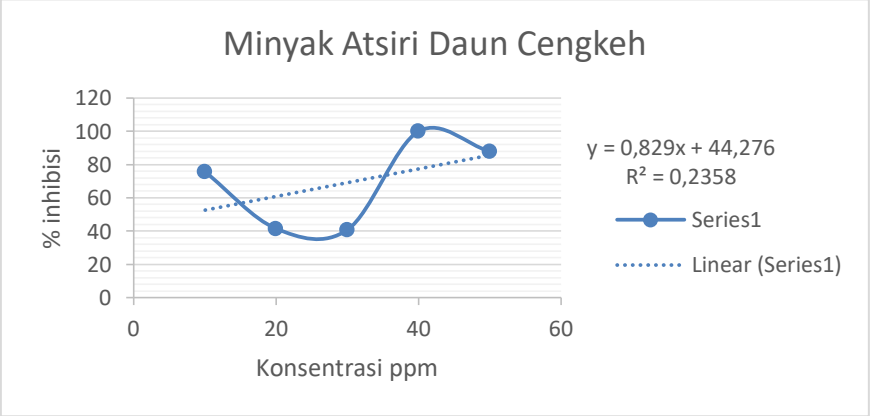
6.	Tanin 	+

7.	**Steroid** 	+

Lampiran 4.4 Kurva



Gambar 4.1 Grafik kurva regresi linear ekstrak daun cengkeh



Gambar 4.2 Grafik kurva regresi linear minyak atsiri