

SUPPLEMENTARY MATERIAL

Chemical Composition, Antioxidant and Antibacterial Activities of *Mezilaurus duckei* (Lauraceae)

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LIST OF CONTENTS

Figure 1. Structure of compound **13** isolated from the dichloromethane phase of the *Mezilaurus duckei* leaf extract.

Table 1. ¹H (300 MHz) and ¹³C (75 MHz) NMR spectral data (CDCl₃) of compound **13**, compared with rubrenolide (Tófoli et al., 2016).

Figure 2. ¹H NMR (300 MHz, CDCl₃) spectrum of compound **13** (rubrenolide) isolated from the dichloromethane phase of the *Mezilaurus duckei* leaf extract.

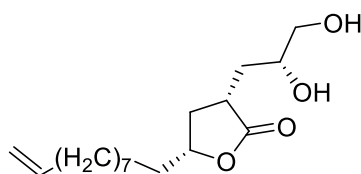
Figure 3. ¹³C NMR (75 MHz, CDCl₃) spectrum of compound **13** (rubrenolide), isolated from fraction F of the dichloromethane phase of the *Mezilaurus duckei* leaf extract.

Figure 4. Structure of compound **8** isolated from fraction M of the dichloromethane phase of the *Mezilaurus duckei* leaf extract

Table 2. ¹H NMR (300 MHz, acetone-d₆) data of compound **8**, compared with kaempferol (Itoh et al., 2009).

Figure 5. ¹H NMR (300 MHz, acetone-d₆) spectrum (with expansion) of compound **8** (kaempferol) from fraction M of the dichloromethane phase of the *Mezilaurus duckei* leaf extract.

Figure 1. Structure of compound **13** isolated from the dichloromethane phase of the *Mezilaurus duckei* leaf extract.



Rubrenolide (**13**)

Table 1. ^1H (300 MHz) and ^{13}C (75 MHz) NMR spectral data (CDCl_3) of compound **13**, compared with rubrenolide (Tófoli et al., 2016).

Position	$\delta^1\text{H}$ of Compound 13 (CDCl_3) (J in Hz)	$\delta^1\text{H}$ Rubrenolide (CDCl_3) ^a (J in Hz)	$\delta^{13}\text{C}$ of Compound 13 (CDCl_3)	$\delta^{13}\text{C}$ Rubrenolide (CDCl_3) ^a
1	–	–	180.4	180.0
2	2.83–2.94 m	2.83–2.94 m	38.8	38.7
3	2.53 ddd (12.3, 8.4, 5.4), 1.54–1.62 m	2.53 ddd (12.3, 8.4, 5.4), 1.54–1.62 m	35.7	35.7
4	4.31–4.42 m	4.31–4.42 m	79.8	79.9
5	1.71–1.81 m, 1.56–1.66 m	1.71–1.81 m, 1.56–1.66 m	35.3	35.3
6	1.42–1.52 m, 1.32–1.42 m	1.42–1.52 m, 1.32–1.42 m	25.1	25.2
7	1.25–1.40 sl	1.25–1.40 sl	29.0	29.3
8	1.25–1.40 sl	1.25–1.40 sl	29.0	29.0
9	1.25–1.40 sl	1.25–1.40 sl	29.0	29.3
10	1.25–1.40 m	1.25–1.40 m	29.0	28.8
11	1.25–1.40 sl	1.25–1.40 sl	29.0	29.3
12	2.00 dd (14.0, 6.6)	2.00 dd (14.0, 6.6)	33.7	33.7
13	5.75 ddt (16.8, 11.2, 6.6)	5.75 ddt (16.8, 11.2, 6.6)	139.0	139.1
14	4.95 br d (16.8), 4.89 br d (11.2)	4.95 br d (16.8), 4.89 br d (11.2)	114.1	114.1
1'	1.90–2.00 m, 1.55–1.61 m	1.90–2.00 m, 1.55–1.61 m	33.7	33.7
2'	3.65–3.75 m	3.65–3.75 m	70.3	70.2
3'	3.59 br d (10.8), 3.44 dd (10.8, 6.3)	3.59 br d (10.8), 3.44 dd (10.8, 6.3)	66.6	66.6

^a) ^1H NMR spectra recorded at 500 MHz and ^{13}C NMR spectra at 125 MHz (Tófoli et al., 2016).

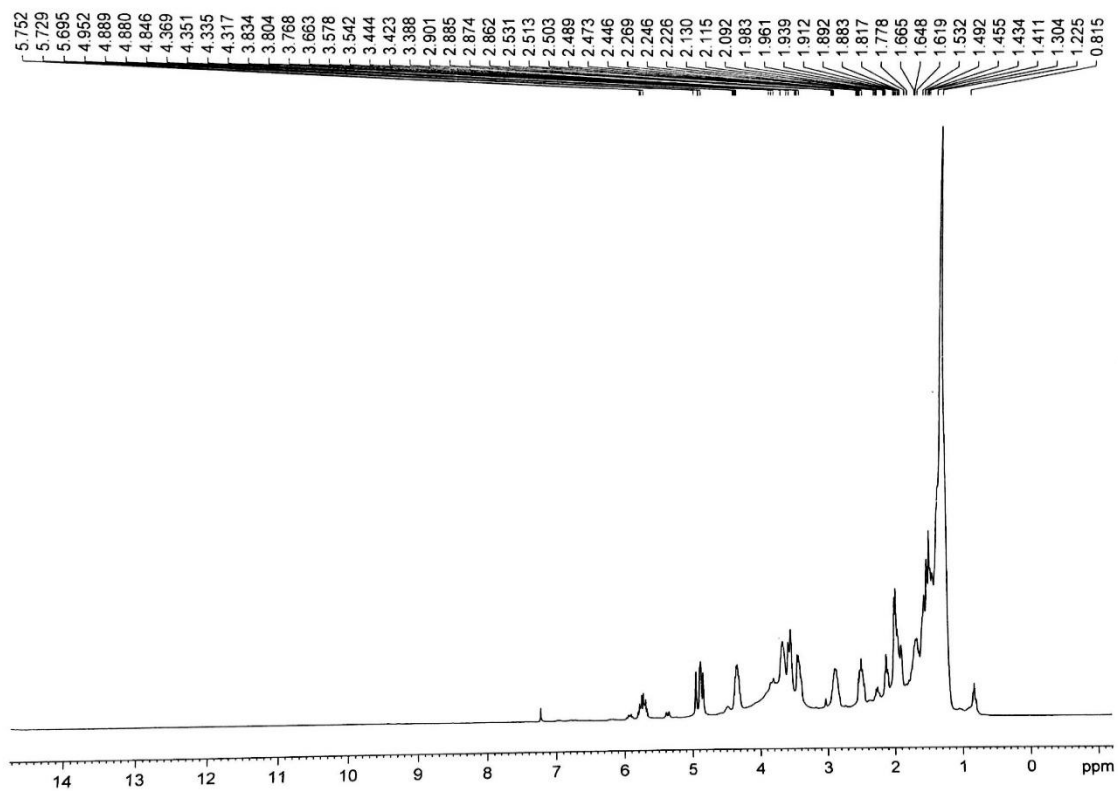


Figure 2. ¹H NMR (300 MHz, CDCl₃) spectrum of compound **13** (rubrenolide) isolated from the dichloromethane phase of the *Mezilaurus duckei* leaf extract.

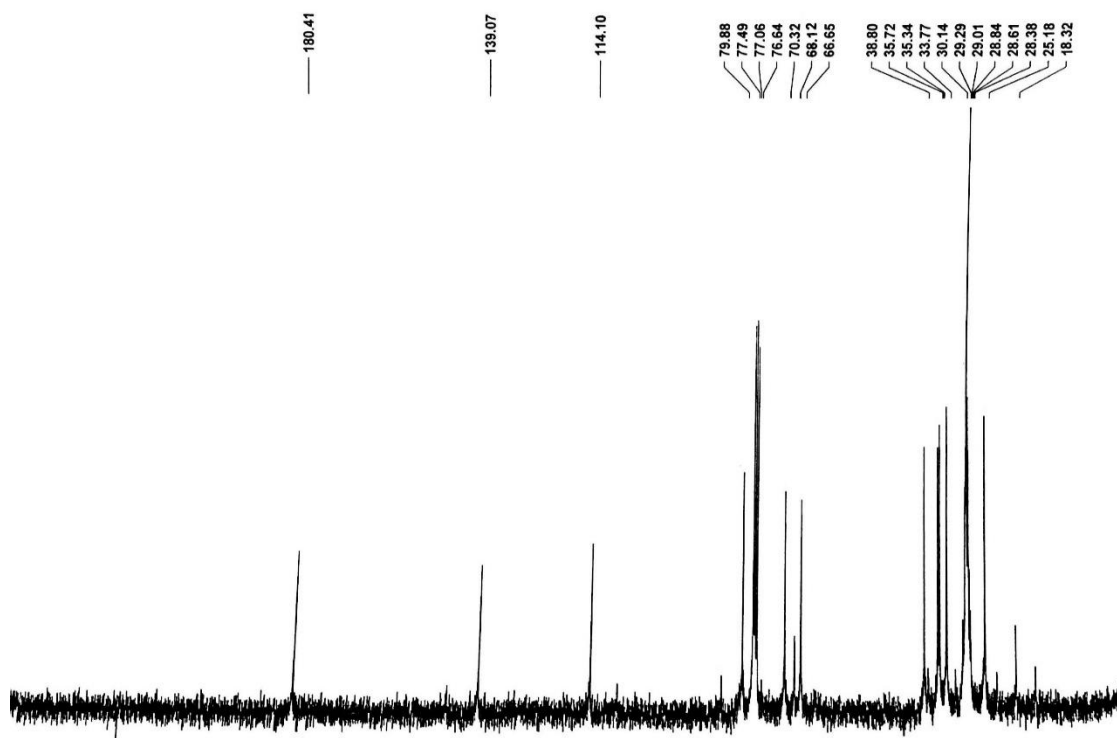
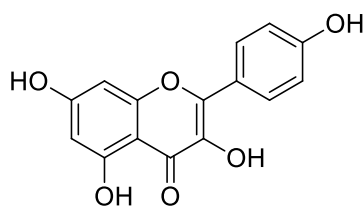


Figure 3. ¹³C NMR (75 MHz, CDCl₃) spectrum of compound **13** (rubrenolide), isolated from fraction F of the dichloromethane phase of the *Mezilaurus duckei* leaf extract.

Figure 4. Structure of compound **8** isolated from fraction M of the dichloromethane phase of the *Mezilaurus duckei* leaf extract



Kaempferol (8)

Table 2. ¹H NMR (300 MHz, acetone-d₆) data of compound **8**, compared with kaempferol (Itoh et al., 2009).

Position	$\delta^1\text{H}$ of Compound 8 (CDCl ₃) (J in Hz)	Kaempferol ^b $\delta^1\text{H}$
2	-	-
3	-	-
4	-	-
5	-	-
6	6.26 d (J=1.8)	6.27 d (J=2.0)
7	-	-
8	6.53 d (J=1.8)	6.34 d (J=2.0)
9	-	-
10	-	-
1'	-	-
2'	8.14 d (J=8.5)	7.98 d (J=8.3)
3'	7.00 d (J=8.5)	6.96 d (J=8.3)
4'	-	-
5'	7.00 d (J=8.5)	6.96 d (J=8.3)
6'	8.14 d (J=8.5)	7.98 d (J=8.3)
OH	12.18 s	-

^b) ¹H NMR spectra recorded at 600 MHz (Itoh et al., 2009).

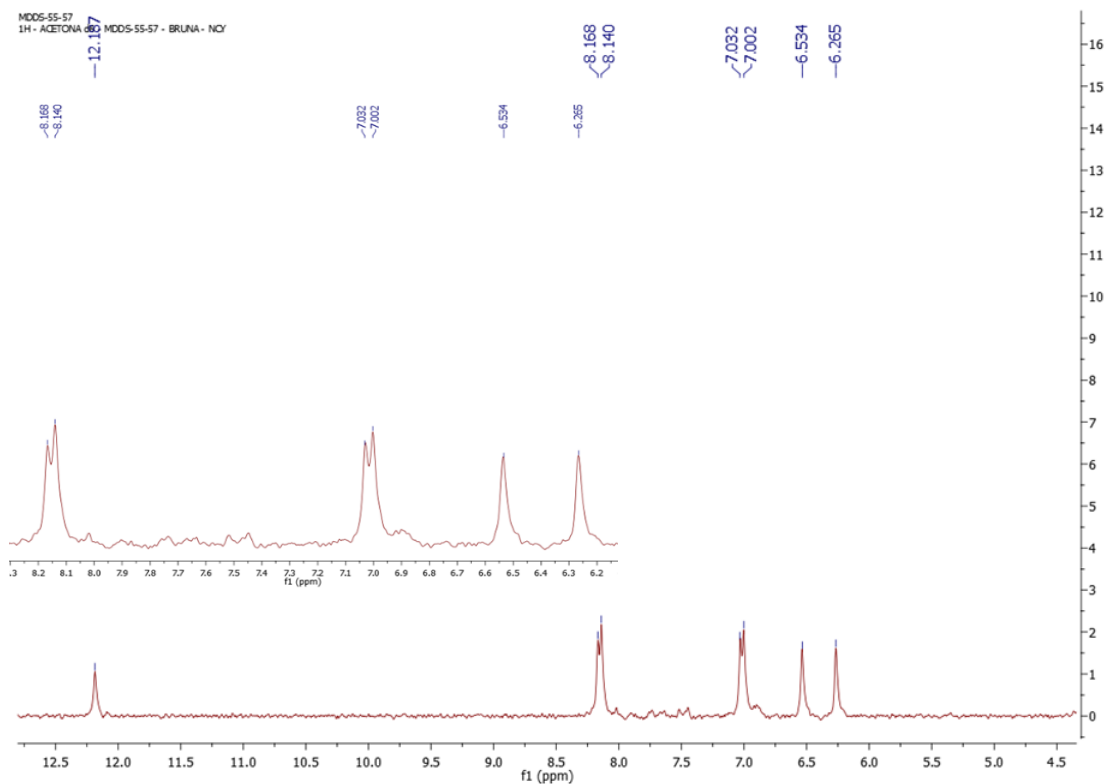


Figure 5. ^1H NMR (300 MHz, acetone- d_6) spectrum (with expansion) of compound **8** (kaempferol) from fraction M of the dichloromethane phase of the *Mezilaurus duckei* leaf extract.

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