Electronic Supplementary Information

A search for BACE inhibitors reveals new biosynthetically related pyrrolidones, furanones and pyrroles from a southern Australian marine sponge, *Ianthella* sp.

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Characterization of known compounds

Lamellarin O (11)

Lamellarin Q (12)

4-Hydroxybenzaldehyde (13)

4-Hydroxybenzoic acid (14)

4-Methoxybenzoic acid (15)

Ethyl 4-hydroxybenzoate (16)

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Characterization of known compounds

Lamellarin O (11): Off-white solid; ^{1}H NMR (methanol-d_4, 600 MHz) δ_H 8.02 (d, J = 8.9 Hz, H-3‴/5‴), 7.05 (s, H-5), 7.04 (d, J = 8.9 Hz, H-2‴/6‴), 6.99 (d, J = 8.6 Hz, H-2′/6′), 6.91 (d, J = 8.7 Hz, H-2″/6″), 6.71 (d, J = 8.6 Hz, H-3′/5′), 6.58 (d, H-3″/5″, J = 8.7 Hz), 5.77 (s, H-6), 3.88 (s, 4‴-OC**H$_3$**), 3.40 (s, 2-CO_2C**H$_3$**); ^{1}H NMR (d_6-acetone, 600 MHz) see Figure S11, identical with literature data;[1] ESI(+)MS m/z 458 $[M + H]^+$, 937 $[2M + Na]^+$, ESI(–)MS m/z 456 $[M – H]^–$.

Lamellarin Q (12): Off-white solid; ^{1}H NMR (methanol-d_4, 600 MHz) δ_H, 7.02 (s, H-5), 7.01 (d, J = 8.7 Hz, H-2′/6′), 6.90 (d, J = 8.7 Hz, H-2″/6″), 6.69 (d, J = 8.7 Hz, H-3′/5′), 6.59 (d, H-3″/5″, J = 8.7 Hz), 3.69 (s, 2-CO_2C**H$_3$**); ^{1}H NMR (d_6-acetone, 600 MHz) see Figure S12, identical with literature data;[2] ESI(+)MS m/z 310 $[M + H]^+$, 641 $[2M + Na]^+$, ESI(–)MS m/z 308 $[M – H]^–$.

4-Hydroxybenzaldehyde (13): Off-white solid; ^{1}H NMR (methanol-d_4, 600 MHz) δ_H, 9.77 (s), 7.78 (d, J = 8.3 Hz), 6.92 (d, J = 8.7 Hz), identical with an authentic sample; ESI(+)MS m/z 123 $[M + H]^+$.

4-Hydroxybenzoic acid (14): Off-white solid; ^{1}H NMR (methanol-d_4, 600 MHz) δ_H, 7.87 (d, J = 8.7 Hz), 6.81 (d, J = 8.7 Hz), identical with an authentic sample; ESI(–)MS m/z 137 $[M – H]^–$.

4-Methoxybenzoic acid (15): Off-white solid; ^{1}H NMR (methanol-d_4, 600 MHz) δ_H, 7.97 (d, J = 8.9 Hz), 6.98 (d, J = 8.9 Hz), identical with an authentic sample; ESI(–)MS m/z 151 $[M – H]^–$.

Ethyl 4-hydroxybenzoate (16): Off-white solid; ^{1}H NMR (methanol-d_4, 600 MHz) δ_H, 7.87 (d, J = 8.9 Hz), 6.81 (d, J = 8.9 Hz), 4.31 (q, J = 7.1 Hz), 1.36 (t, J = 7.1 Hz); ^{13}C NMR (METHANOL-D4, 600 MHz) δ_C, 132.8, 116.4, 61.8, 14.8, quaternary carbons were not detected, and structure was confirmed by 2D NMR HMBC experiment; ESI(+)MS m/z 167 $[M + H]^+$.

[1] S. Urban, M. S. Butler and R. J. Capon *Aust. J. Chem.* **1994**, *47*, 1919-1924.
[2] S. Urban, L. Hobbs, J. N. A. Hooper and R. J. Capon *Aust. J. Chem.* **1995**, *48*, 1491-1494.

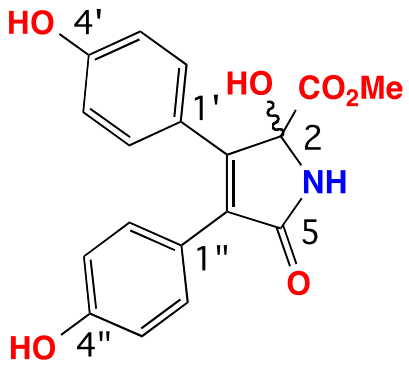

Table S1. NMR data (methanol-d_4, 600 MHz) for ianthellidone A (**1**)

No.	δ_C [A]	δ_H (m, *J* (Hz))	COSY	HMBC (^{1}H to ^{13}C)
2	ND			
3	151.9			
4	131.9			
5	ND			
1′	124.1			
2′/6′	131.8	7.24 (d, 8.9)	H-3′/5′	C-3, C-4′
3′/5′	116.3	6.66 (d, 8.9)	H-2′/6′	C-1′, C-4′
4′	159.9			
1″	123.7			
2″/6″	132.2	7.20 (d, 8.8)	H-3″/5″	C-4, C-3″/5″, C-4″
3″/5″	116.4	6.75 (d, 8.8)	H-2″/6″	C-1″, C-4″
4″	159.1			
2-**C**O_2Me	171.9			
2-CO_2**Me**	53.8	3.72 (s)		2-**C**O_2Me

[A] ^{13}C NMR assignments were supported by HSQC experiment; [ND] Signals not detected.

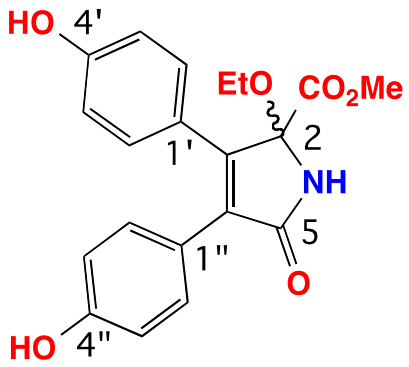

Table S2. NMR data (methanol-d_4, 600 MHz) for ianthellidone B (**2**)

No.	δ_C [A]	δ_H (m, *J* (Hz))	COSY	HMBC (^{1}H to ^{13}C)
2	98.4			
3	156.6			
4	131.6			
5	176.5			
1′	124.5			
2′/6′	131.5	7.22 (d, 8.9)	H-3′/5′	C-3, C-4′
3′/5′	116.3	6.62 (d, 8.9)	H-2′/6′	C-1′, C-4′
4′	159.9			
1″	123.8			
2″/6″	132.1	7.15 (d, 8.7)	H-3″/5″	C-4, C-3″/5″, C-4″
3″/5″	116.5	6.77 (d, 8.7)	H-2″/6″	C-1″, C-4″
4″	159.1			
2-**C**O_2Me	173.0			
2-CO_2**Me**	53.6	3.68 (s)		2-**C**O_2Me
2-O**C**$H_2$$CH_3$	66.4	4.35 (m)	2-OCH_2C**H**$_3$	2-OCH_2**C**H_3
2-OCH_2**C**H_3	14.7	1.36 (t, 7.1)	2-OC**H**$_2$$CH_3$	2-O**C**H_2CH_3

[A] ^{13}C NMR assignments were supported by HSQC experiment.

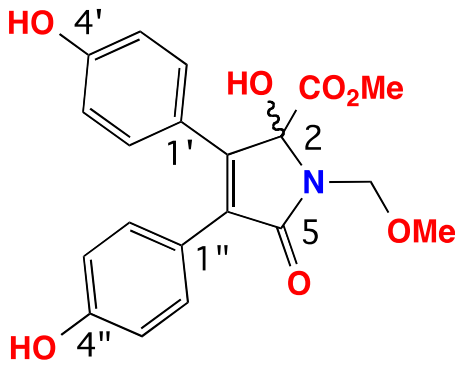

Table S3. NMR data (methanol-d_4, 600 MHz) for ianthellidone C (**3**)

No.	δ_C [A]	δ_H (m, *J* (Hz))	COSY	HMBC (^{1}H to ^{13}C)
2	89.4			
3	151.2			
4	131.9			
5	173.0			
1′	123.7			
2′/6′	131.8	7.27 (d, 8.9)	H-3′/5′	C-3, C-4′
3′/5′	116.4	6.67 (d, 8.9)	H-2′/6′	C-1′, C-4′
4′	160.1			
1″	123.5			
2″/6″	132.2	7.23 (d, 8.8)	H-3″/5″	C-4, C-4″
3″/5″	116.5	6.76 (d, 8.8)	H-2″/6″	C-1″, C-4″
4″	159.3			
2-**C**O_2Me	171.4			
2-CO_2**Me**	53.8	3.68 (s)		2-**C**O_2Me
1*N*-**C**$H_2$$OCH_3$	70.8	C$\mathbf{H_a}$ 4.97 (d, 11.2)	C$\mathbf{H_b}$	C-2, C-5, 1*N*-CH_2O**C**H_3
				C-2, C-5, 1*N*-CH_2O**C**H_3
		C$\mathbf{H_b}$ 4.79 (d, 11.2)	C$\mathbf{H_a}$	
1*N*-CH_2O**C**$\mathbf{H_3}$	56.9	3.30 (s)		1*N*-**C**$H_2$$OCH_3$

[A] ^{13}C NMR assignments were supported by HSQC experiment.

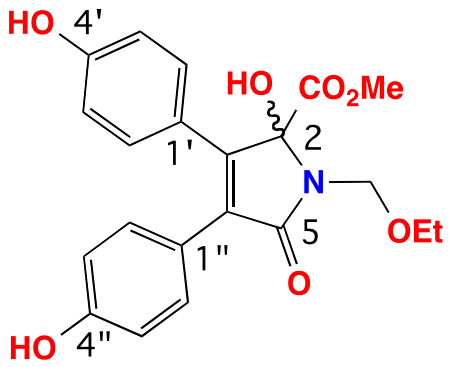

Table S4. NMR data (methanol-d_4, 600 MHz) for ianthellidone D (**4**)

No.	δ_C [A]	δ_H (m, *J* (Hz))	COSY	HMBC (^{1}H to ^{13}C)
2	89.4			
3	151.2			
4	131.8			
5	172.8			
1′	123.7			
2′/6′	131.8	7.26 (d, 8.9)	H-3′/5′	C-3, C-3′/5′, C-4′
3′/5′	116.4	6.67 (d, 8.9)	H-2′/6′	C-1′, C-4′
4′	160.1			
1″	123.5			
2″/6″	132.2	7.22 (d, 8.8)	H-3″/5″	C-4, C-3″/5″, C-4″
3″/5″	116.5	6.76 (d, 8.8)	H-2″/6″	C-1″, C-4″
4″	159.3			
2-**C**CO_2Me	171.4			
2-CO_2**Me**	53.9	3.69 (s)		**C**O_2Me
1*N*-**C**$\mathbf{H_2}$$OCH_2CH_3$	69.2	C$\mathbf{H_a}$ 5.07 (d, 11.2)	C$\mathbf{H_b}$	C-2, C-5, 1*N*-CH_2O**C**H_2CH_3
		C$\mathbf{H_b}$ 4.78 (d, 11.2)	C$\mathbf{H_a}$	C-2, C-5, 1*N*-CH_2O**C**H_2CH_3
1*N*-CH_2O**C**$\mathbf{H_2}$$CH_3$	65.4	C$\mathbf{H_c}$ 3.59 (m)	1*N*-CH_2OCH_2C$\mathbf{H_3}$	
		C$\mathbf{H_d}$ 3.48 (m)	1*N*-CH_2OCH_2C$\mathbf{H_3}$	
1*N*-CH_2OCH_2**C**$\mathbf{H_3}$	15.4	1.15 (t, 7.0)	1*N*-CH_2OC$\mathbf{H_2}$$CH_3$	1*N*-CH_2O**C**H_2CH_3

[A] ^{13}C NMR assignments were supported by HSQC experiment.

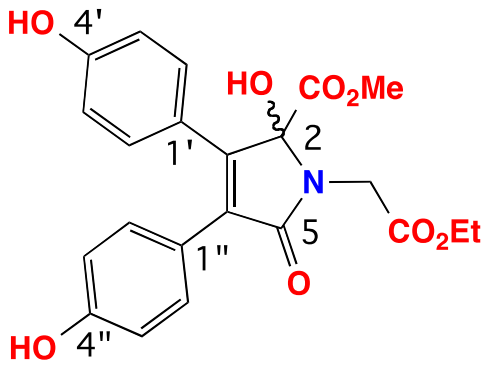

Table S5. NMR data (methanol-d_4, 600 MHz) for ianthellidone E (**5**)

No.	δ_C [A]	δ_H (m, *J* (Hz))	COSY	HMBC (^{1}H to ^{13}C)
2	90.5			
3	151.1			
4	131.9			
5	172.8			
1′	124.0			
2′/6′	131.9	7.27 (d, 8.9)	H-3′/5′	C-3, C-4′
3′/5′	116.4	6.67 (d, 8.9)	H-2′/6′	C-1′, C-4′
4′	160.0			
1″	123.6			
2″/6″	132.2	7.23 (d, 8.8)	H-3″/5″	C-4, C-4″
3″/5″	116.5	6.76 (d, 8.8)	H-2″/6″	C-1″, C-4″
4″	159.3			
2-**C**O_2Me	170.9			
2-CO_2**Me**	53.9	3.69 (s)		2-**C**O_2Me
1*N*-**C**$H_2$$CO_2$Et	41.2	C**H**$_a$ 4.19 (d, 17.7) C**H**$_b$ 4.14 (d, 17.7)	C**H**$_b$ C**H**$_a$	C-2, C-5, 1*N*-CH_2**C**O_2Et C-2, C-5, 1*N*-CH_2**C**O_2Et
1*N*-CH_2**C**O_2Et	170.5			
O**C**$H_2$$CH_3$	62.7	4.20 (m)	OCH_2C**H**$_3$	
OCH_2**C**H_3	14.6	1.28 (t, 7.1)	O**C**$H_2$$CH_3$	O**C**$H_2$$CH_3$

[A] ^{13}C NMR assignments were supported by HSQC experiment.

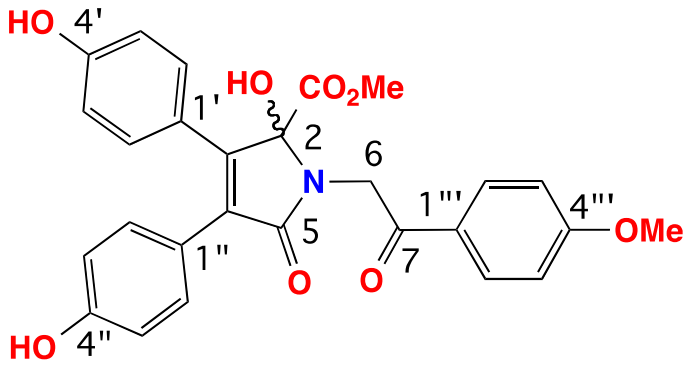

Table S6. NMR data (methanol-d_4, 600 MHz) for ianthellidone F (**6**)

No.	δ_C [A]	δ_H (m, *J* (Hz))	COSY	HMBC (^{1}H to ^{13}C)
2	90.6			
3	151.2			
4	132.1			
5	172.8			
6	45.9	a 4.93 (d, 17.9)		C-2, C-5, C-7
		b 4.84 (d, 17.9)		C-2, C-5, C-7
7	194.1			
1′	124.1			
2′/6′	131.9	7.28 (d, 8.9)	H-3′/5′	C-3, C-3′/5′, C-4′
3′/5′	116.4	6.67 (d, 8.9)	H-2′/6′	C-1′, C-4′
4′	160.1			
1″	123.7			
2″/6″	132.3	7.26 (d, 8.7)	H-3″/5″	C-4, C-3″/5″, C-4″
3″/5″	116.5	6.77 (d, 8.7)	H-2″/6″	C-1″, C-4″
4″	159.2			
1‴	129.4			
2‴/6‴	131.7	8.04 (d, 8.9)	H-3‴/5‴	C-7, C-3‴/5‴, C-4‴
3‴/5‴	115.2	7.05 (d, 8.9)	H-2‴/6‴	C-1‴, C-4‴
4‴	165.9			
2-**C**O_2Me	170.9			
2-CO_2**Me**	53.9	3.68 (s)		2-**C**O_2Me
4‴-O**Me**	56.3	3.89 (s)		C-4‴

[A] ^{13}C NMR assignments were supported by HSQC experiment

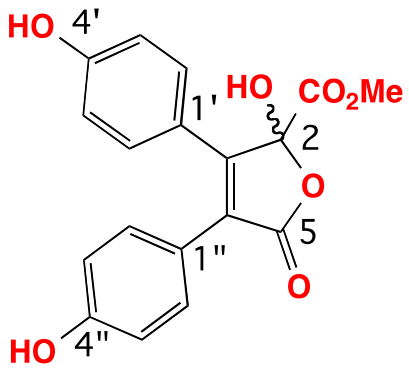

Table S7. NMR data (methanol-d_4, 600 MHz) for ianthellidone G (**7**)

No.	δ_C [A]	δ_H (m, *J* (Hz))	COSY	HMBC (^{1}H to ^{13}C)
2	102.4			
3	155.0			
4	127.1			
5	173.0			
1′	122.3			
2′/6′	132.0	7.34 (d, 8.8)	H-3′/5′	C-3, C-3′/5′, C-4′
3′/5′	116.6	6.69 (d, 8.8)	H-2′/6′	C-1′, C-4′
4′	161.1			
1″	122.5			
2″/6″	132.0	7.25 (d, 8.6)	H-3″/5″	C-4, C-3″/5″, C-4″
3″/5″	116.7	6.80 (d, 8.6)	H-2″/6″	C-1″, C-4″
4″	159.7			
2-**C**O_2Me	169.5			
2-CO_2**Me**	54.2	3.74 (s)		2-**C**O_2Me

[A] ^{13}C NMR assignments were supported by HSQC experiment.

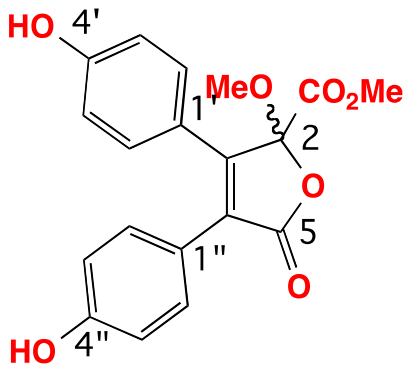

Table S8. NMR data (methanol-d_4, 600 MHz) for ianthellidone H (**8**)

No.	δ_C [A]	δ_H (m, *J* (Hz))	COSY	HMBC (^{1}H to ^{13}C)
2	105.4			
3	152.8			
4	128.5			
5	172.1			
1′	121.7			
2′/6′	131.9	7.34 (d, 9.0)	H-3′/5′	C-3, C-4′
3′/5′	116.8	6.71 (d, 9.0)	H-2′/6′	C-1′, C-4′
4′	161.5			
1″	122.1			
2″/6″	132.1	7.27 (d, 8.8)	H-3″/5″	C-4, C-4″
3″/5″	116.8	6.81 (d, 8.8)	H-2″/6″	C-1″, C-4″
4″	160.0			
2-**C**O_2Me	167.9			
2-CO_2**Me**	54.2	3.74 (s)		2-**C**O_2Me
2-O**Me**	52.3	3.46 (s)		C-2

[A] ^{13}C NMR assignments were supported by HSQC experiment.

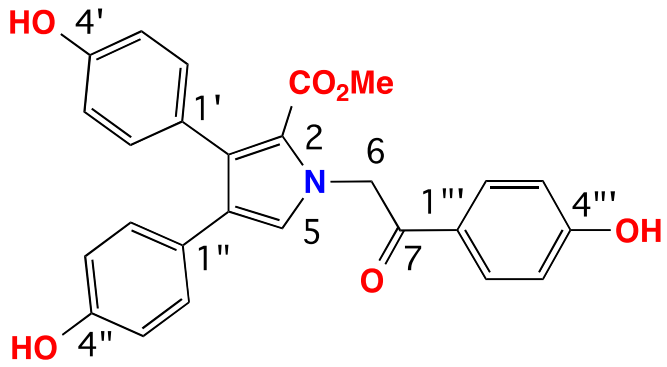

Table S9. NMR data (methanol-d_4, 600 MHz) for lamellarin O1 (**9**)

No.	δ_C [A]	δ_H (m, *J* (Hz))	COSY	HMBC (^{1}H to ^{13}C)
2	121.0			
3	132.8			
4	126.1			
5	128.7	7.07 (s)		C-2, C-3, C-4, C-6
6	56.8	5.81 (s)		C-2, C-5, C-7
7	194.8			
1′	128.8			
2′/6′	133.1	7.00 (d, 8.6)	H-3′/5′	C-3, C-4′
3′/5′	115.5	6.70 (d, 8.6)	H-2′/6′	C-1′, C-4′
4′	157.3			
1″	127.7			
2″/6″	130.6	6.91 (d, 8.8)	H-3″/5″	C-4, C-3″/5″, C-4″
3″/5″	116.0	6.58 (d, 8.8)	H-2″/6″	C-1″, -4″
4″	156.8			
1‴	127.0			
2‴/6‴	132.0	7.95 (brd, 8.6)	H-3‴/5‴	C-7, C-4‴
3‴/5‴	117.4	6.85 (dd, 8.6, 1.0)	H-2‴/6‴	C-1‴
4‴	167.1			
2-**C**O_2Me	164.0			
2-CO_2**Me**	51.1	3.42 (s)		2-**C**O_2Me

[A] ^{13}C NMR assignments were supported by HSQC experiment.

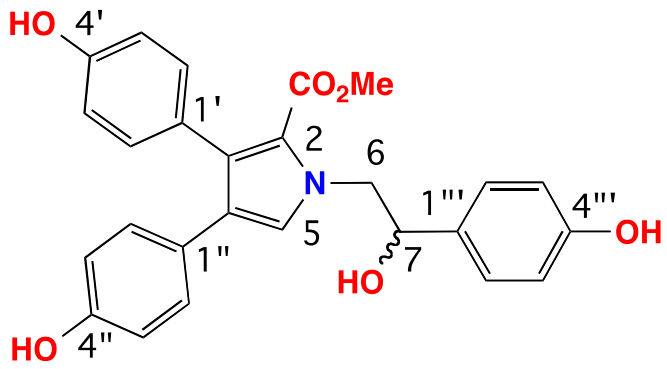

Table S10. NMR data (methanol-d_4, 600 MHz) for lamellarin O2 (**10**)

No.	δ_C [A]	δ_H (m, *J* (Hz))	COSY	HMBC (^{1}H to ^{13}C)
2	120.5			
3	132.9			
4	125.5			
5	128.9	6.93 (s)		C-2, C-3, C-4, C-6
6	58.0	a 4.59 (dd, 13.6, 4.5)		C-5
		b 4.34 (dd, 13.6, 8.0)		C-2, C-5, C-7, C-1‴
7	74.8	4.91 (dd, 8.0, 4.5)		C-6, C-1‴, C-2‴/C-6‴
1′	128.8			
2′/6′	133.0	6.92 (d, 8.6)	H-3′/5′	C-3, C-3′/5′, C-4′
3′/5′	115.4	6.69 (d, 8.6)	H-2′/6′	C-1′, C-4′
4′	157.3			
1″	127.7			
2″/6″	130.5	6.82 (d, 8.6)	H-3″/5″	C-4, C-4″, C-3″/5″
3″/5″	115.9	6.55 (d, 8.6)	H-2″/6″	C-1″, C-4″
4″	156.7			
1‴	134.5			
2‴/6‴	128.5	7.20 (d, 8.5)	H-3‴/5‴	C-7, C-3‴/5‴, C-4‴
3‴/5‴	116.2	6.76 (d, 8.5)	H-2‴/6‴	C-1‴, C-4‴
4‴	158.3			
2-**C**O_2Me	164.4			
2-CO_2**Me**	51.2	3.54 (s)		2-**C**O_2Me

[A] ^{13}C NMR assignments were supported by HSQC experiment.

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Figure S1 ^{1}H NMR (methanol-d_4, 600 MHz) spectrum for ianthellidone A (**1**).

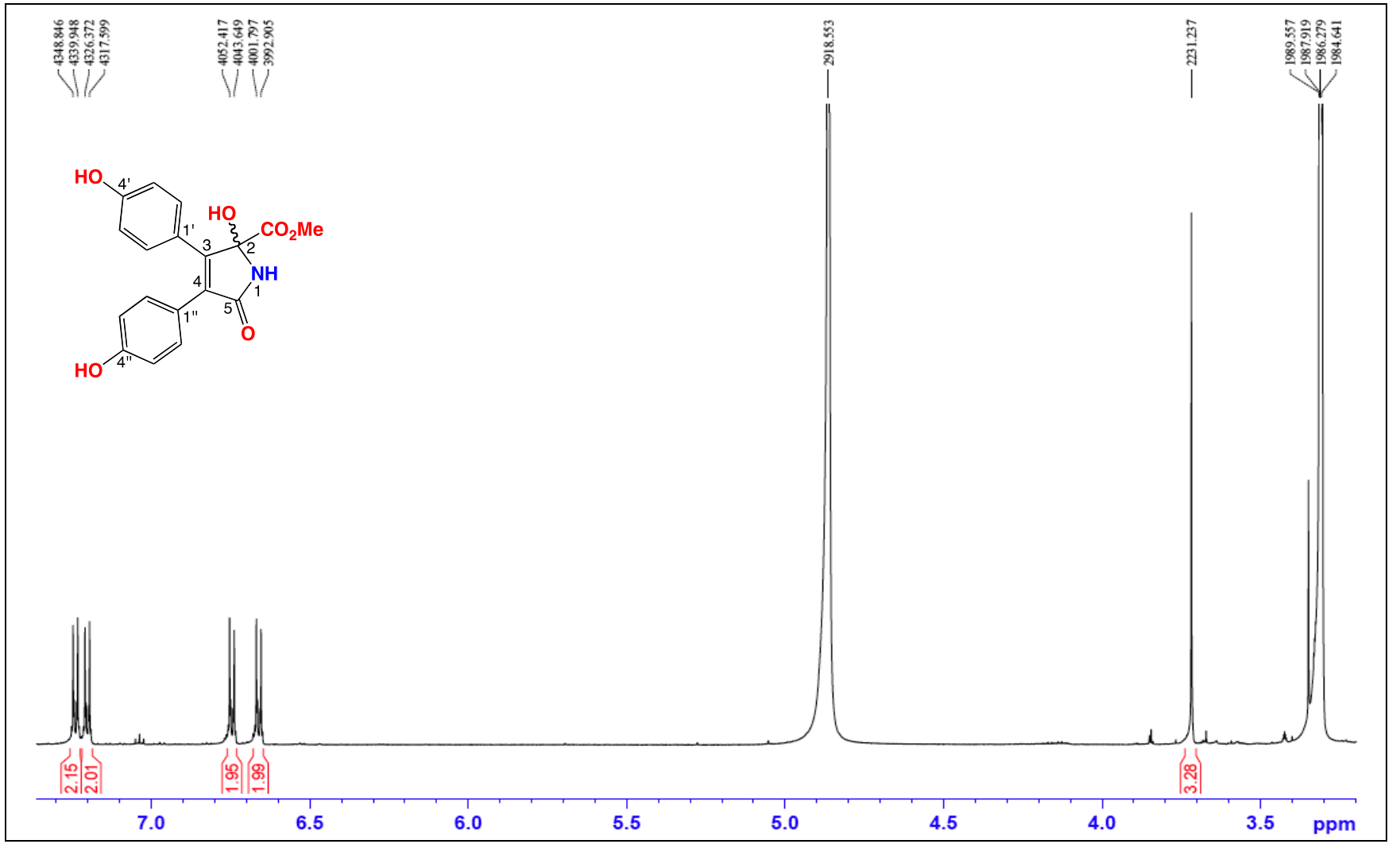


Figure S2 ^{13}C NMR (methanol-d_4, 600 MHz) spectrum for ianthellidone A (**1**).

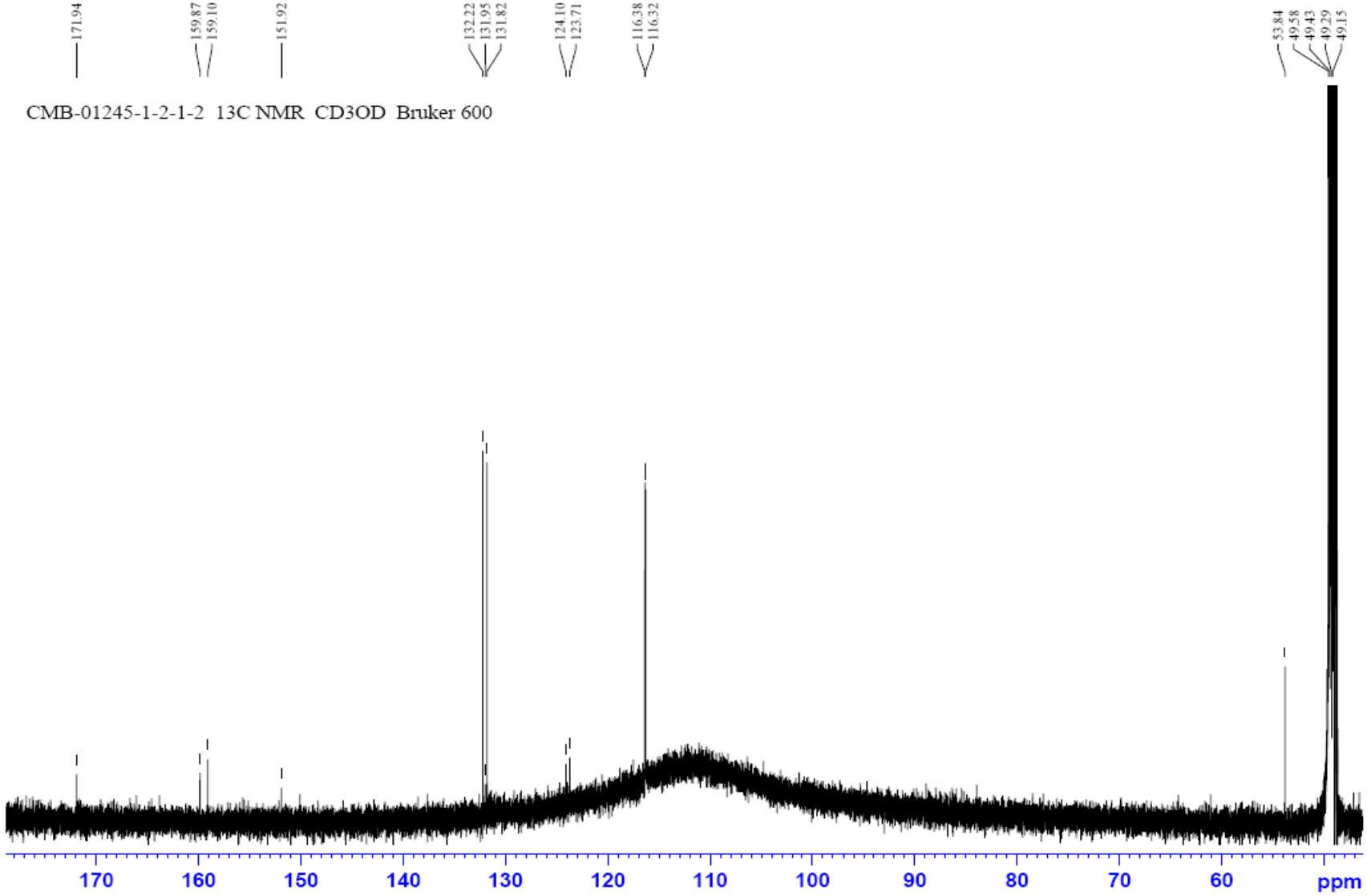


Figure S3 ^{1}H NMR (methanol-d_4, 600 MHz) spectrum for ianthellidone B (**2**).

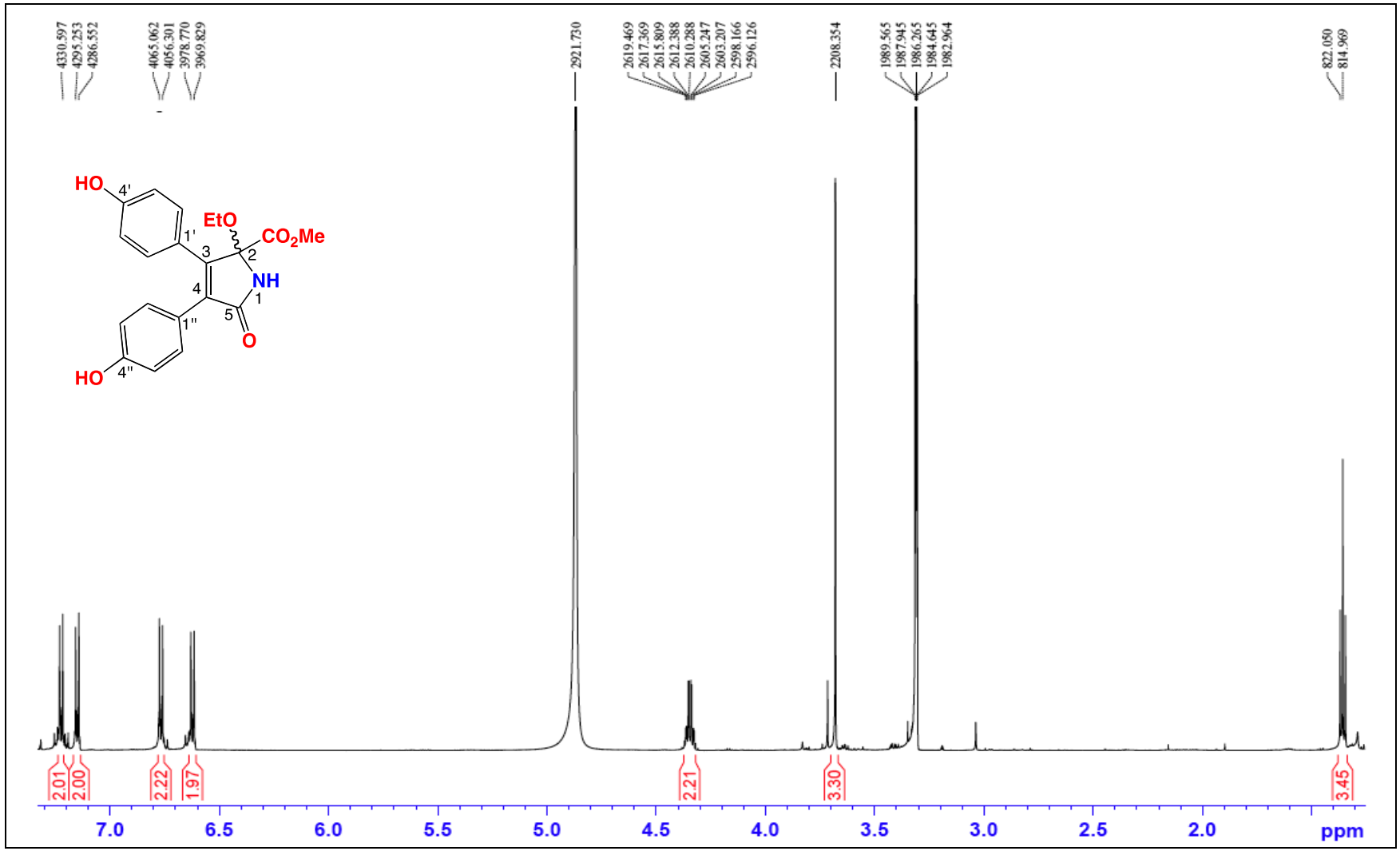


Figure S4 ^{13}C NMR (methanol-d_4, 600 MHz) spectrum for ianthellidone B (**2**).

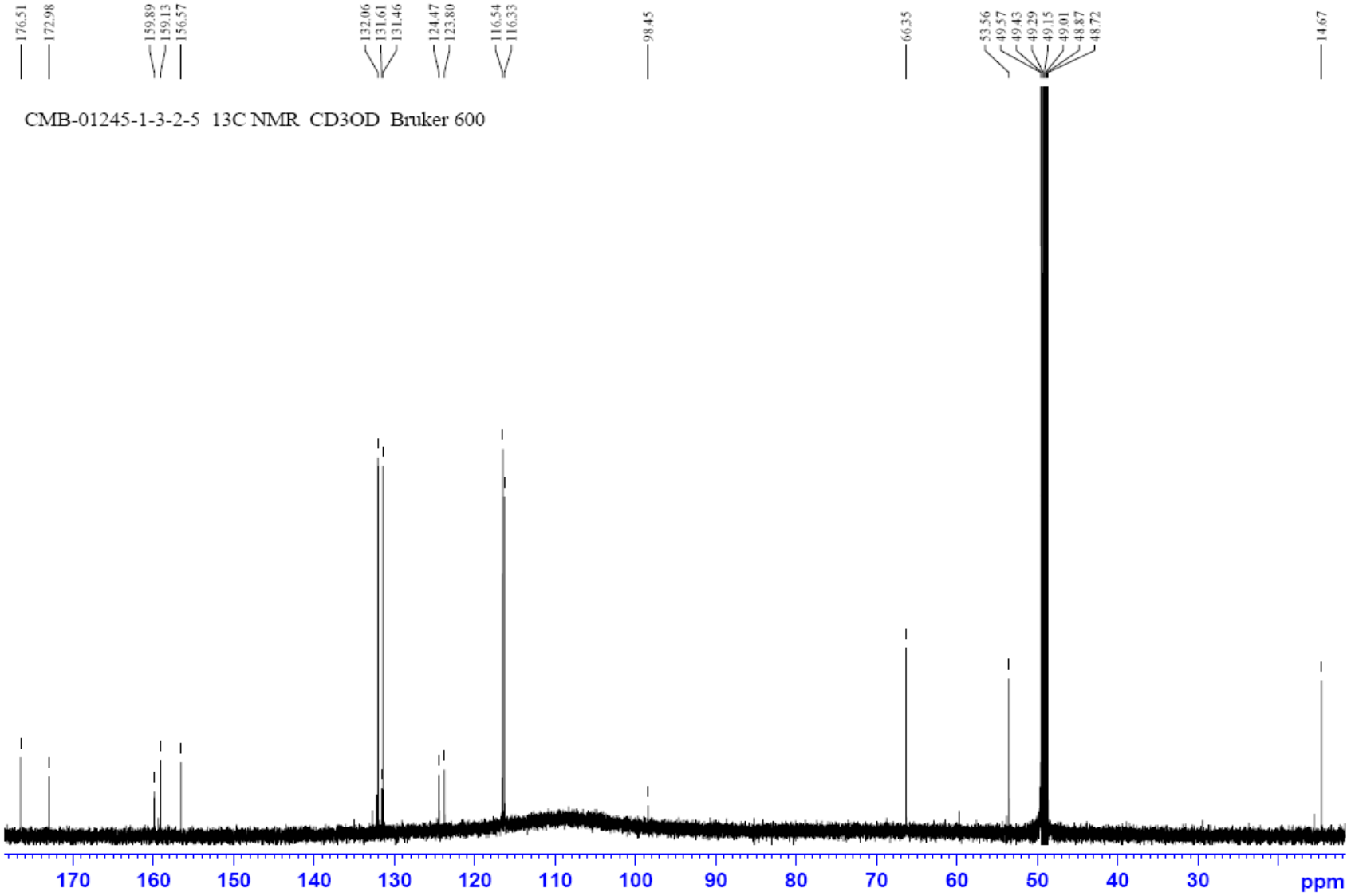


Figure S5 ^{1}H NMR (methanol-d_4, 600 MHz) spectrum for ianthellidone C (**3**).

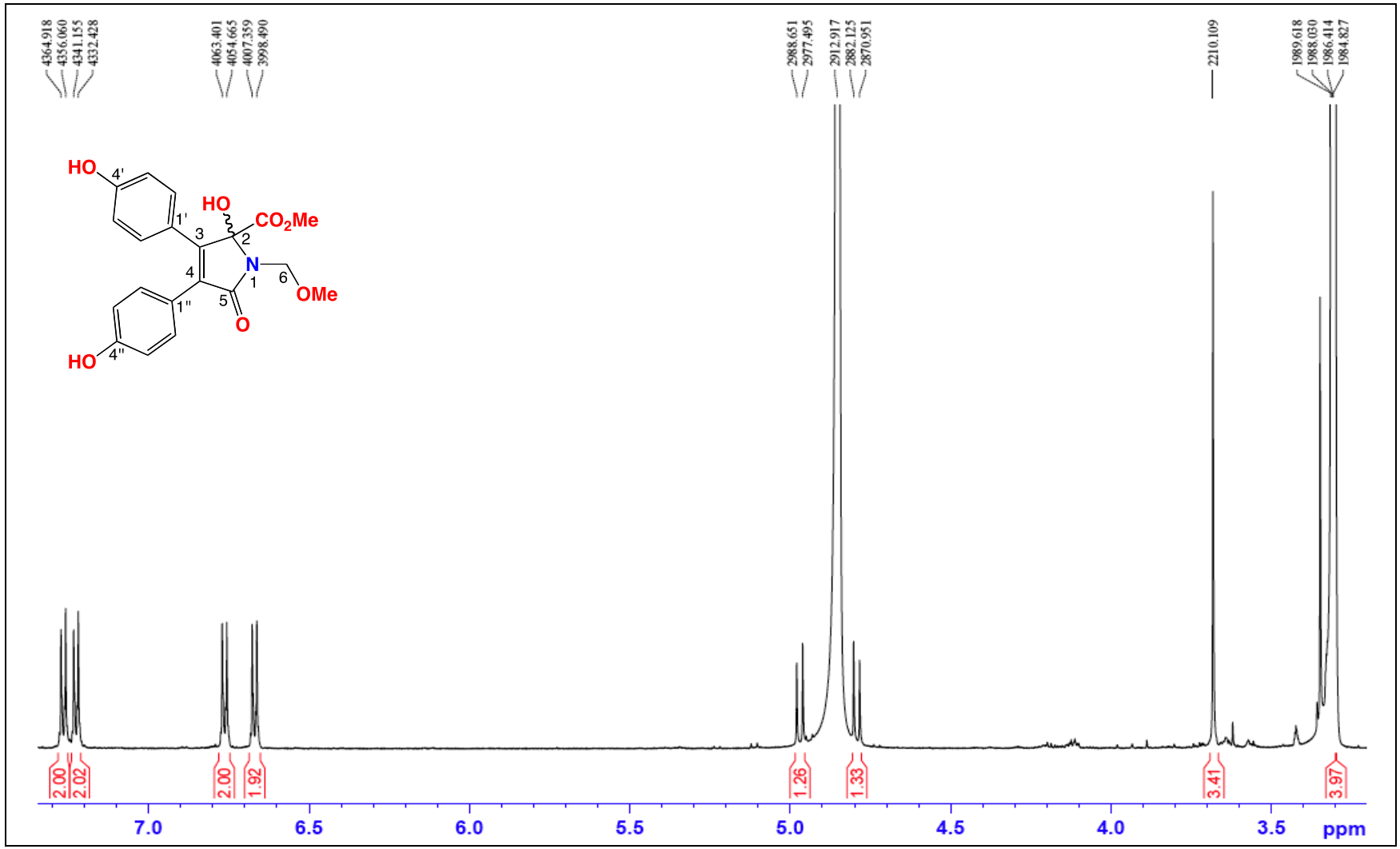


Figure S6 ^{13}C NMR (methanol-d_4, 600 MHz) spectrum for ianthellidone C (**3**).

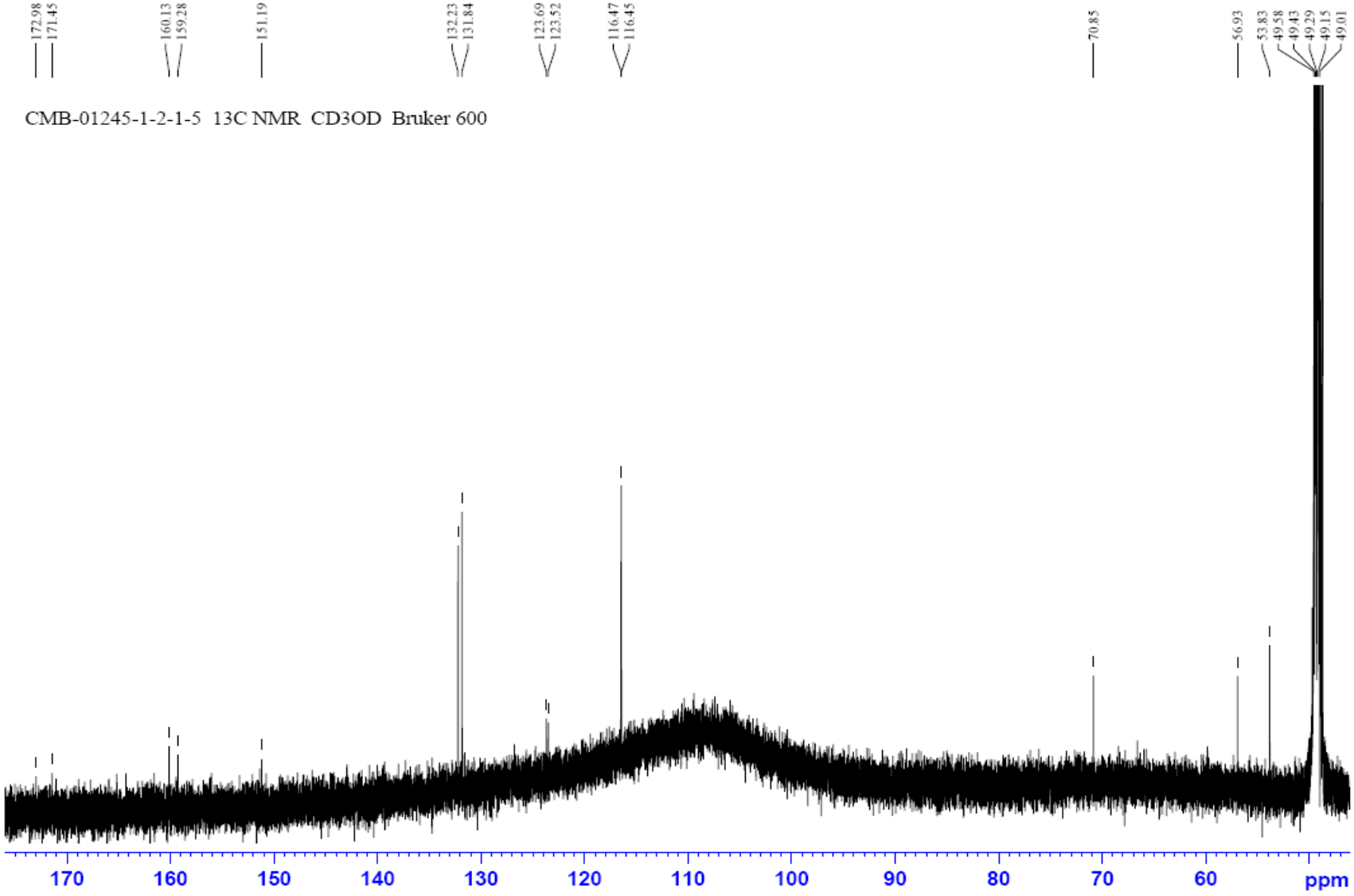


Figure S7 ^{1}H NMR (methanol-d_4, 600 MHz) spectrum for ianthellidone D (**4**).

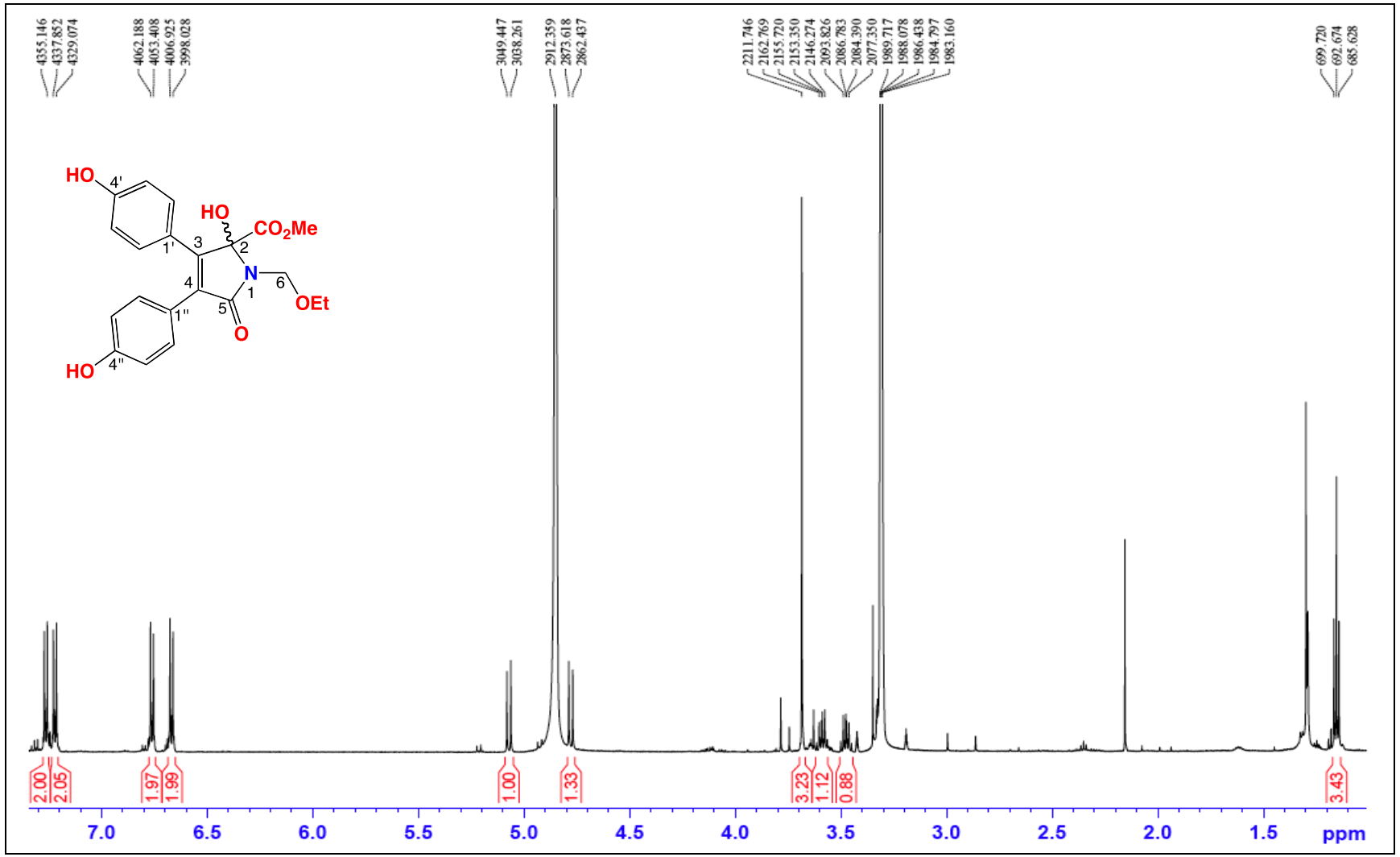


Figure S8 ^{13}C NMR (methanol-d_4, 600 MHz) spectrum for ianthellidone D (**4**).

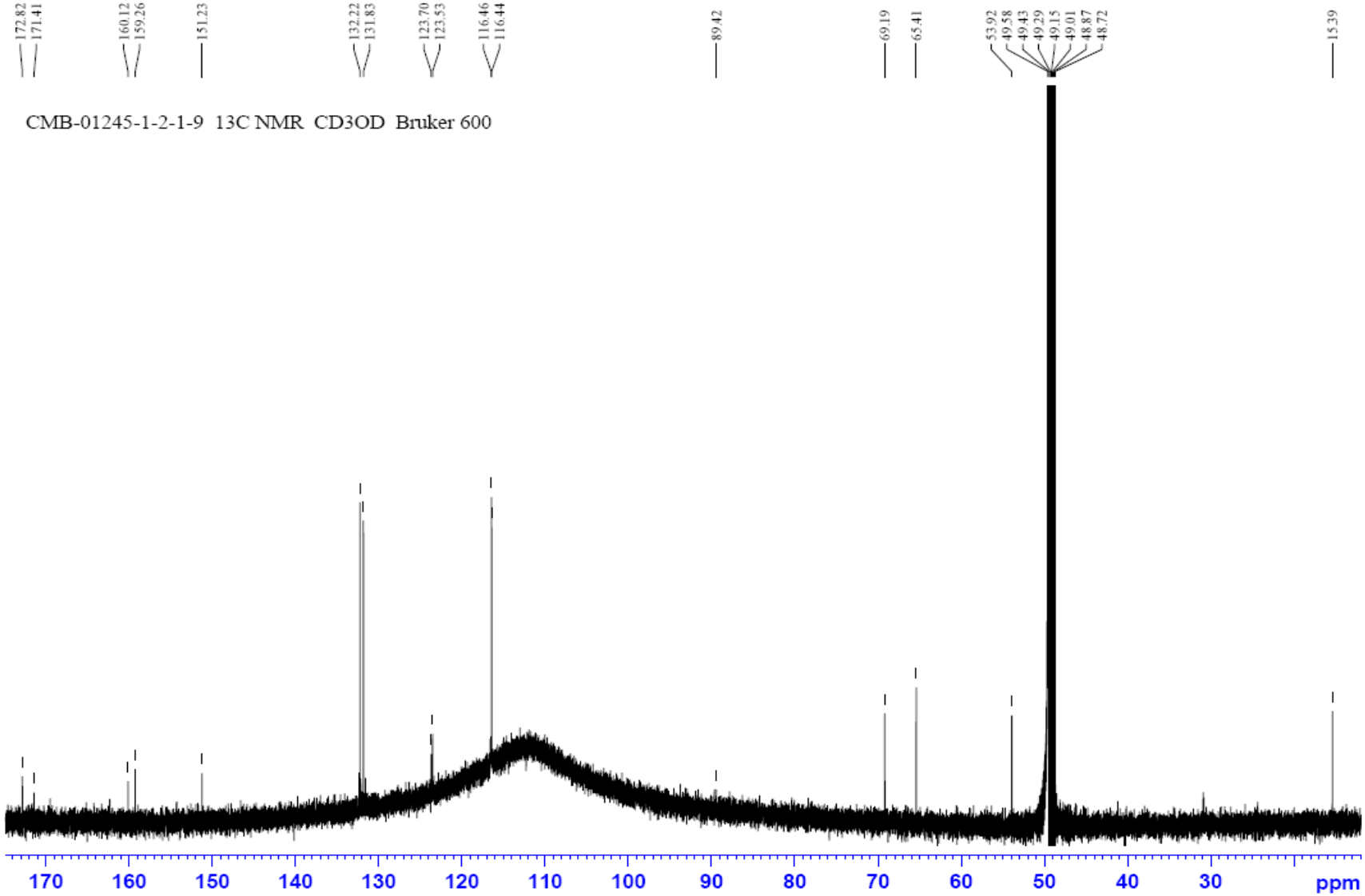


Figure S9 ^{1}H NMR (methanol-d_4, 600 MHz) spectrum for ianthellidone E (**5**).

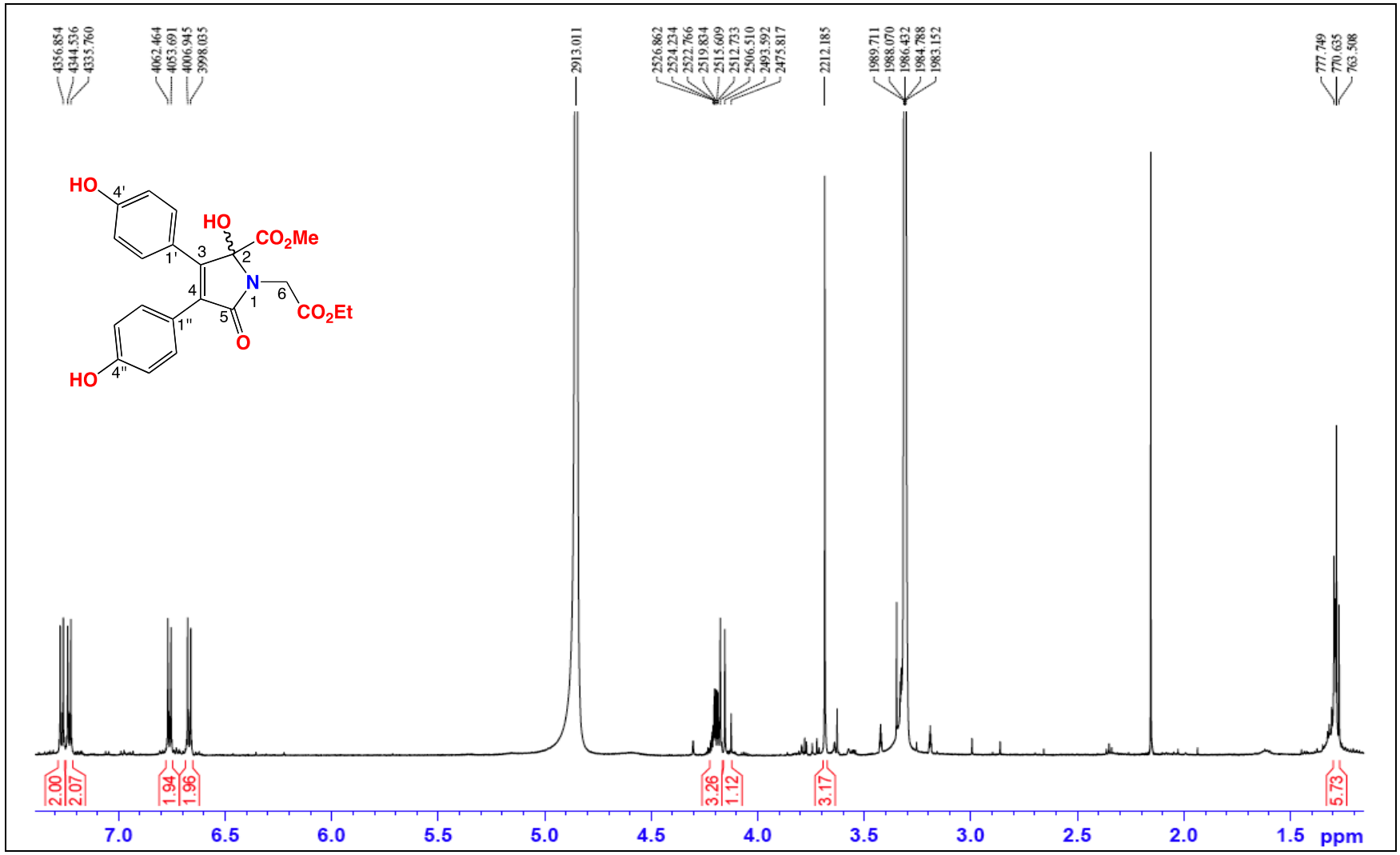


Figure S10 ^{13}C NMR (methanol-d_4, 600 MHz) spectrum for ianthellidone E (**5**).

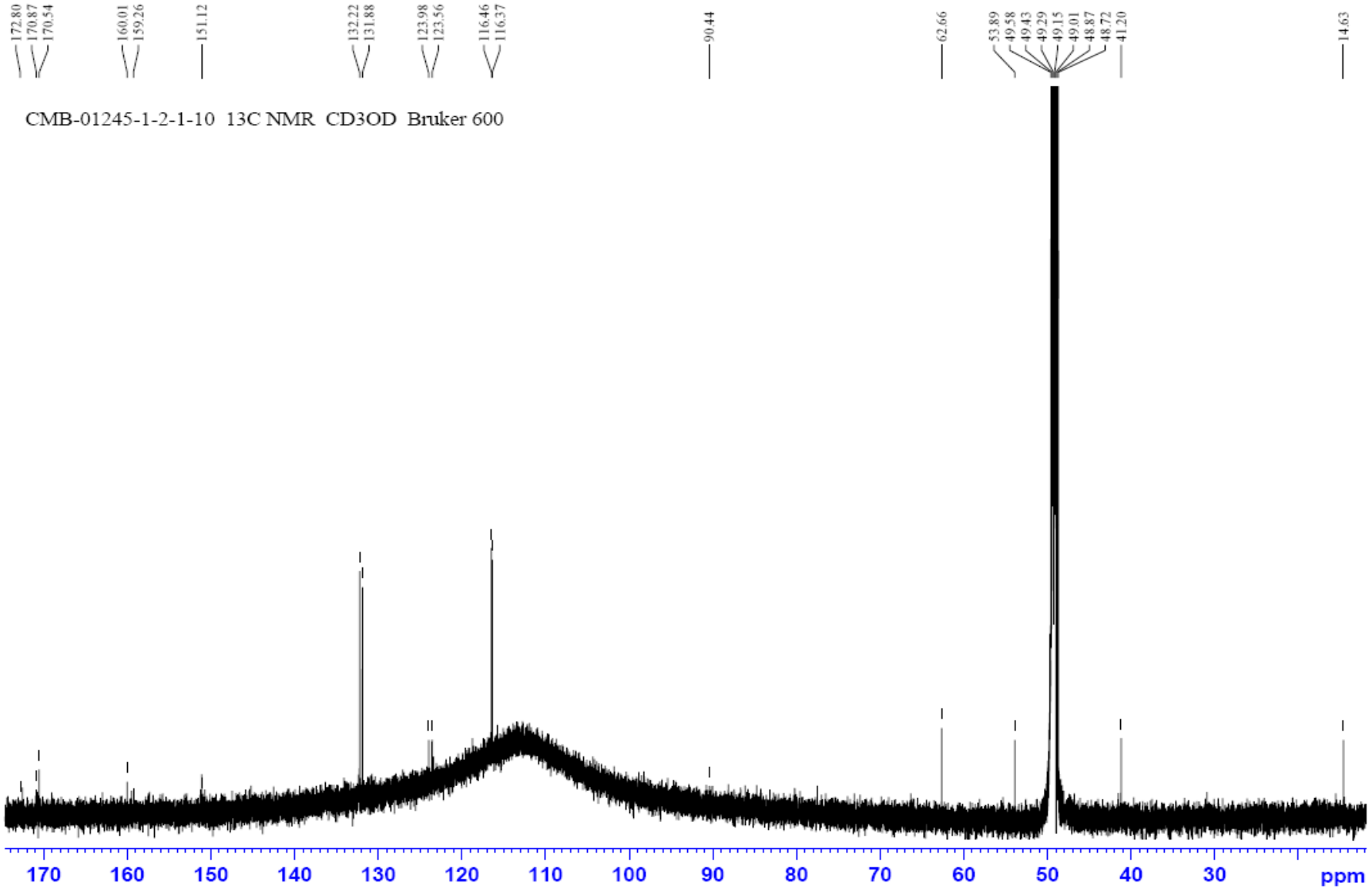


Figure S11 ^{1}H NMR (methanol-d_4, 600 MHz) spectrum for ianthellidone F (**6**).

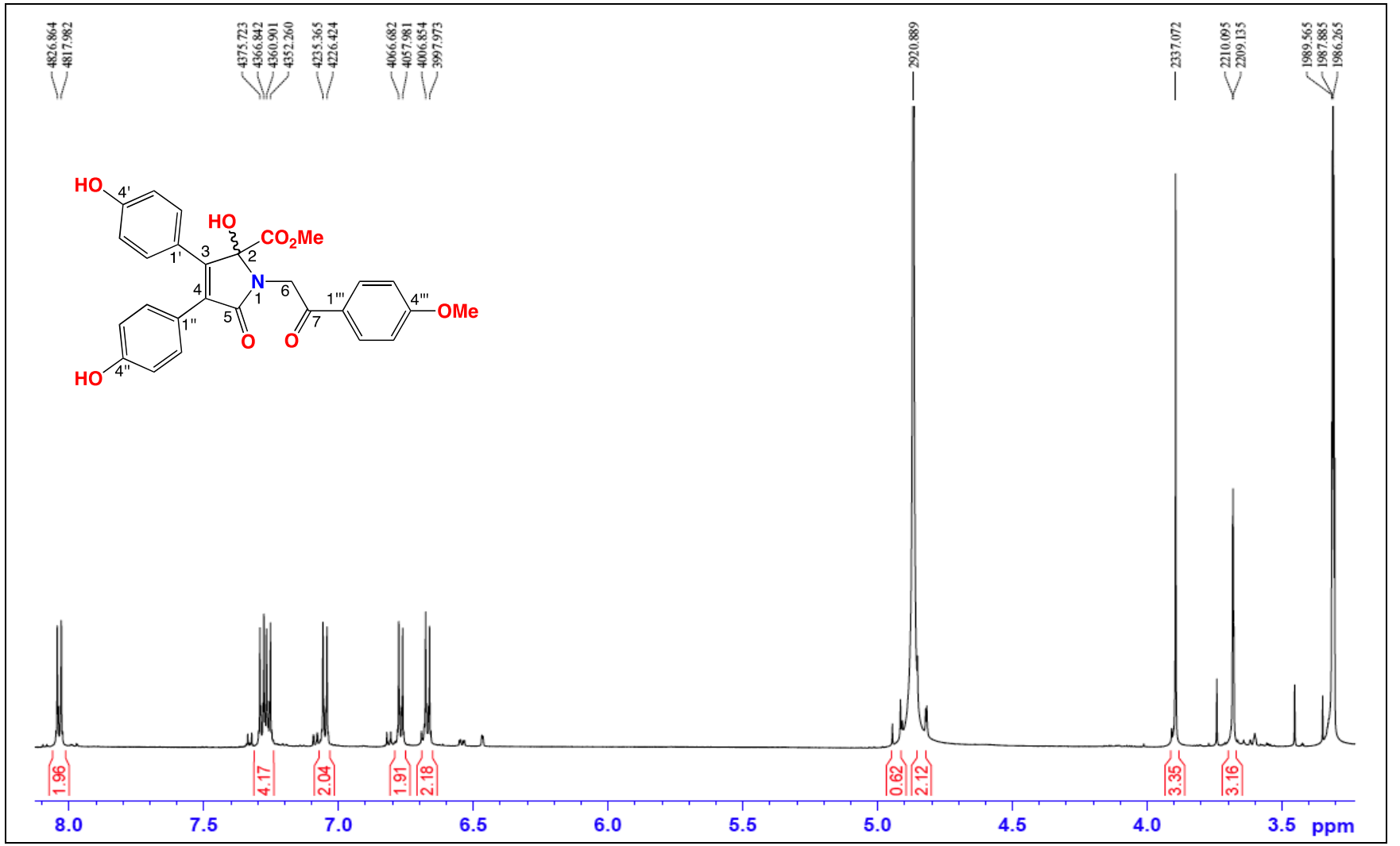


Figure S12 ^{13}C NMR (methanol-d_4, 600 MHz) spectrum for ianthellidone F (**6**).

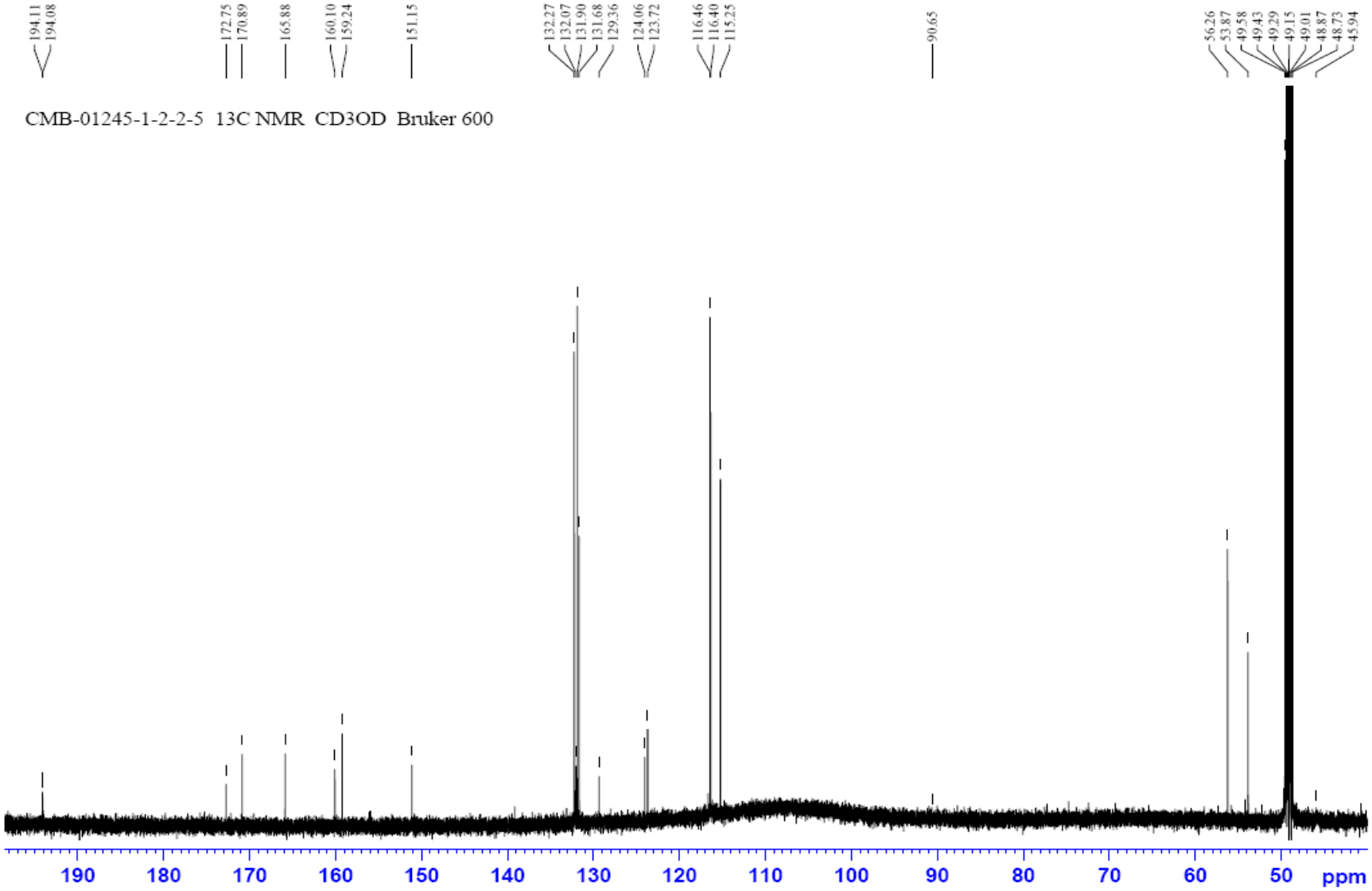


Figure S13 ^{1}H NMR (methanol-d_4, 600 MHz) spectrum for ianthellidone G (**7**).

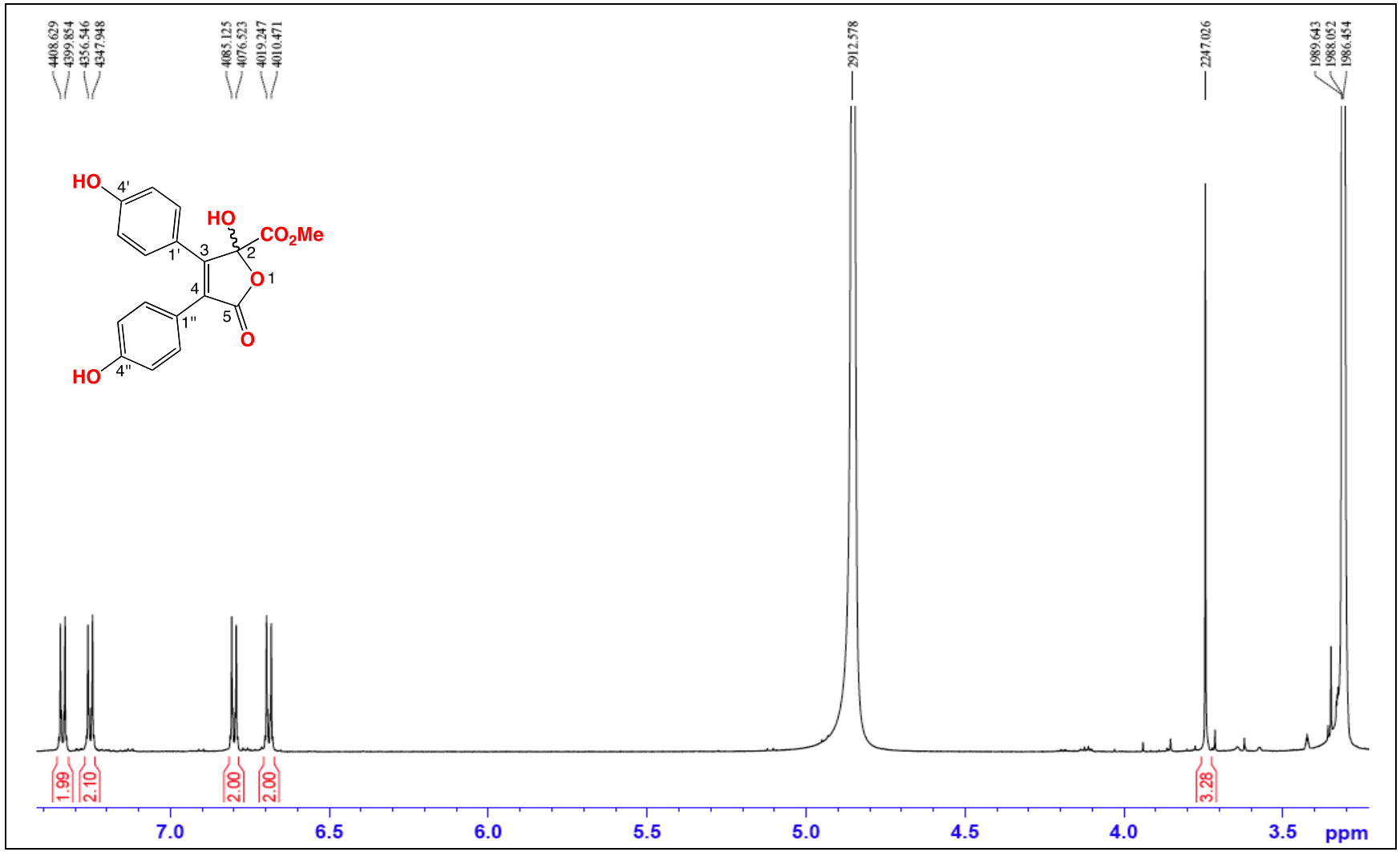


Figure S14 ^{13}C NMR (methanol-d_4, 600 MHz) spectrum for ianthellidone G (**7**).

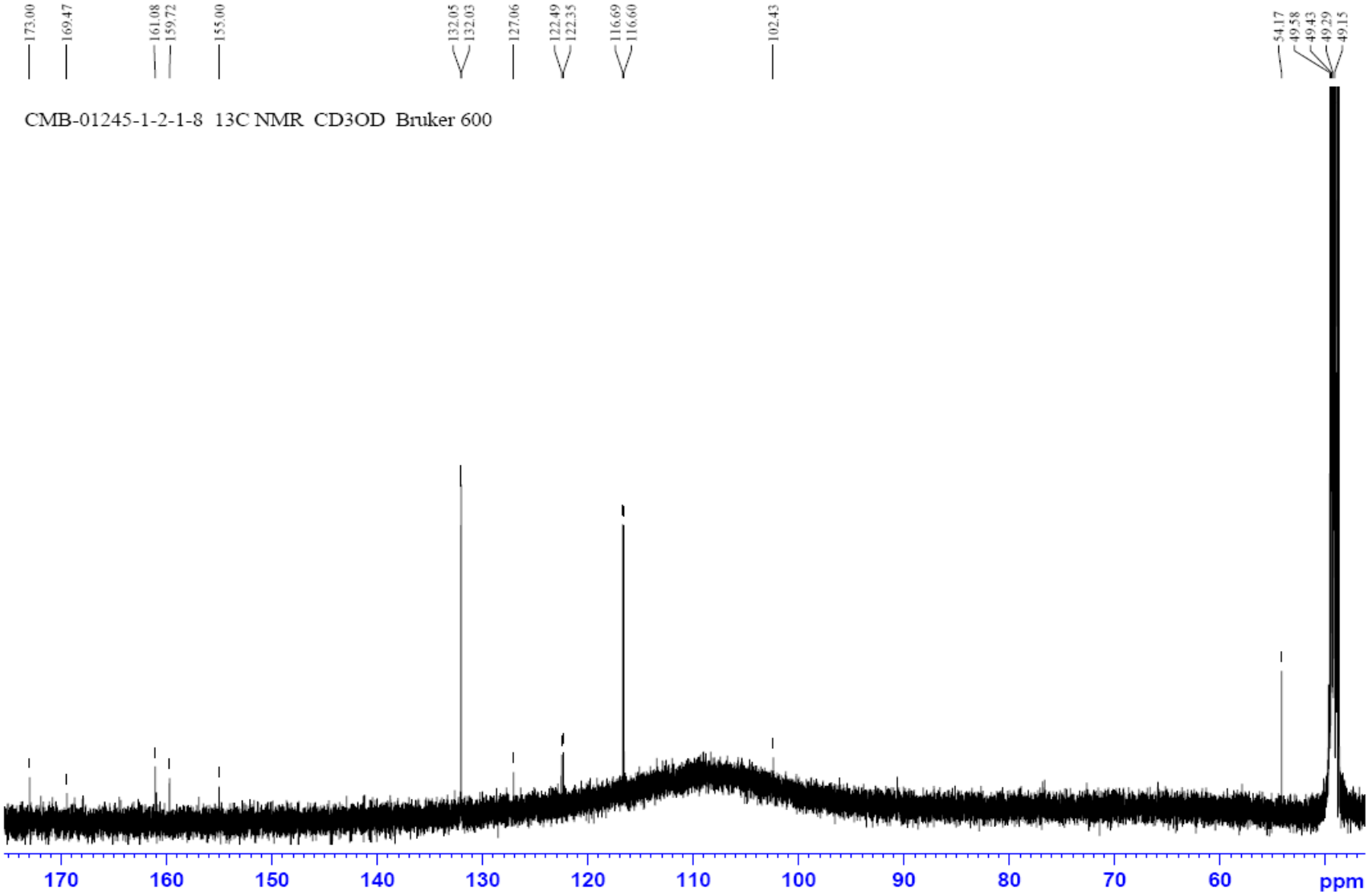


Figure S15 ^{1}H NMR (methanol-d_4, 600 MHz) spectrum for ianthellidone H (**8**).

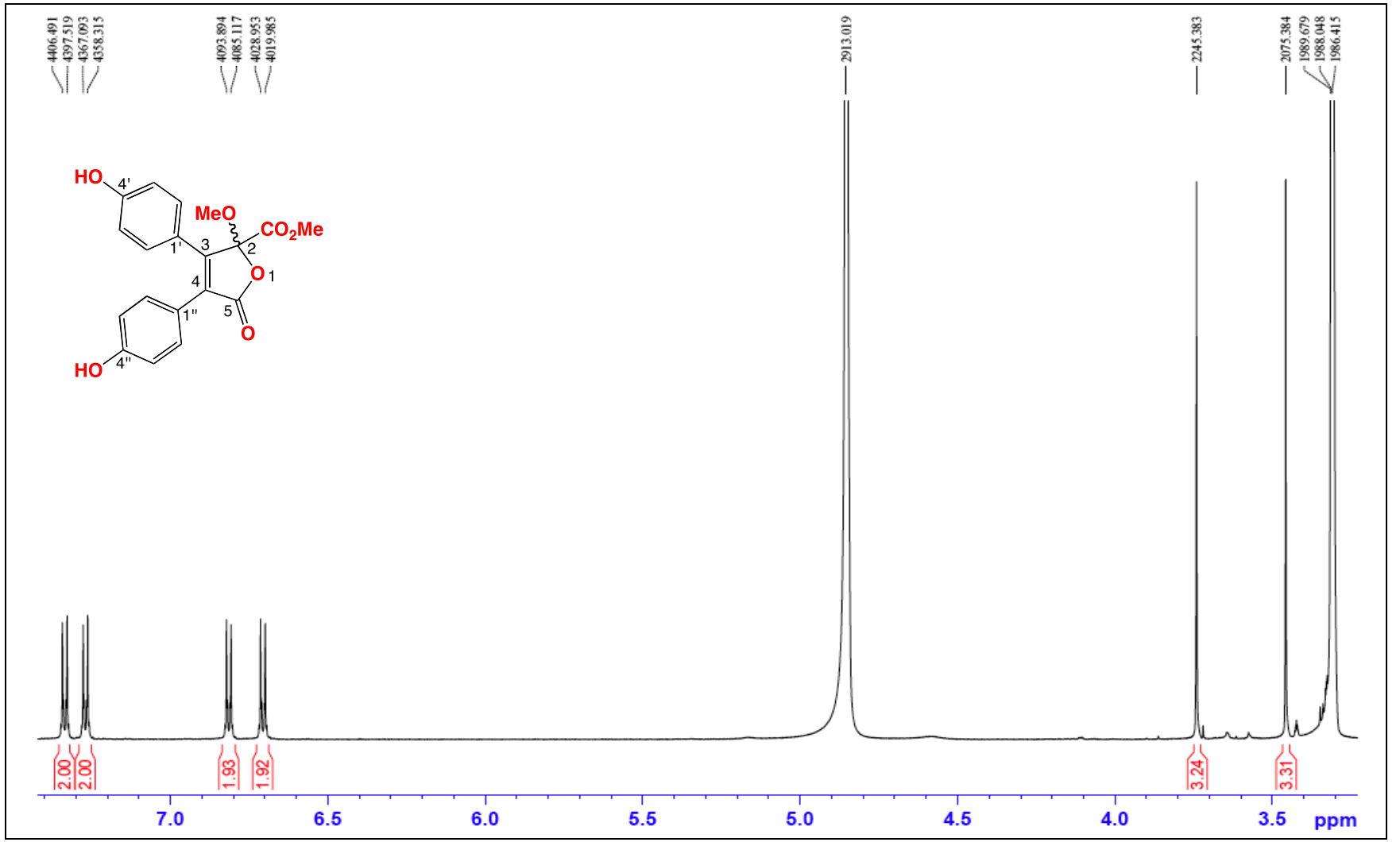


Figure S16 ^{13}C NMR (methanol-d_4, 600 MHz) spectrum for ianthellidone H (**8**).

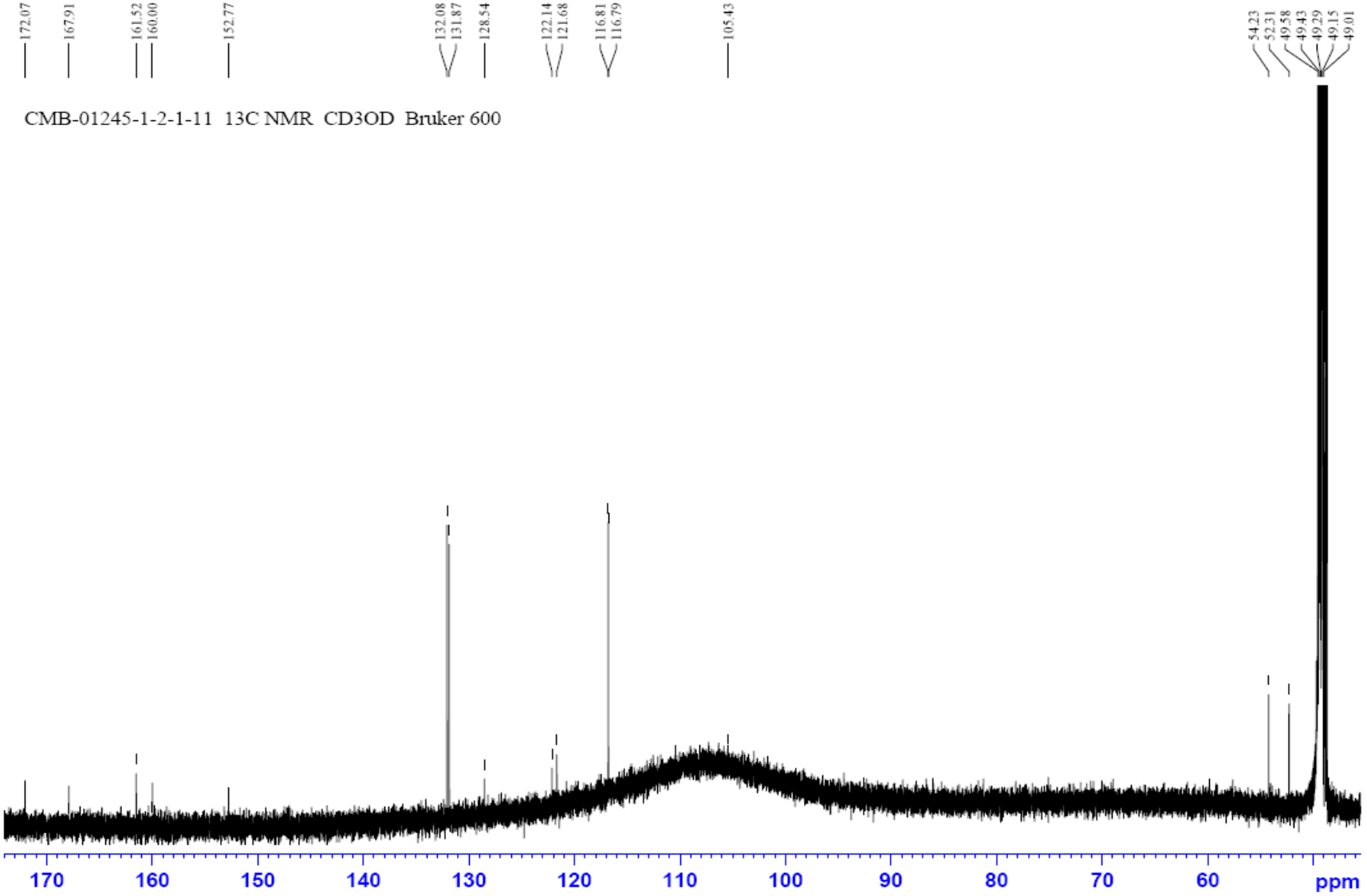


Figure S17 ^{1}H NMR (methanol-d_4, 600 MHz) spectrum for lamellarin O1 (**9**).

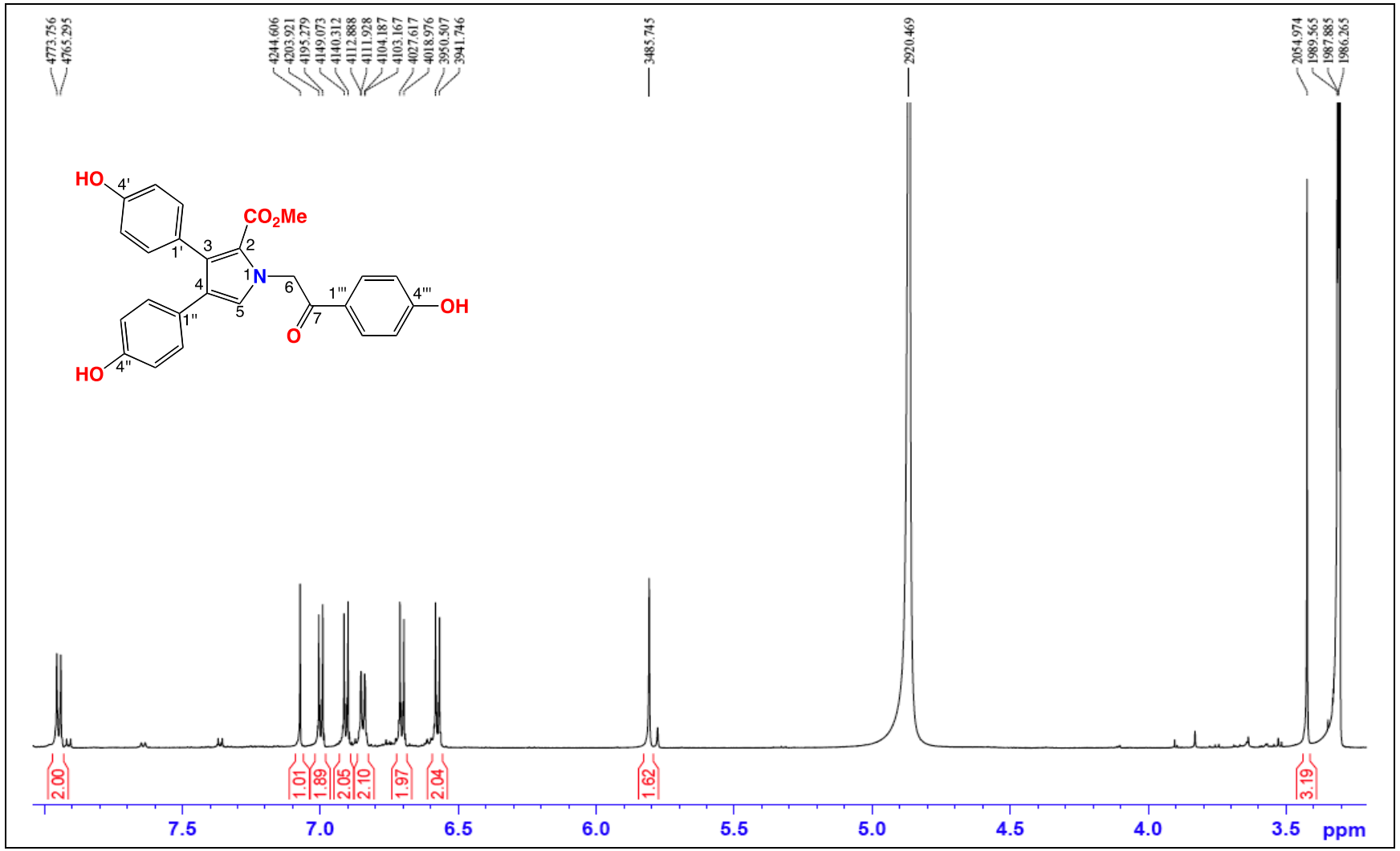


Figure S18 ^{13}C NMR (methanol-d_4, 600 MHz) spectrum for lamellarin O1 (**9**).

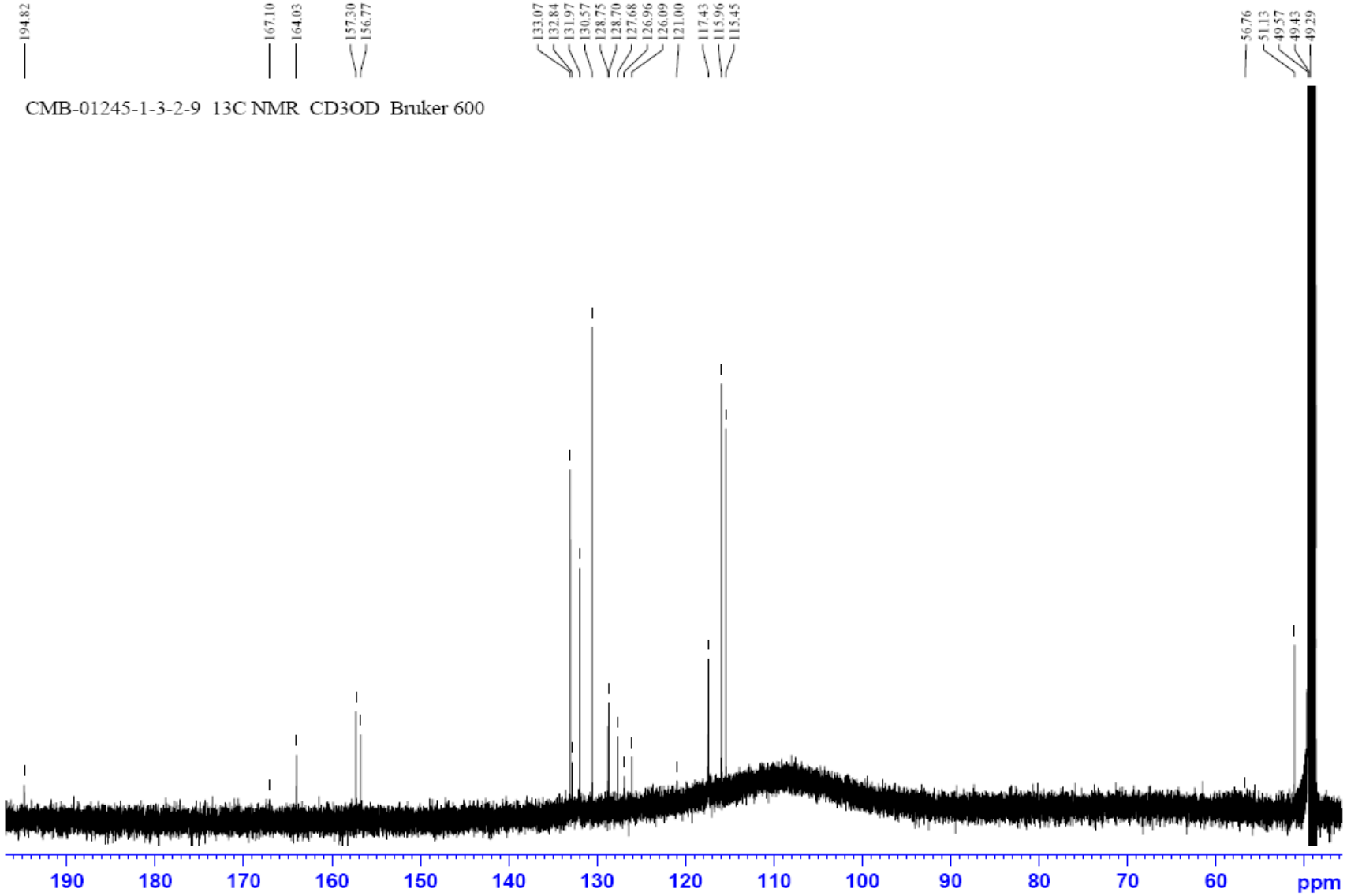


Figure S19 ^{1}H NMR (methanol-d_4, 600 MHz) spectrum for lamellarin O2 (**10**).

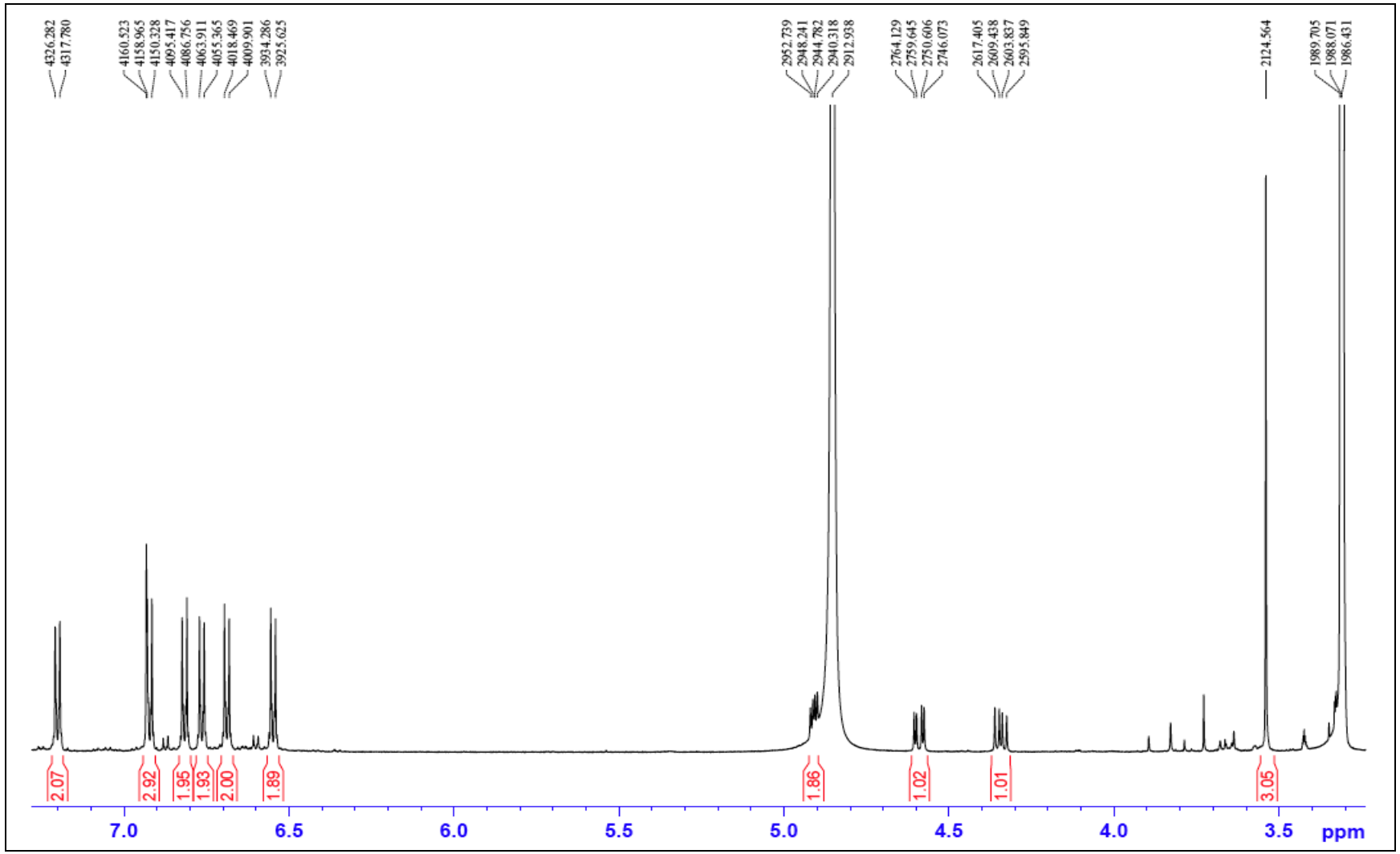


Figure S20 ^{13}C NMR (methanol-d_4, 600 MHz) spectrum for lamellarin O2 (**10**)

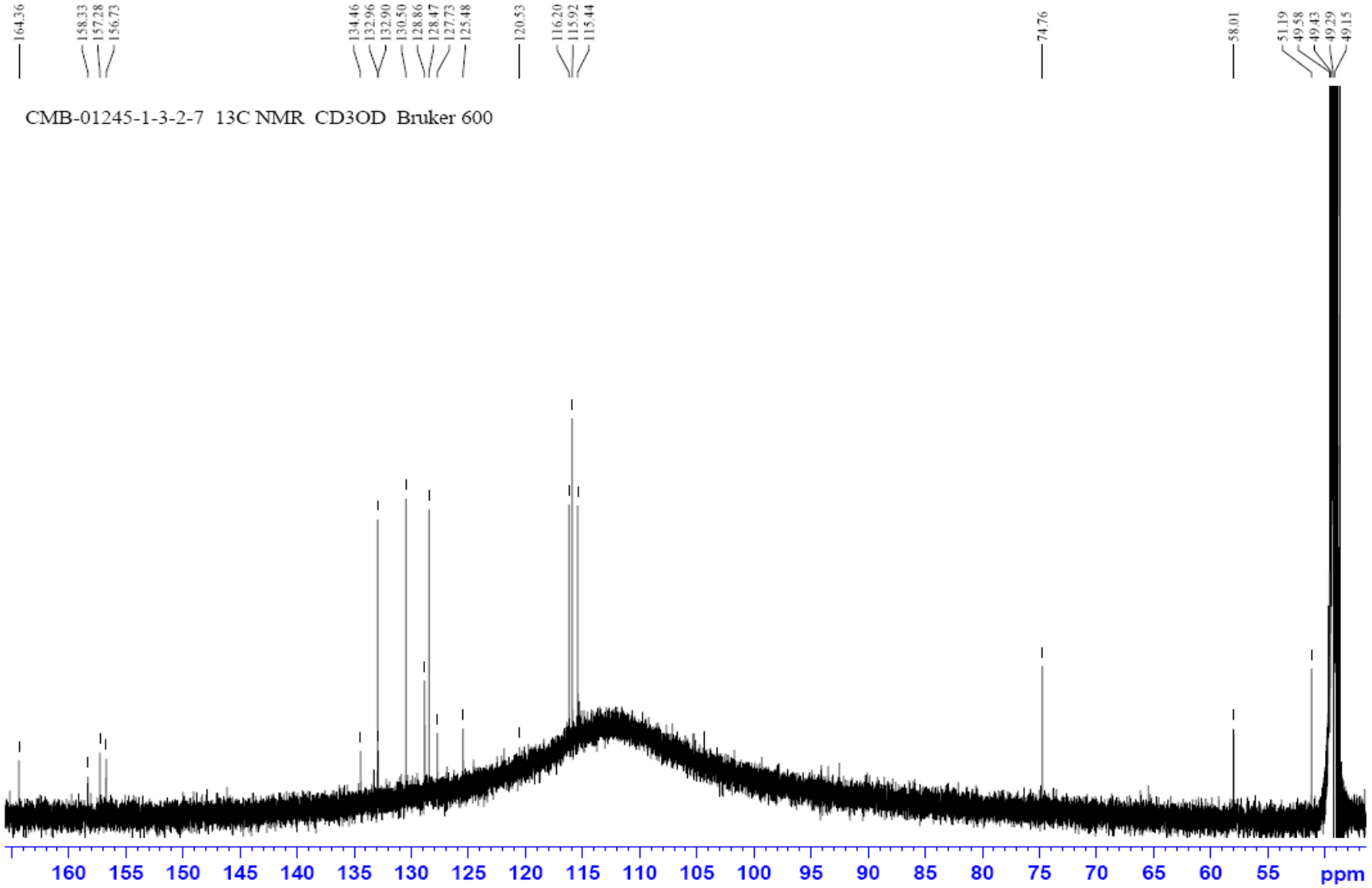


Figure S21 ^{1}H NMR (acetone-d_6, 600 MHz) spectrum for lamellarin O (**11**).

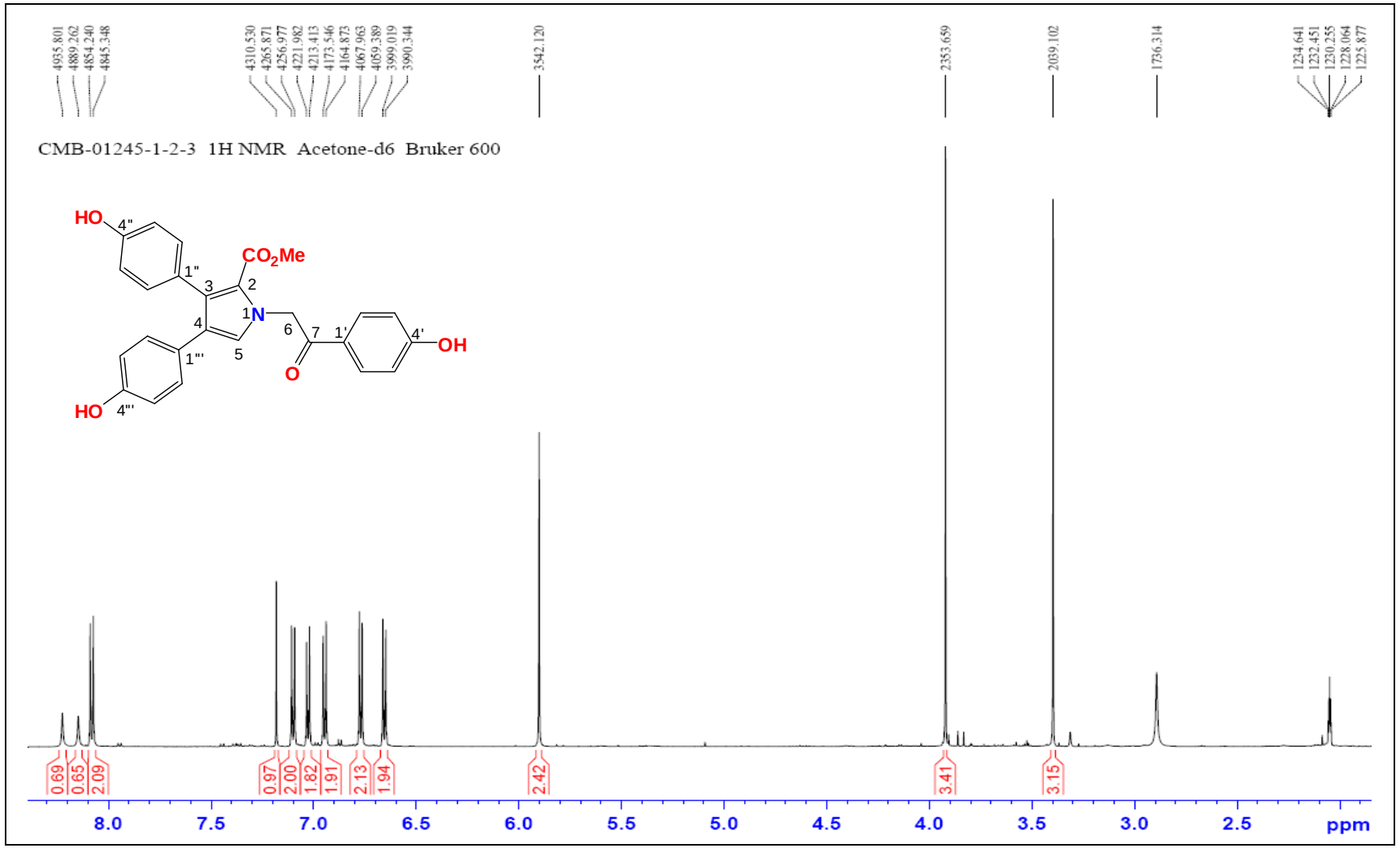


Figure S22 ^{1}H NMR (acetone-d_6, 600 MHz) spectrum for lamellarin Q (**12**).

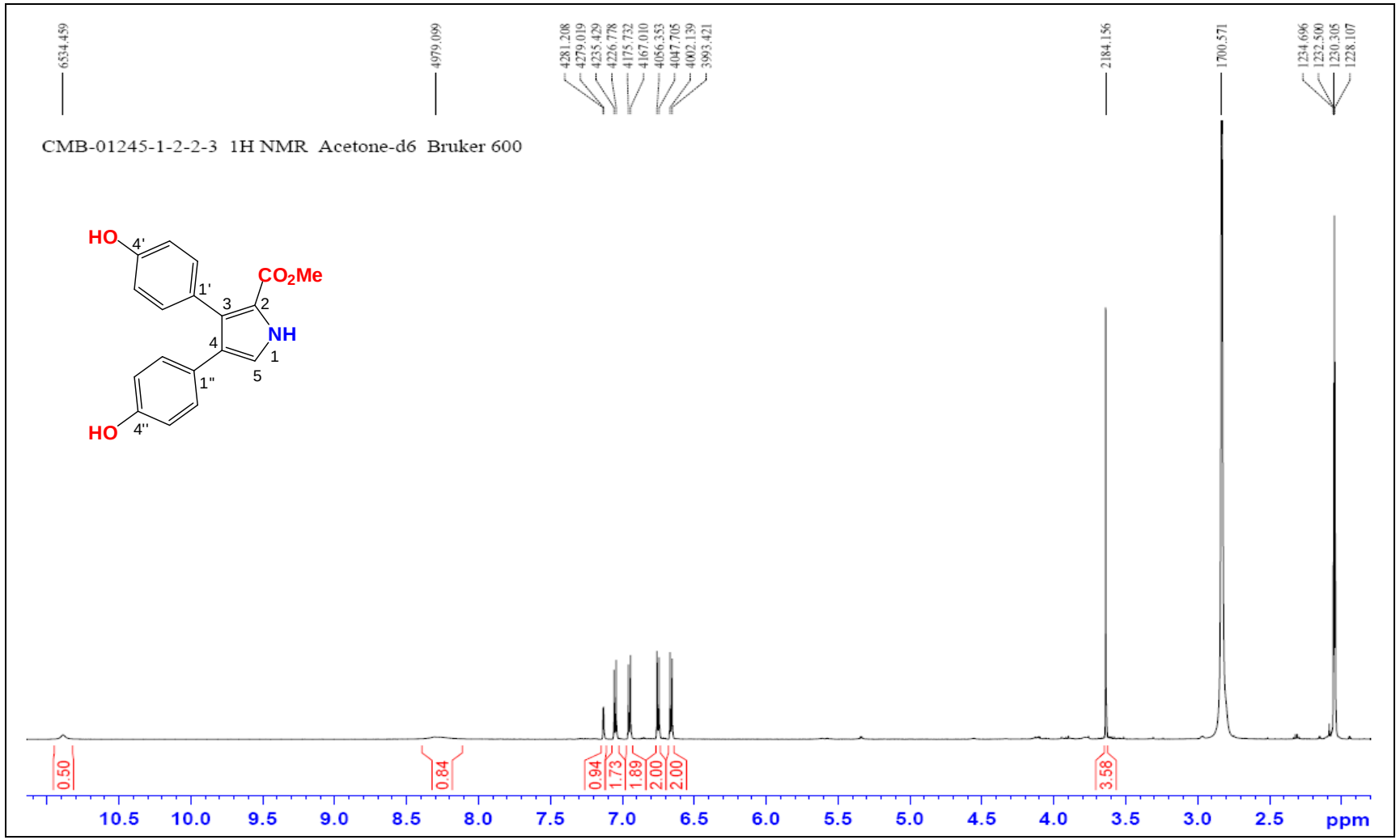


Figure S23 ^{1}H NMR (methanol-d_4, 600 MHz) spectrum for 4-hydroxybenzaldehyde (**13**).

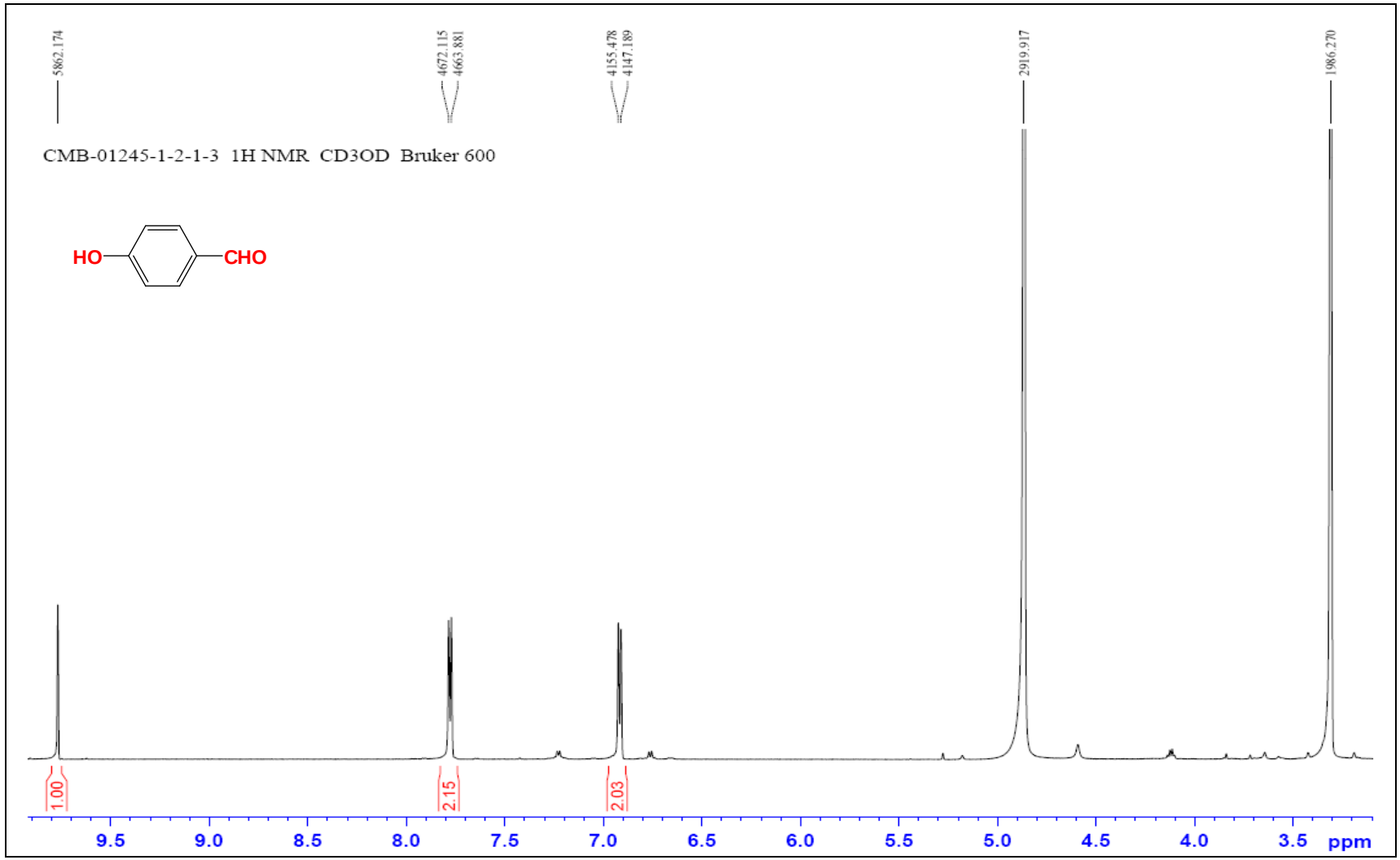


Figure S24 ^{1}H NMR (methanol-d_4, 600 MHz) spectrum for 4-hydroxybenzoic acid (**14**).

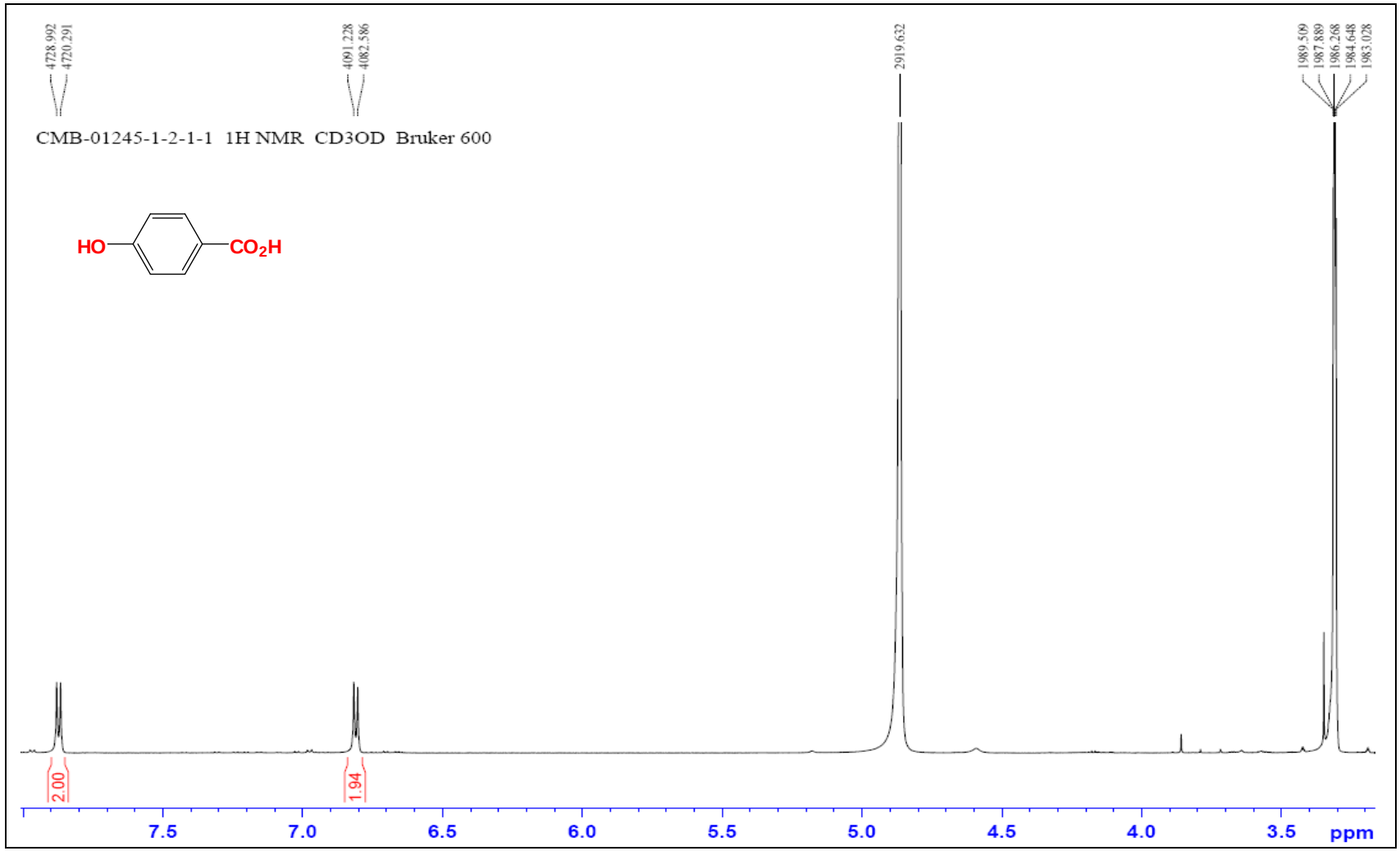


Figure S25 ^{1}H NMR (methanol-d_4, 600 MHz) spectrum for 4-methoxybenzoic acid (**15**).

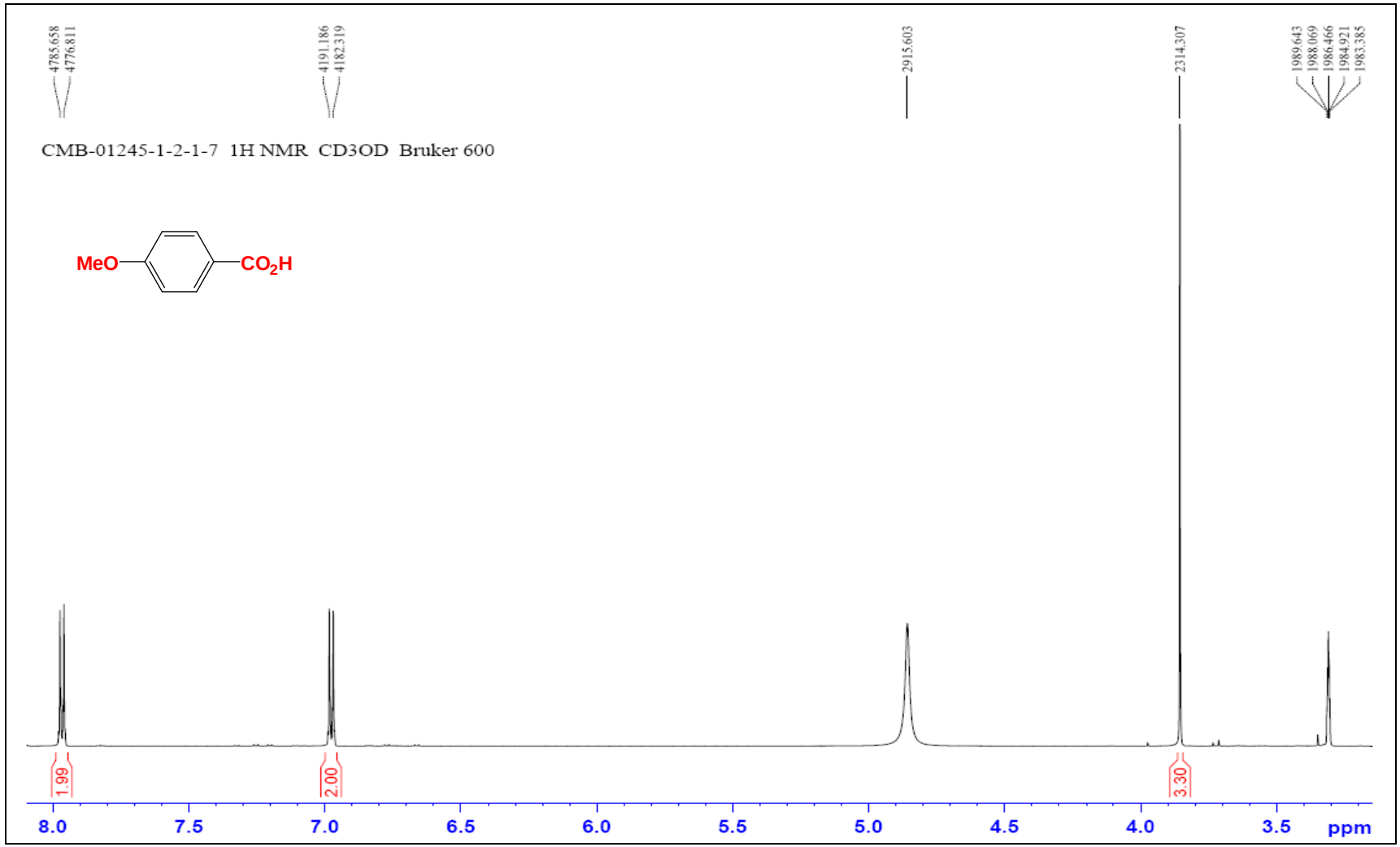


Figure S26 ^{1}H NMR (methanol-d_4, 600 MHz) spectrum for ethyl 4-hydroxybenzoate (**16**).

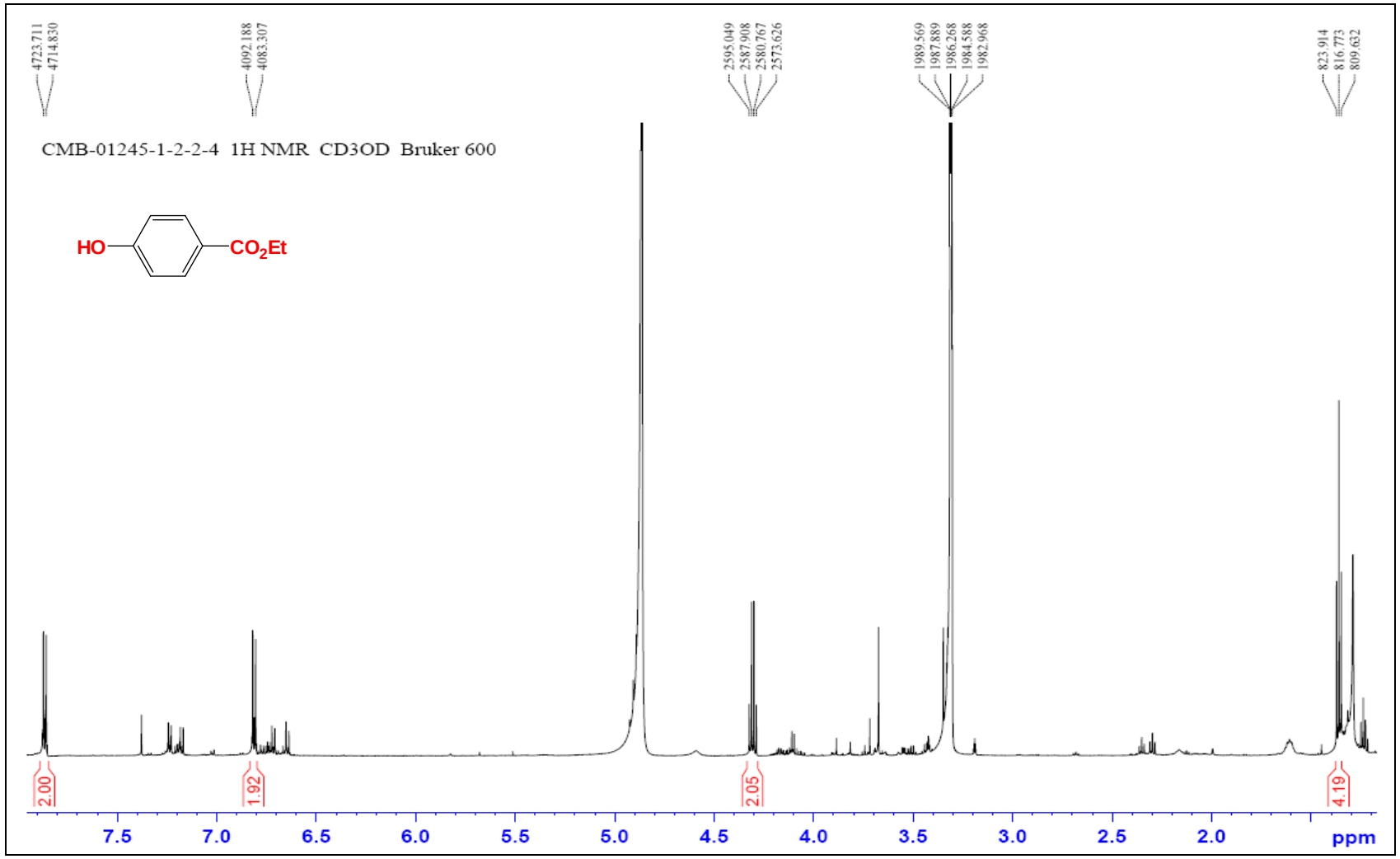
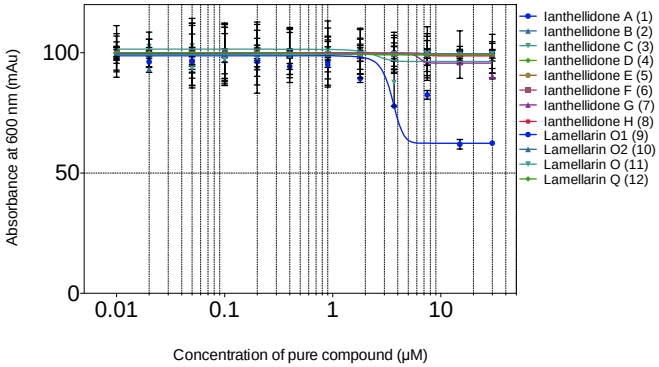
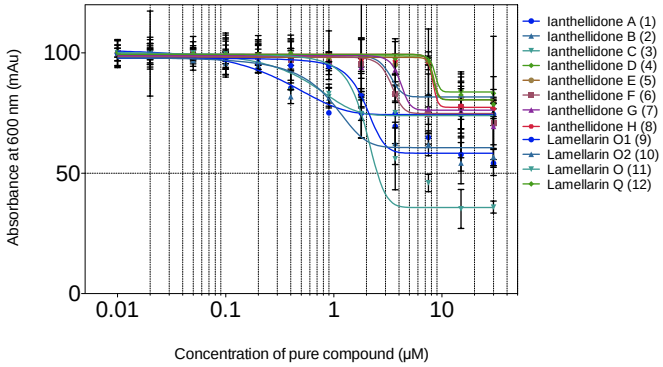


Figure S27a Selected antibacterial data for ianthellidones **1-8** and lamellarins **9-12**

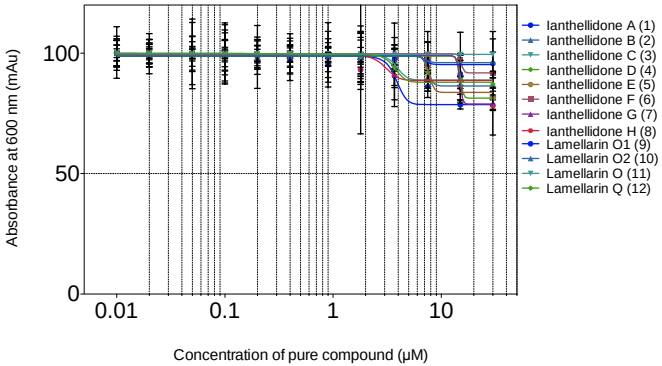
Bacillus subtilis ATCC 6051



Bacillus subtilis ATCC 6633



Staphylococcus aureus ATCC 25923



Staphylococcus aureus ATCC 9144

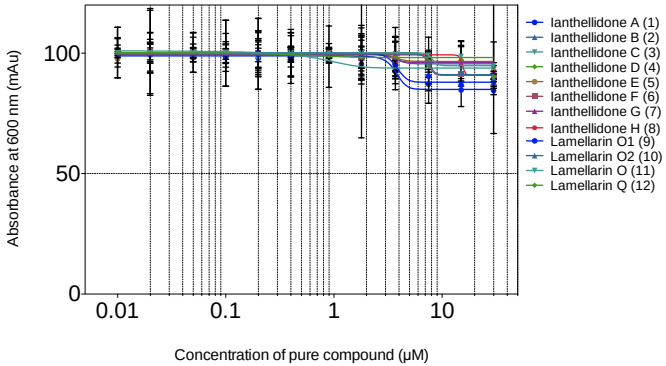
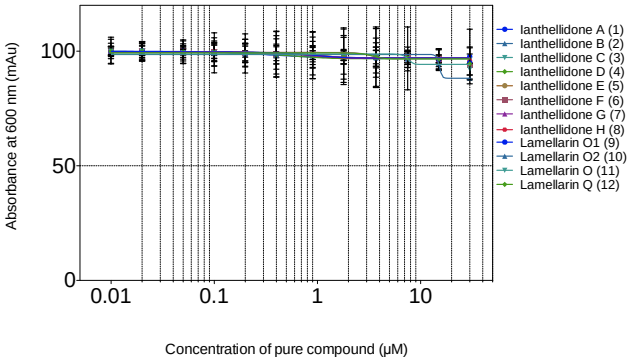
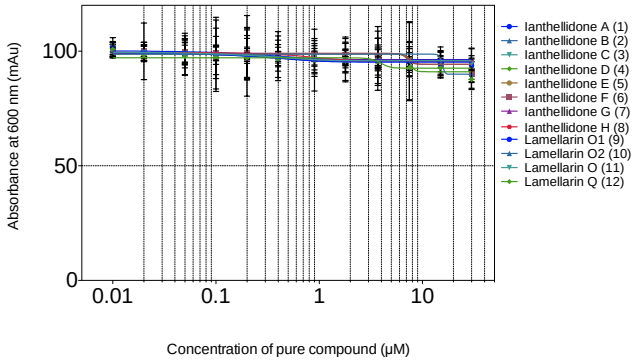


Figure S27b Selected antibacterial and antifungal data for ianthellidones **1-8** and lamellarins **9-12**

Escherichia coli ATCC 11775



Pseudomonas aeruginosa ATCC 10145



Candida albicans ATCC 90028

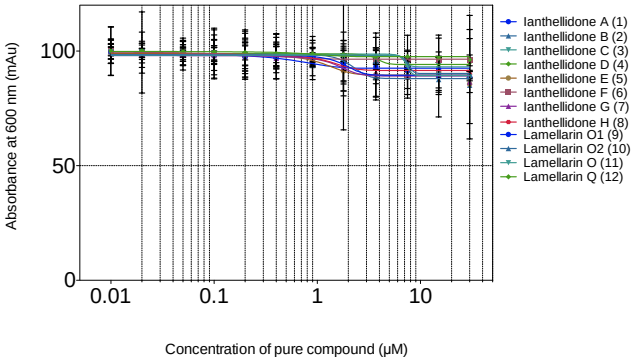


Table S27c Summary of antibacterial and antifungal data for **1-12**

	***Escherichia coli* ATCC 11775**		***Pseudomonas aeruginosa* ATCC 10145**		***Staphylococcus aureus* ATCC 25923**		***Staphylococcus aureus* ATCC 9144**		***Bacillus subtilis* ATCC 6051**		***Bacillus subtilis* ATCC 6633**		***Candida albicans* ATCC 90028**	
Compounds	**MIC (μM)**	**IC_{50} (μM)**	**MIC (μM)**	**IC_{50} (μM)**	**MIC (μM)**	**IC_{50} (μM)**	**MIC (μM)**	**IC_{50} (μM)**	**MIC (μM)**	**IC_{50} (μM)**	**MIC (μM)**	**IC_{50} (μM)**	**MIC (μM)**	**IC_{50} (μM)**
ianthellidone A (**1**)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ianthellidone B (**2**)	--		--	--	--	--	--	--	--	--	--	--	--	--
ianthellidone C (**3**)	--		--	--	--	--	--	--	--	--	--	--	--	--
ianthellidone D (**4**)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ianthellidone E (**5**)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ianthellidone F (**6**)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ianthellidone G (**7**)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ianthellidone H (**8**)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
lamellarin O1 (**9**)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
lamellarin O2 (**10**)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
lamellarin O (**11**)	--	--	--	--	--	--	--	--	--	--	15	2.5	--	--
lamellarin Q (**12**)	--	--	--	--	--	--	--	--	--	--	--		--	--

-- = inactive