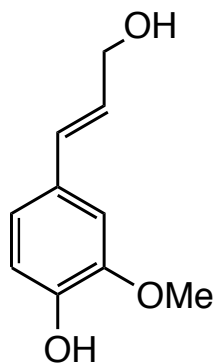


Compound Number 2001

¹³C



trans

coniferyl alcohol
4-hydroxy-3-methoxy cinnamyl alcohol

¹H (acetone)

Atom	H Shifts	Mult	J
γ OH	3.78	t	5.65
OMe	3.85	s	
γ	4.18	td	1.5, 5.6
β	6.22	dt	15.9, 5.5
α	6.49	dt	15.9, 1.5
5	6.76	d	8.1
6	6.84	dd	8.1, 1.9
2	7.04	d	1.9
Ar OH	7.63	s	

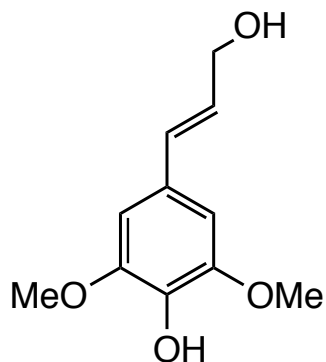
Notes:

S. Quideau
Assignments confirmed in all three solvents
JAFC 1992-40(7), 1108-1110

Atom	CDCl ₃	Acetone	DMSO	
OMe	55.78	56.09	55.56	
γ	63.66	63.37	61.73	
2	108.40	109.91	109.72	
5	114.48	115.73	115.47	
6	120.18	120.55	119.43	
β	126.05	127.96	127.49	
1	129.18	130.16	128.52	
α	131.23	130.41	129.00	
4	145.51	147.07	146.17	
3	146.64	148.36	147.72	

Compound Number 2002

¹³C



sinapyl alcohol
4-hydroxy-3,5-dimethoxy cinnamyl alcohol

¹H (acetone)

Atom	H Shifts	Mult	J
γ OH	3.88	t	5.65
OMe	3.82	s	
γ	4.20	td	5.6, 1.5
β	6.24	dt	15.8, 5.5
α	6.48	dt	15.8, 1.5
2,6	6.71	s	
4 OH	7.30	s	

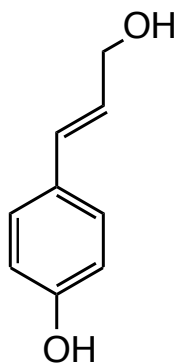
Notes:

S. Quideau

Note A1 and β change places in DMSO. Assignments confirmed in CDCl₃ and Acetone. JAFC 1992-40(7), 1108-1110

Atom	CDCl ₃	Acetone	DMSO	
OMe	56.27	56.48	55.92	
OMe	56.27	56.48	55.92	
γ	63.76	63.33	61.62	
2	103.35	104.65	103.79	
6	103.35	104.65	103.79	
β	126.58	128.27	127.89	
1	128.22	128.99	127.40	
α	131.50	130.62	129.17	
4	134.80	136.52	135.17	
3	147.13	148.71	148.01	
5	147.13	148.71	148.01	

Compound Number 2003

¹³C

p-coumaryl alcohol
4-hydroxy-cinnamyl alcohol

Atom	CDCl ₃	Acetone	DMSO	
γ	63.79	63.41	61.72	
3	115.50	116.15	115.37	
5	115.50	116.15	115.37	
β	125.74	127.71	127.15	
2	127.73	128.33	127.38	
6	127.73	128.33	127.38	
1	128.90	129.68	127.92	
α	131.08	130.13	128.70	
4	156.12	157.76	156.80	

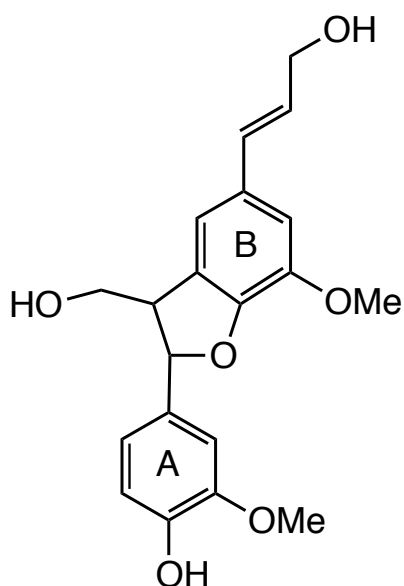
¹H (acetone)

Atom	H Shifts	Mult	J
γ OH	3.85	t	5.65
g's	4.19	td	5.6, 1.6
β	6.19	dt	15.9, 5.6
α	6.50	dt	15.9, 1.6
3,5	6.78	m	
2,6	7.25	m	
4 OH	8.40	s	

Notes:

S. Quideau
JAFC-1992-40(7), 1108-1110

Compound Number 2004

¹³C

4-[3-Hydroxymethyl-5-(3-hydroxypropenyl)-7-methoxy-2,3-dihydrobenzofuran-2-yl]-2-methoxyphenol

¹H (acetone)

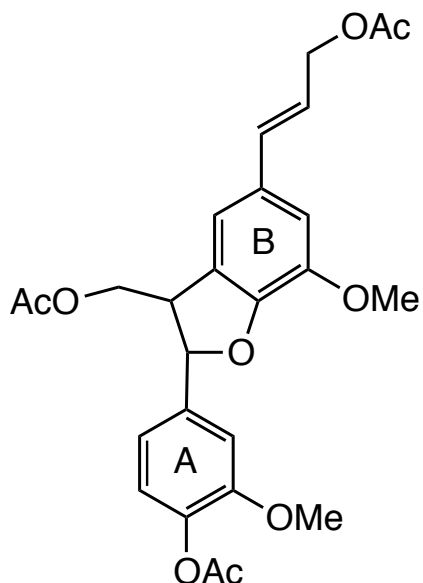
Atom	H Shifts	Mult	J
β	3.53	br q	
γ + γ OH	3.78-3.88	m	
A3 OMe	3.81	s	
B3 OMe	3.85	s	
B γ OH	4.16	t	5.0
B γ	4.19	td	5.2, 1.5
α	5.56	d	6.5
B β	6.23	dt	15.8, 5.5
B α	6.52	dt	15.8, 1.5
A5	6.80	d	8.1
A6	6.87	ddd	8.1, 2.0, 0.5
B2	6.94	br s	
B6	6.97	br s	
A2	7.03	d	2.0
A4 OH	7.73	br s	

Notes:

S. Quideau-Ag₂O oxidation of coniferyl alcohol.
Assignments confirmed in acetone and DMSO

Atom	CDCl ₃	Acetone	DMSO	
β	53.53	54.73	53.02	
A OMe	55.99	56.26	55.68	
B OMe	56.01	56.38	55.73	
B γ	63.83	63.39	61.70	
γ	64.00	64.60	62.98	
α	88.24	88.51	87.26	
A2	108.75	110.48	110.37	
B2	110.54	111.72	110.37	
A5	114.33	115.67	115.37	
B6	114.78	116.08	115.00	
A6	119.43	119.57	118.58	
B β	126.45	128.33	129.52	
B5	128.09	130.40	128.02	
B α	131.33	130.54	129.04	
B1	130.87	131.91	130.56	
A1	132.87	134.36	132.39	
B3	144.47	145.14	143.72	
A4	145.74	147.27	146.42	
A3	146.68	148.36	147.60	
B4	148.38	148.84	147.13	
<u>1H</u>				
β			3.44	
γ + γ OH			3.62-3.72	
A3 OMe			3.74	
B3 OMe			3.79	
B γ OH			4.77	
B γ			4.08	
α			5.47	
B β			6.21	
B α			6.46	
A5			6.75	
A6			6.75	
B2			6.91	
B6			6.94	
A2			6.92	
A4 OH			9.01	

Compound Number 2005



Acetic acid 4-[3-acetoxymethyl-5-(3-acetoxypentenyl)-7-methoxy-2,3-dihydrobenzofuran-2-yl]-2-methoxyphenyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	2.00	s	
B γ Ac Me	2.01	s	
A4 Ac Me	2.22	s	
β	3.78	m	
A3 OMe	3.79	s	
B3 OMe	3.88	s	
γ1	4.34	dd	11.1, 7.6
γ2	4.46	dd	11.1, 5.4
B γ	4.66	dd	6.5, 1.3
α	5.61	d	6.7
Bβ	6.24	dt	15.8, 6.5
B α	6.63	dt	15.8, 1.3
A6	7.00	br dd	8.1, 1.8
B6	7.03	br s	
B2	7.049	br s	
A5	7.054	d	8.1
A2	7.18	d	1.8

Notes:

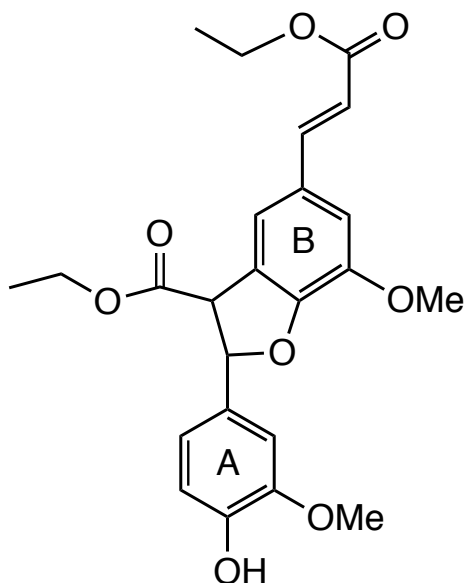
S.Quideau-Ag2O oxidation of coniferyl alcohol + acetylation. Assignments confirmed in CDCl3 and acetone
A1 and A4 switch places in CDCl3

¹³C

Atom	CDCl ₃	Acetone	DMSO
A4 Ac Me	20.51	20.43	20.41
γ Ac Me	20.68	20.67	20.61
B γ Ac Me	20.90	20.78	20.79
β	50.36	51.33	49.53
A OMe	55.79	56.24	55.84
B OMe	55.92	56.41	55.84
B γ	65.06	65.47	64.57
γ	65.22	65.96	64.90
α	87.91	88.34	87.01
A2	109.84	111.07	110.59
B2	110.56	112.20	111.08
B6	115.23	116.32	115.36
A6	118.08	118.67	118.00
B β	121.16	122.30	121.53
A5	122.79	123.76	123.01
B5	127.21	128.82	127.84
B1	130.59	131.65	130.28
B α	134.13	134.64	133.52
A4	139.56	140.70	139.14
A1	139.30	140.99	139.59
B3	144.30	145.39	143.96
B4	148.03	149.21	147.55
A3	151.16	152.38	150.92
A4 Ac C=O	168.95	168.98	168.60
γ C=O	170.77	170.97	170.41
B γ C=O	170.92	170.80	170.27

Compound Number 2006

¹³C



5-(2-Ethoxycarbonylvinyl)-2-(4-hydroxy-3-methoxyphenyl)-7-methoxy-2,3-dihydrobenzofuran-3-carboxylic acid ethyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
CH3	1.27	t	7.1
CH3	1.27	t	7.1
A3 OMe	3.82	s	
B3 OMe	3.91	s	
CH2	4.18	q	7.1
CH2	4.25	m	
β	4.43	d	8.0
α	6.03	d	8.0
B β	6.41	d	15.9
A5	6.84	d	8.1
A6	6.91	dd	8.1, 1.9
A2	7.08	d	1.9
B6	7.27	br s	
B2	7.31	br s	
B α	7.62	d	15.9
A4 OH	7.87	s	

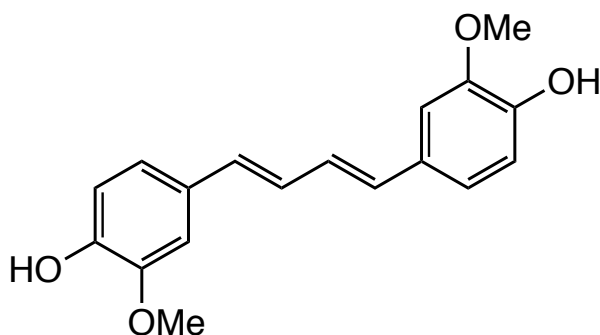
Notes:

S. Quideau-Ag2O oxidation of ethyl ferulate.

Atom	CDCl ₃	Acetone	DMSO	
A CH3	14.24	14.48	14.12	
B CH3	14.31	14.63	14.32	
β	55.54	56.06	54.33	
A OMe	55.98	56.31	55.78	
B OMe	56.08	56.49	56.04	
A CH2	61.83	62.20	61.49	
B CH2	60.37	60.56	59.99	
α	87.46	88.34	87.36	
A2	108.74	110.74	110.86	
B2	111.93	113.30	112.55	
A5	114.49	115.82	115.48	
B β	115.93	116.69	115.84	
B6	117.86	118.91	118.31	
A6	119.44	120.18	119.41	
B5	125.85	127.41	126.35	
B1	128.61	129.46	128.23	
A1	131.44	132.10	129.97	
B α	144.50	145.22	144.66	
B3	144.69	145.82	147.83	
A3	146.69	148.56	144.44	
A4	146.03	147.97	149.50	
B4	149.90	150.99	147.19	
B γ	167.18	167.28	166.65	
γ	170.20	171.10	170.42	

Compound Number 2007

¹³C



trans

1,4-bis-(4-hydroxy-3-methoxyphenyl)-1,3-butadiene

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.87	s	
α	6.56	m	
A5	6.78	d	8.1
β, A6	6.85-6.92	m	
A2	7.12	d	1.9
Ar OH	7.71	s	

Notes:

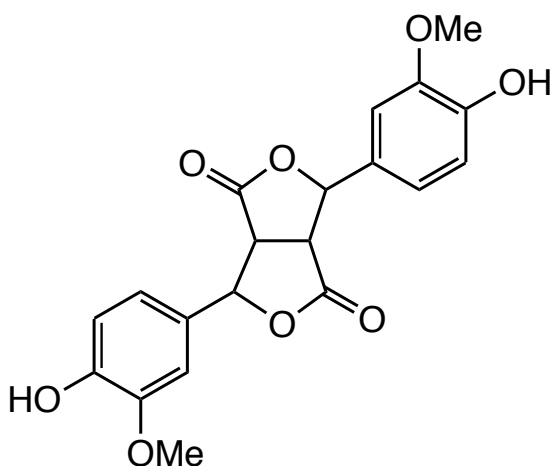
S. Quideau

From LiBH₄ red. of dilactone

As this compound has a plane of symmetry the shifts for the other half are identical.

Atom	CDCl ₃	Acetone	DMSO	
OMe	55.89	56.21	55.55	
2	107.95	109.76	109.38	
5	114.55	115.96	115.55	
6	120.29	120.95	119.81	
β	127.35	128.07	126.90	
1	130.25	130.81	128.96	
α	131.72	132.49	131.37	
4	145.45	147.41	146.43	
3	146.69	148.60	147.80	

Compound Number 2008



dilactone from ferulic acid

3,6-Bis-(4-hydroxy-3-methoxyphenyl) tetrahydrofuro [3,4-c]
furan-1,4-dione

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.85	s	
β	4.09	t	1.0
α	5.77	br s	
5	6.86	d	8.2
6	6.92	dd	8.2, 1.8
2	7.05	d	1.8
4 OH	7.90	s	

Notes:

S. Quideau

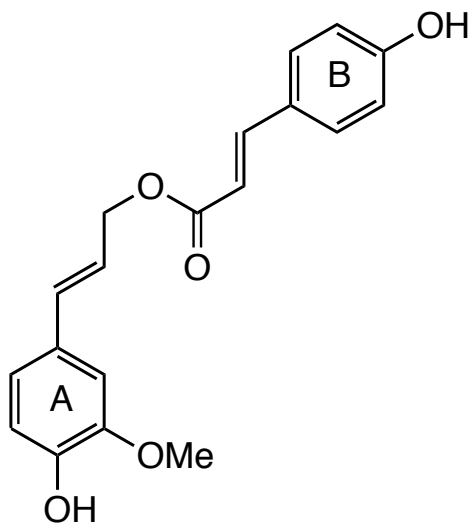
As this compound has a plane of symmetry the shifts for the other half are identical.

¹³C

Atom	CDCl ₃	Acetone	DMSO	
β	48.39	49.11	48.11	
OMe	56.13	56.39	55.81	
α	81.90	83.22	82.06	
2	107.52	110.40	110.64	
5	114.98	116.00	115.46	
6	117.41	119.57	119.22	
1	129.81	130.82	129.00	
4	146.35	148.17	147.36	
3	147.06	148.72	147.88	
γ	174.94	175.99	175.40	

Compound Number 2009

¹³C



coniferyl *p*-coumarate

3-(4-Hydroxyphenyl) acrylic acid 3-(4-hydroxy-3-methoxyphenyl) llyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.86	s	
γ	4.78	dd	6.5, 1.3
β	6.25	dt	15.8, 6.5
B β	6.37	d	15.9
α	6.65	dt	15.8, 1.3
A5	6.79	d	8.1
B3,5	6.88	m	
A6	6.91	dd	8.1, 2.0
A2	7.11	d	2.0
B2,6	7.54	m	
B α	7.63	d	15.9
ArOH	7.76	s	
ArOH	9.03	s	

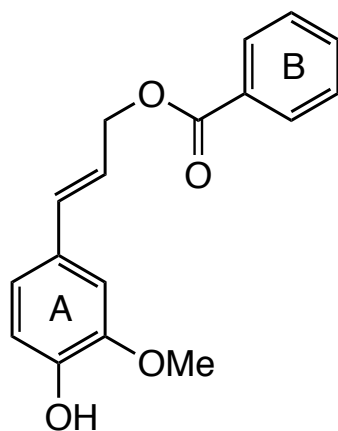
Notes:

S. Quideau

Atom	CDCl ₃	Acetone	DMSO	
OMe	55.87	56.20	55.61	
γ	65.35	65.49	64.62	
A2	108.44	110.20	109.91	
B β	114.45	115.45	114.13	
A5	114.98	115.83	115.46	
B3	115.93	116.68	115.81	
B5	115.93	116.68	115.81	
A6	120.62	121.19	120.12	
β	120.89	121.72	120.61	
B1	126.81	126.90	125.12	
A1	128.83	129.39	127.59	
B2	130.00	130.91	130.37	
B6	130.00	130.91	130.37	
α	134.43	134.90	133.9	
Bα	145.07	145.49	144.90	
A4	145.84	147.80	146.87	
A3	146.63	148.53	147.79	
B4	158.26	160.65	159.89	
B γ	167.57	167.27	166.46	

Compound Number 2010

¹³C



coniferyl benzoate

3-Phenyl-acrylic acid 3-(4-hydroxy-3-methoxyphenyl)allyl ester

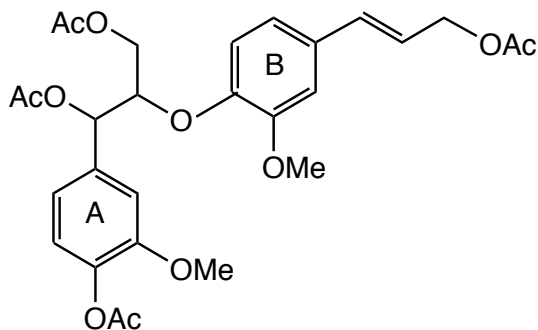
Atom	CDCl ₃	Acetone	DMSO	
OMe	55.86	56.21	55.61	
γ	65.74	66.35	65.55	
A2	108.39	110.25	109.96	
A5	114.44	115.84	115.45	
A6	120.64	121.29	120.23	
β	120.81	121.32	120.23	
B3	128.32	129.37	128.82	
B5	128.32	129.37	128.82	
A1	128.76	129.31	127.52	
B2	129.61	130.17	129.20	
B6	129.61	130.17	129.20	
B1	130.24	131.30	129.78	
B4	132.93	133.86	133.39	
α	134.50	135.34	134.29	
A3	146.63	148.54	147.79	
A4	145.91	147.89	146.93	
B α C=O	166.46	166.58	165.62	

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.86	s	
γ	4.94	dd	6.5, 1.3
β	6.34	dt	15.8, 6.5
α	6.72	dt	15.8, 1.3
A5	6.80	d	8.1
A6	6.93	dd	8.1, 2.0
A2	7.14	d	2.0
B3,5	7.50	m	
B4	7.62	m	
B2,6	8.03 - 8.06	m	
ArOH	7.76	s	

Notes:

S. Quideau
isolated from gum s.am



threo

Guaiacylglycerol- β -coniferyl ether peracetate¹H (acetone)

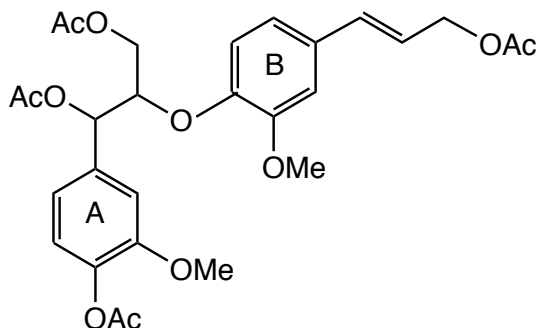
Atom	H Shifts	Mult	J

Notes:

S. Quideau

Atom	CDCl ₃	Acetone	DMSO	
A4 Ac Me	20.63	20.44	20.38	
α Ac Me	20.68	20.58	20.46	
γ Ac Me	20.99	20.78	20.75	
Bγ Ac Me	21.02	20.91	20.72	
A3 OMe	55.81	56.24	55.67	
B3 OMe	55.93	56.29	55.84	
γ	63.02	63.56	62.49	
B γ	65.08	65.36	64.45	
α	74.40	75.32	74.28	
β	80.19	80.56	78.95	
B2	110.17	111.31	110.22	
A2	111.66	112.64	111.65	
B5	118.31	118.74	116.99	
A6	119.54	120.30	119.46	
B6	119.82	120.54	119.56	
Bβ	122.13	123.26	122.35	
A5	122.83	123.56	122.74	
B1	131.54	132.35	130.64	
B α	133.87	134.16		
			132.99	
A1	135.18	136.61	135.40	
A4	139.92	140.92	139.23	
B4	148.02	149.09	147.56	
B3	150.71	151.75	150.09	
A3	151.12	152.22	150.73	
A4 Ac C=O	168.76	168.89	168.48	
α Ac C=O	169.65	170.00	169.45	
γ Ac C=O	170.54	170.68	170.05	
Bγ Ac C=O	170.84	170.77	170.21	

Compound Number 2012



Guaiacyl glycerol- β -coniferyl ether peracetate
Acetic acid 4-{1,3-diacetoxy-2-[4-(3-acetoxypentenyl)-2-methoxyphenoxy] propyl}-2-methoxyphenyl ester

^1H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.93	s	
B γ Ac Me	2.02	s	
α Ac Me	2.07	s	
A4 Ac Me	2.21	s	
A3 OMe	3.82	s	
B3 OMe	3.85	s	
γ 1	4.22	dd	11.9, 4.1
γ 2	4.36	dd	11.9, 5.9
B γ	4.66	dd	6.4, 1.4
β	4.85	m	
α	6.06	d	5.1
B β	6.26	dt	15.9, 6.4
B α	6.62	dt	15.9, 1.4
B6	6.93	dd	8.3, 2.0
B5	6.97	d	8.3
A5	7.02	d	8.1
A6	7.05	dd	8.1, 1.8
B2	7.13	d	2.0
A2	7.25	d	1.8

Notes:

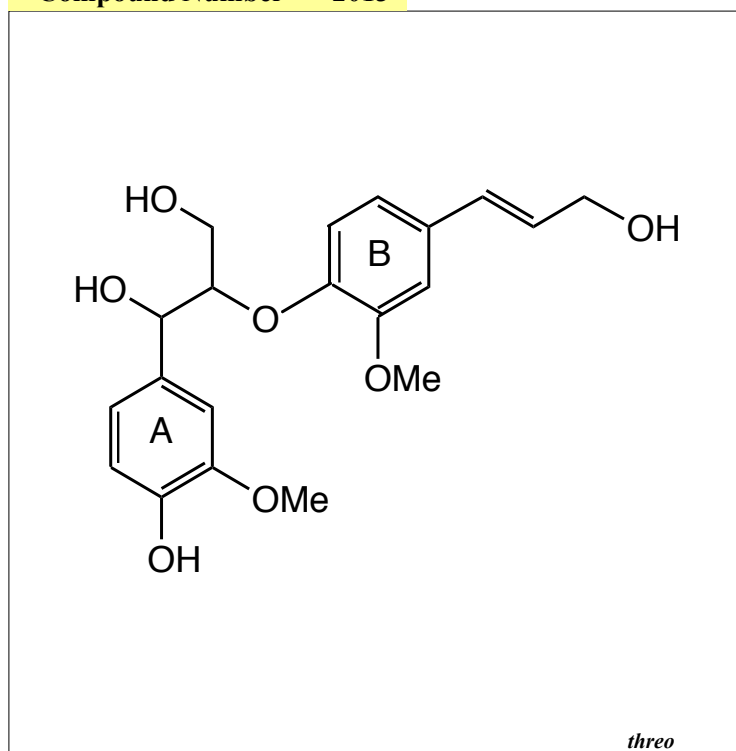
S. Quideau

^{13}C

Atom	CDCl_3	Acetone	DMSO
A4 Ac Me	20.64	20.45	20.39
α Ac Me	20.74	20.59	20.47
γ Ac Me	20.99	20.77	20.69
B γ Ac Me	20.99	20.85	20.75
A3 OMe	55.80	56.25	55.72
B3 OMe	55.91	56.27	55.78
γ	62.53	62.98	61.92
B γ	65.07	65.34	64.43
α	73.70	74.49	73.07
β	80.17	80.27	78.29
B2	110.24	111.38	110.40
A2	111.94	112.73	111.69
B5	119.11	119.36	117.51
A6	119.65	120.39	119.37
B6	119.80	120.48	119.56
B β	122.23	123.37	122.48
A5	122.60	123.35	122.58
B1	131.86	132.63	130.93
B α	133.85	134.12	132.96
A1	135.28	136.59	135.34
A4	139.78	140.79	139.11
B4	147.23	148.27	146.63
B3	150.98	151.98	150.32
A3	151.02	152.11	150.60
A4 Ac C=O	168.80	168.90	168.51
α Ac C=O	169.49	169.88	169.33
γ Ac C=O	170.76	170.74	170.12
B γ Ac C=O	170.83	170.74	170.21

Compound Number 2013

¹³C



Guaiacylglycerol- β -coniferyl ether

1-(4-Hydroxy-3-methoxyphenyl)-2-[4-(3-hydroxypropenyl)-2-methoxyphenoxy]propane-1,3-diol

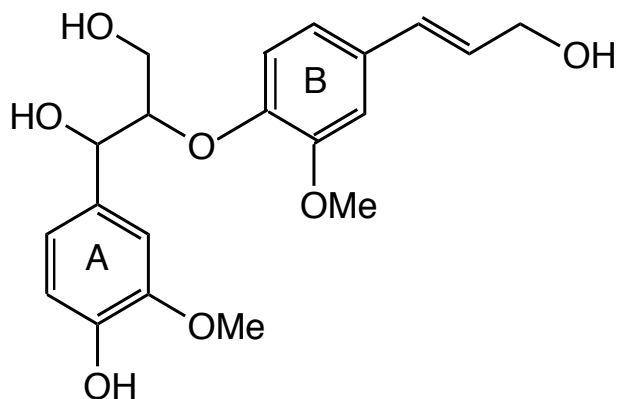
¹H (acetone)

Atom	H Shifts	Mult	J
γ 1	3.48	dd	11.9, 5.7
γ 2	3.67	dd	11.9, 3.7
A,B γ OH	3.80-3.90		
A3 OMe	3.80	s	
B3 OMe	3.88	s	
B γ	4.20	br dd	5.3, 1.6
β	4.20	m	
α OH	4.45	d	3.9
α	4.87	br d	5.5
B β	6.28	dt	15.9, 5.4
B α	6.52	dt	15.9, 1.6
A5	6.76	d	8.1
A,B 6	6.88-6.91	m	
A2	7.08	d	1.9
B2	7.09	d	1.9
B5	7.11	d	8.4
A4 OH	7.50	br s	

Notes:

S. Quideau see erythro isomer 2014
 α (e/t) and γ shifts (e/t) interchange from sample to sample, probably due to H-exchange of OH's in d6-acetone. CDCl₃ and DMSO shifts not substantiated.
DMSO/pyr data at 700MHz F. Lu w3-F9 HSQC and HMBC

Atom	CDCl ₃	Acetone	DMSO	
A3 OMe	55.97	56.19	55.44	55.40
B3 OMe	56.03	56.31	55.83	55.57
γ	61.21	61.88	60.16	60.28
B γ	63.56	63.25	61.65	61.75
α	74.07	73.83	71.01	71.18
β	89.47	88.37	84.36	84.62
B2	108.94	110.85	109.84	109.84
A2	110.00	111.42	111.05	111.10
A5	114.37	115.21	114.71	114.78
B5	120.15	119.57	115.53	115.68
B6	120.29	120.31	119.05	119.07
A6	120.83	120.54	119.10	119.16
B β	128.24	129.63	128.58	128.59
B α	130.53	129.85	128.60	128.59
B1	131.55	132.96	130.18	130.30
A1	133.15	133.82	132.97	133.04
A4	144.75	146.83	145.46	145.67
A3	145.71	148.03	147.03	147.11
B4	147.47	149.15	147.88	147.99
B3	151.33	151.69	149.70	149.80
¹ H				
OMe				3.72
OMe				3.78
A γ				3.73
B γ				4.15
β				4.39
α				4.86
B β				6.28
B α				6.50
B2				7.06
A2				7.08
A5				6.77
B5				7.05
A,B 6				6.88-6.91

*erythro*Guaiacylglycerol- β -coniferyl ether

1-(4-Hydroxy-3-methoxyphenyl)-2-[4-(3-hydroxypropenyl)-2-methoxyphenoxy]propane-1,3-diol

¹H (acetone)

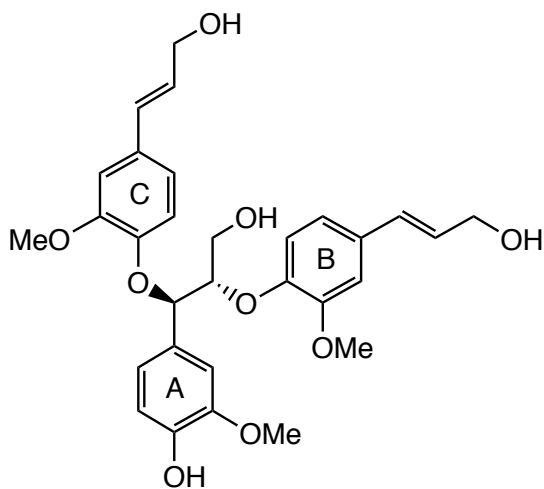
Atom	H Shifts	Mult	J
γ 1	3.69	dd	11.8, 4.0
γ 2	3.81	dd	11.8, 6.2
A,B γ OH	3.80-3.90		
A3 OMe	3.80	s	
B3 OMe	3.84	s	
B γ	4.19	br dd	5.4, 1.6
β	4.29	m	
α OH	4.57	d	4.6
α	4.89	br d	5.2
B β	6.26	dt	15.9, 5.4
B α	6.50	dt	15.9, 1.6
A5	6.75	d	8.1
A,B6	6.86-6.89	m	
B5	6.91	d	1.9
B2	7.05	d	1.9
A2	7.10	d	8.4
A4 OH	7.47	br s	

Notes:

S. Quideau see threo isomer 2013

α (e/t) and γ shifts (e/t) interchange from sample to sample, probably due to H-exchange of OH's in d6-acetone. CDCl₃ and DMSO shifts not substantiated. DMSO/pyr data at 700MHz F. Lu w3-F9 HSQC and HMBC

Atom	CDCl ₃	Acetone	DMSO	
A3 OMe	55.97	56.21	55.64	55.40
B3 OMe	56.03	56.29	55.64	55.57
γ	60.87	61.82	60.16	60.28
B γ	63.56	63.25	61.65	61.75
α	72.96	73.81	71.67	71.83
β	87.34	86.63	83.75	83.97
B2	108.82	110.99	109.93	109.94
A2	110.05	111.44	111.47	111.49
A5	114.37	115.13	114.60	114.69
B5	119.14	119.27	115.60	115.76
B6	120.09	120.23	119.05	119.11
A6	120.79	120.46	119.54	119.62
B β	128.19	129.54	128.52	128.59
B α	130.56	129.87	128.60	128.59
B1	131.86	132.84	130.08	130.22
A1	133.11	134.24	133.23	133.33
A4	143.98	146.65	145.46	145.67
A3	145.27	147.96	147.00	147.11
B4	146.75	148.55	147.60	147.68
B3	151.62	151.88	149.75	149.86
¹ H				
OMe				3.72
OMe				3.78
A γ				3.73
B γ				4.15
α				4.86
β				4.43
B2				7.01
A2				7.10
A5				6.77
B5				7.00
A,B 6				6.86-6.89
B α + β				6.28 + 6.50

*erythro*

Guaiacylglycerol- α,β -bis-coniferyl ether
4-{3-Hydroxy-1,2-bis-[4-(3-hydroxypropenyl)-2-methoxy
phenoxy]propyl}-2-methoxyphenol

¹H (acetone)

Atom	H Shifts	Mult	J
A α	5.46	d	5.5
A β	4.56	m	
A γ 1	3.81	dd	11.7, 7.1
A γ 2	3.93	dd	11.7, 4.1

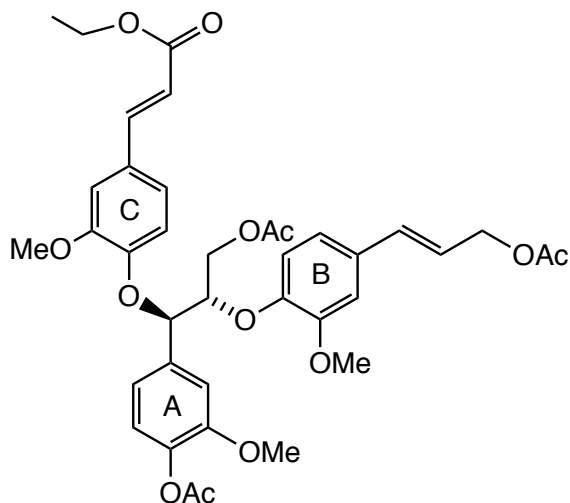
Notes:

S. Quideau Shifts for α and β 's and A,B,C 1's change places in CDCl₃ and DMSO
S. Quideau, and J. Ralph, A biomimetic route to lignin model compounds via silver (I) oxide oxidation. 2. NMR characterization of non-cyclic benzyl aryl ethers, Holzforschung, 1994, 48(2), 124-132.

Atom	CDCl ₃	Acetone	DMSO	
A3 OMe	55.76	56.18	55.41	
B3 OMe	55.85	56.20	55.61	
C3 OMe	55.93	56.32	55.80	
γ	62.17	61.75	59.74	
B γ	63.56	63.25	61.52	
C γ	63.63	63.25	61.58	
α	81.68	81.15	79.01	
β	85.42	85.31	82.53	
C2	109.38	110.74	109.93	
B2	109.54	110.93	109.93	
A2	109.77	112.11	111.91	
A5	114.26	115.23	114.74	
C5	115.94	117.02	115.71	
B5	119.13	119.04	116.15	
C6	119.49	119.90	118.87	
B6	119.74	120.15	119.00	
A6	120.33	121.49	120.34	
C β	127.10	129.22	128.32	
B β	127.60	129.45	128.47	
B α	130.59	129.85	130.49	
C α	130.79	129.85	130.49	
A1	130.43	130.39	128.24	
C1	130.85	132.05	128.71	
B1	132.09	132.74	128.82	
A4	145.49	147.18	146.07	
C4	146.64	147.77	146.27	
A3	146.85	148.10	147.11	
B4	147.08	148.61	147.36	
C3	149.80	151.17	149.73	
B3	150.81	151.71	149.80	

Compound Number 2016

¹³C



erythro

3-(4-{3-Acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-[4-(3-acetoxypentenyl)-2-methoxyphenoxy]propoxy}-3-methoxyphenyl) acrylic acid ethyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
γ1	4.45	dd	11.8, 3.8
γ2	4.53	dd	11.9, 6.0
B γ	4.66	dd	6.4, 1.3
β	4.88	m	
α	5.71	d	5.3
B β	6.25	dt	15.8, 6.4
C β	6.39	d	15.9
B α	6.61	dt	15.8, 1.3
C α	7.53	d	15.9

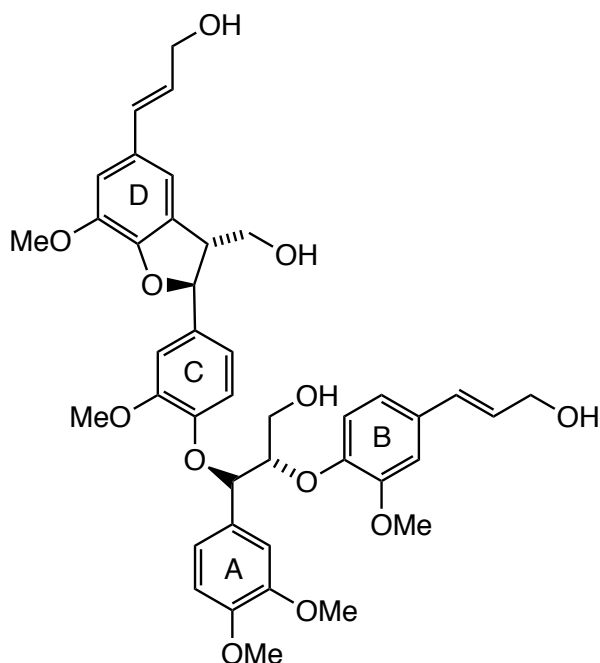
Notes:

S. Quideau Shifts substantiated in d6-acetone but not CDCL₃ or DMSO. γ and Bγ Ac C=O shifts may be interchanged S. Quideau, and J. Ralph, A biomimetic route to lignin model compounds via silver (I) oxide oxidation. 2. NMR characterization of non-cyclic benzyl aryl ethers, *Holzforschung*, 1994, 48(2), 124-132.

Atom	CDCl ₃	Acetone	DMSO	
Me	14.33	14.57	14.19	
A4 Ac Me	20.65	20.43	20.33	
γ Ac Me	20.74	20.60	20.43	
B γAc Me	21.00	20.77	20.71	
A OMe	55.73	56.16	55.67	
B OMe	55.96	56.20	55.80	
C OMe	55.98	56.44	55.95	
CH2	60.39	60.56	59.79	
γ	63.22	63.41	62.33	
B γ	65.09	65.37	64.41	
α	79.99	80.47	78.45	
β	81.98	81.70	79.57	
B2	110.14	111.19	110.22	
C2	110.73	111.92	111.40	
A2	111.17	112.80	111.89	
C5	115.87	116.69	115.28	
C β	116.51	117.15	116.25	
B5	119.10	119.28	117.18	
A6	119.34	120.33	119.35	
B6	119.82	120.47	119.50	
C6	122.08	122.57	122.33	
B β	122.15	123.17	122.24	
A5	122.66	123.36	122.49	
C1	128.62	129.41	127.56	
B1	131.71	132.37	130.59	
B α	133.90	134.18	133.00	
A1	136.48	137.19	135.93	
A4	139.64	140.63	138.94	
C α	144.28	144.96	144.23	
B4	147.35	148.51	146.96	
C4	149.33	150.06	148.42	
C3	150.23	151.36	149.75	
B3	150.96	151.86	150.12	
A3	151.20	152.12	150.49	
C γ C=O	167.13	167.23	166.40	
A4 Ac C=O	168.78	168.90	168.36	
γAc C=O	170.77	170.81	170.09	
B γ Ac C=O	170.86	170.82	170.14	

Compound Number 2017

¹³C



erythro

Veratryglycerol-α-dehydrodiconifyl-β-con.ether

¹H Acetone/D2O

Atom	H Shifts	Mult	J
A α	5.48	d	5.8
A β	4.62	m	
A γ1	3.80	dd	11.9, 6.5
A γ2	3.91	dd	11.9, 4.9
C α	5.51	d	5.8
C β	3.43	m	
C γ1	3.69	s	
C γ2	3.80	s	

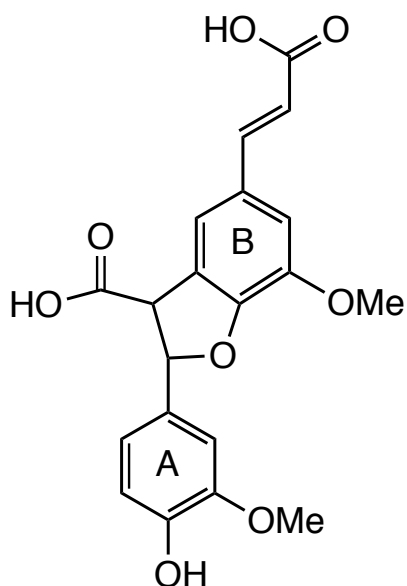
Notes:

S. Quideau Run only in Acetone:D2O (9:1) S. Quideau, and J. Ralph,,
Holzforschung, 1994, 48(2), 124-132. Note: Two erythro isomers!! Resolvable
pairs are:80.10, 80.05 54.28, 54.21 136.08, 136.05 110.98, 110.89
147.31, 147.30 116.41, 116.42 118.42, 118.40

Atom	CDCl ₃	Acetone	DMSO	
C β		Note* 54.28		
A3 OMe		55.83		
A4 OMe		55.80		
B OMe		56.09		
D OMe		56.20		
C OMe		56.33		
γ		61.20		
B γ		62.77		
D γ		62.85		
C γ		64.18		
α		80.10		
β		83.86		
C α		87.80		
B2		110.71		
C2		110.98		
D2		111.35		
A5		111.67		
A2		112.04		
D6		115.96		
C5		116.41		
B5		117.55		
C6		118.42		
B6		119.99		
A6		120.96		
D β		127.73		
B β		128.64		
B α		130.02		
D5		129.64		
D α		130.57		
A1		130.94		
D1		131.83		
B1		132.11		
C1		136.08		
D3		144.75		
C4		147.31		
B4		147.98		
D4		148.27		
A3		149.45		
A4		149.48		
C3		150.58		
B3		150.83		

Compound Number 2018

¹³C



beta-5-dehydrodiferulic acid

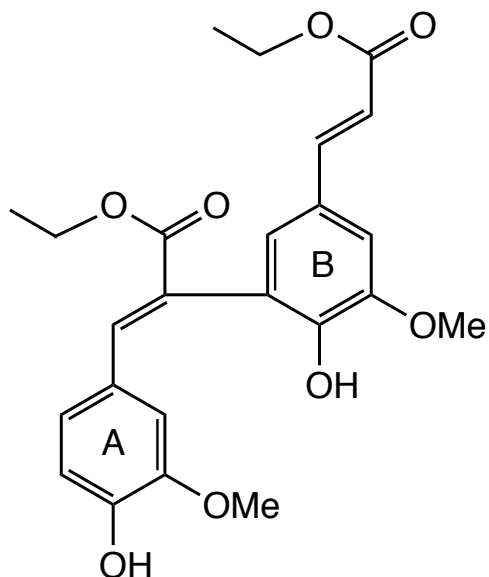
Atom	CDCl ₃	Acetone	DMSO	
A3 OMe	56.03	56.31	55.61	
B3 OMe	56.15	56.49	55.85	
β	53.76	56.22	55.10	
α	87.53	88.56	87.72	
A2	108.77	110.72	110.61	
B2	112.26	113.34	112.10	
A5	114.53	115.78	115.30	
B β	114.91	116.75	116.43	
B6	118.63	118.95	117.93	
A6	119.49	120.08	119.50	
B5	125.93	128.05	127.82	
B1	128.29	129.38	130.69	
A1	131.44	132.49	137.46	
B α	146.74	145.59	144.09	
B3	144.71	145.73	144.19	
A4	146.06	147.81	146.79	
A3	146.74	148.53	147.60	
B4	150.32	150.96	149.16	
B γ	171.34	168.18	167.79	
γ	173.67	172.55	171.66	

¹H (acetone)

Atom	H Shifts	Mult	J
α	6.05	d	7.8
β	4.39	d	7.8
A2	7.08	d	2.0
A5	6.83	d	8.1
A6	6.91	dd	8.1, 2.0
A3 OMe	3.83	s	
B α	7.62	d	15.9
B β	6.39	d	15.9
B2	7.29	br s	
B6	7.33	br s	
B3 OMe	3.91	s	

Notes:

S. Quideau
B α changes in CDCl₃
JCS Perkin 1, 3485-98 (1994)
Cmpd 13



3-(4-Hydroxy-3-methoxyphenyl)-2-[2-hydroxy-3-methoxy-5-(2-propoxycarbonylvinyl)phenyl] acrylic acid ethyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
CH3	1.21	t	7.1
CH3	1.24	t	7.1
A3 OMe	3.44	s	
B3 OMe	3.96	s	
CH2	4.16	q	7.1
CH2	4.17	q	7.1
B β	6.38	d	15.9
A2	6.696	d	2.1
A5	6.702	d	8.2
A6	6.83	dd	8.2, 2.1
B6	7.00	d	2.0
B2	7.38	d	2.0
B α	7.56	d	15.9
A α	7.76	s	

Notes:

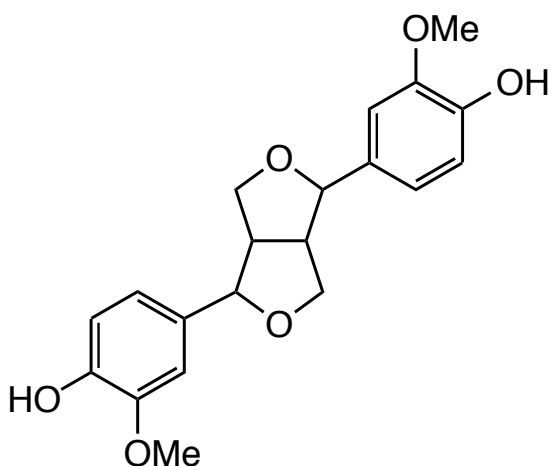
S. Quideau

B5,B6 and A6 switch in acetone and DMSO

Atom	CDCl ₃	Acetone	DMSO	
CH3	14.28	14.61	14.14	
CH3	14.28	14.62	14.16	
A3 OMe	55.24	55.51	54.66	
B3 OMe	56.12	56.58	56.05	
CH2	60.35	60.47	59.62	
CH2	61.09	61.05	60.15	
B2	108.68	110.25	110.05	
A2	111.57	113.28	112.92	
A5	114.29	115.63	115.02	
B β	116.00	116.31	115.17	
β	123.29	124.92	123.97	
B5	124.76	126.56	125.09	
B6	124.82	125.71	124.61	
A6	125.82	126.37	125.16	
B1	126.81	127.31	125.56	
A1	126.94	127.58	125.66	
α	141.45	141.37	140.11	
B α	144.30	145.25	144.49	
A3	145.86	147.87	147.02	
B4	146.05	148.03	147.11	
A4	147.11	148.99	148.16	
B3	147.31	149.10	148.23	
B γ	167.11	167.29	166.44	
γ	167.46	167.77	166.83	

Compound Number 2020

¹³C



Pinoresinol

¹H (acetone)

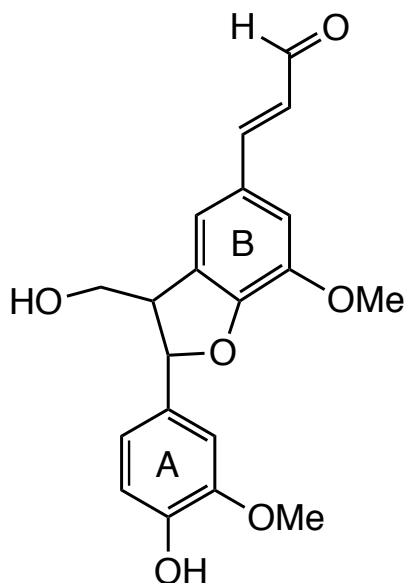
Atom	H Shifts	Mult	J
β	3.08	m	
γ1	3.80	dd	9.1, 3.8
OMe	3.83	s	
γ 2	4.19	dd	9.0, 7.0
α	4.66	d	4.25
A5	6.78	d	8.1
A6	6.83	dd	8.1, 1.8
A2	6.98	d	1..8
Ar OH	7.48	s	

Notes:

S. Quideau

As this compound has a plane of symmetry the shifts for the other half are identical.

Atom	CDCl ₃	Acetone	DMSO	
β	54.15	55.23	53.59	
OMe	55.94	56.24	55.62	
γ	71.66	72.20	70.91	
α	85.86	86.62	85.17	
2	108.60	110.60	110.43	
5	114.27	115.52	115.15	
6	118.95	119.59	118.64	
1	132.91	134.17	132.26	
4	145.24	146.86	145.91	
3	146.70	148.32	147.53	

*erythro*

3-[2-(4-Hydroxy-3-methoxyphenyl)-3-hydroxymethyl-7-methoxy-2,3-dihydrobenzofuran-5-yl] prop-2-enal

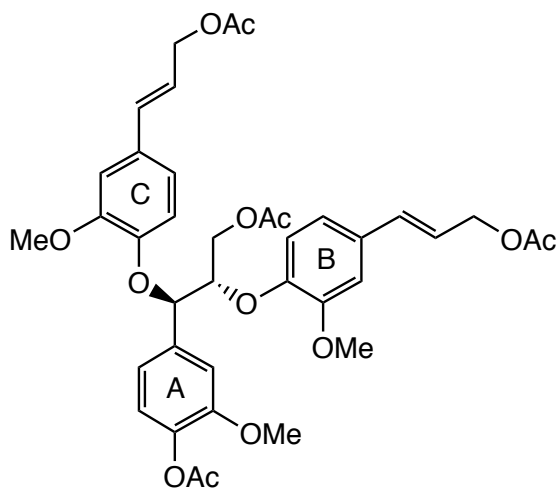
¹H (acetone)

Atom	H Shifts	Mult	J
β	3.61	br q	
A3 OMe	3.82	s	
B3 OMe	3.91	s	
γ	3.87-3.91	m	
α	5.65	d	6.6
B β	6.65	dd	15.8, 7.7
A5	6.81	d	8.1
A6	6.88	dd	8.1, 2.0
A2	7.04	d	2.0
B2	7.29	bro	
B6	7.32	bro	
B α	7.59	d	15.8
B γ	9.63	d	7.7

Notes:

S. Quideau

Atom	CDCl ₃	Acetone	DMSO	
β		54.25		
A3 OMe		56.29		
B3 OMe		56.46		
γ		64.32		
α		89.39		
A2		110.59		
B2		113.56		
A5		115.76		
B6		119.64		
A6		119.73		
B β		127.14		
B5		129.00		
B1		131.24		
A1		133.75		
B3		145.65		
A4		147.55		
A3		148.46		
B4		152.41		
B α		154.10		
B γ		193.77		

*erythro*Guaiacylglycerol- α,β -bis coniferyl ether tetraacetate¹H (acetone)

Atom	H Shifts	Mult	J
A α	5.62		
A β	4.87		
A γ 1	4.45		
A γ 2	4.53		

Notes:

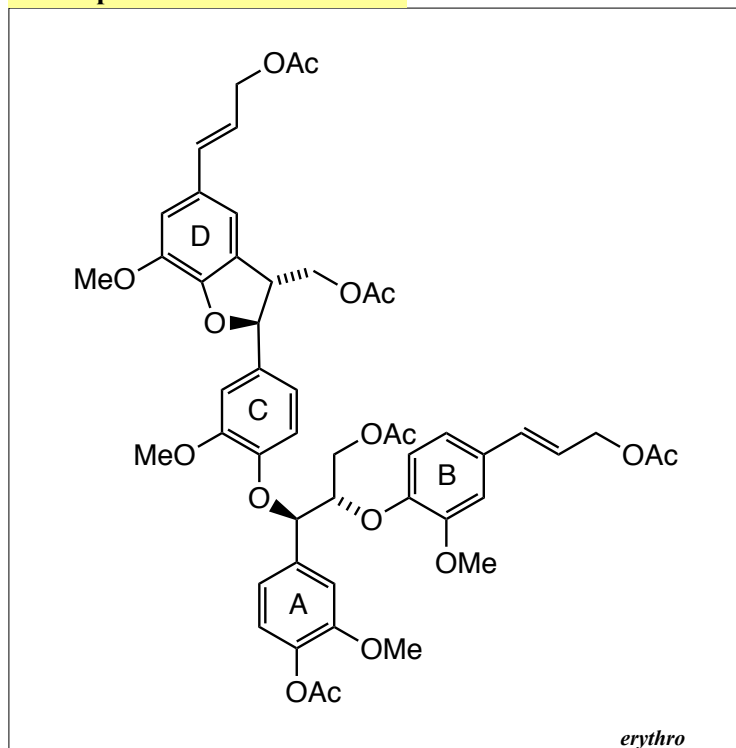
S. Quideau

 α and β of B and C can interchange in CDCl₃

S. Quideau, and J. Ralph, Holzforschung, 1994, 48(2), 124-132.

Atom	CDCl ₃	Acetone	DMSO	
A4 Ac Me	20.63	20.44	20.33	
γ Ac Me	20.73	20.62	20.42	
C γ Ac Me	20.98	20.76	20.70	
B γ Ac Me	20.98	20.78		
			20.70	
A3 OMe	55.73	56.23	55.59	
B3 OMe	55.91	56.23	55.64	
C3 OMe	55.94	56.39	55.78	
γ	63.37	63.56	62.39	
C γ	65.08	65.37	64.39	
B γ	65.12	65.37	64.39	
α	80.17	80.85	78.68	
β	81.92	81.74	79.56	
C2	109.94	111.16	110.15	
B2	110.11	111.32	110.21	
A2	111.29	112.74	111.87	
C5	116.41	117.41	115.81	
B5	118.92	119.23	117.06	
C6	119.49	120.45	119.43	
B6	119.77	120.50	119.48	
A6	119.79	120.51	119.50	
C β	121.69	122.99	122.12	
B β	122.03	123.18	122.19	
A5	122.50	123.26	122.38	
C1	130.61	131.73	130.12	
B1	131.55	132.34	130.51	
C α	133.92	134.22	133.00	
B α	134.02	134.22	133.00	
A1	136.80	137.52	136.19	
A4	139.53	140.65	138.88	
C4	147.45	148.20	146.38	
B4	147.47	148.66	146.99	
C3	150.18	151.43	149.75	
B3	150.90	151.91	150.09	
A3	151.09	152.12	150.45	
A4 Ac C=O	168.76	168.85	168.34	
A γ Ac	170.76	170.72	170.07	
C=O	170.83	170.74	170.10	
D γ Ac	170.83	170.77	170.12	
C=O				
C γ Ac C=O				

Compound Number 2023



Guaiacylglycerol- α -dehydrodiconiferyl-bis-ether peracetate diastereomeric mixture

^1H (acetone)

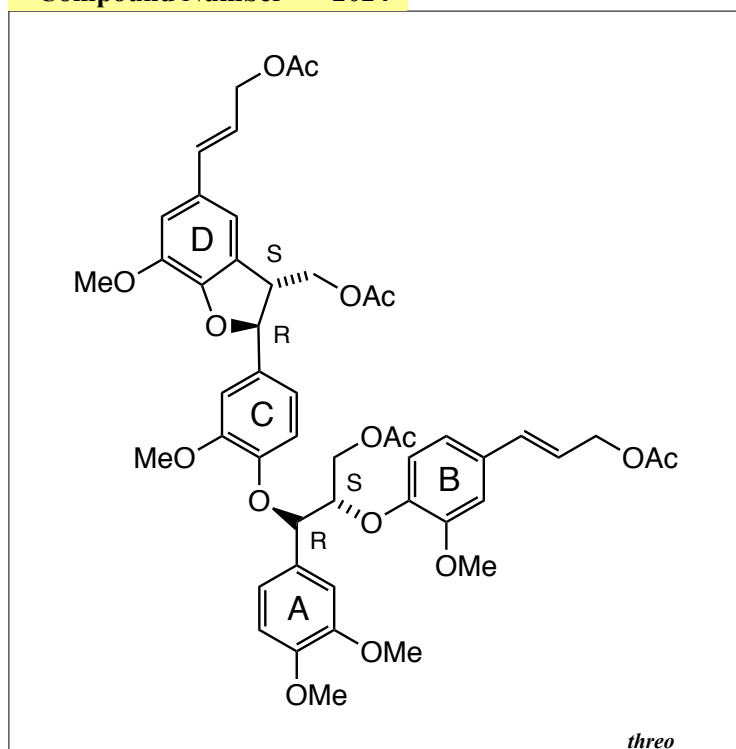
Atom	H Shifts	Mult	J
A α	5.62	d	5.4
A β	4.88	m	
A γ 1	4.46	dt	11.9, 3.8
A γ 2	4.53	dt	11.9, 5.8
C α	5.49	d	6.9
C β	3.72	s	
C γ 1	4.28	dd	11.1, 7.5
C γ 2	4.40	dd	11.1, 5.4

Notes:

S. Quideau
S. Quideau
S. Quideau, and J. Ralph, A biomimetic route to lignin model compounds via silver (I) oxide oxidation. 2. NMR characterization of non-cyclic benzyl aryl ethers, *Holzforschung*, 1994, 48(2), 124-132.

^{13}C

Atom	CDCl_3	Acetone	DMSO
A4 Ac Me	20.52	20.43	20.32
A γ Ac Me	20.61	20.61	20.42
C γ Ac Me	20.74	20.65	20.48
B γ Ac Me	20.98	20.78	20.70
D γ Ac Me	20.98	20.78	20.70
OMe		56.39	
OMe		56.31	
OMe		56.17	
OMe		56.15	
C β	50.25	51.04	49.16
γ	63.36	63.52	62.38
B γ	65.06	65.36	64.40
D γ	65.16	65.48	64.49
C γ	65.28	65.84	68.42
α	80.13	80.73	78.62
β	81.87	81.63	79.49
C α	88.38	88.61	87.25
B2	110.09	111.17	110.20
C2	110.17	111.36	110.74
D2	110.61	112.02	110.93
A2	111.33	112.69	111.89
D6	115.31	116.24	115.24
C5	116.39	117.29	115.76
C6	118.64	119.11	118.35
B5	118.89	119.11	117.00
A6	119.51	120.45	119.43
B6	119.77	120.46	119.49
D β	121.13	122.13	121.31
B β	122.01	123.10	122.18
A5	122.47	123.24	122.38
D5	127.53	128.99	127.93
D1	130.49	131.41	129.99
B1	131.52	132.23	130.48
B α	133.90	134.20	133.00
D α	134.31	134.69	133.50
C1	134.49	135.94	134.13
A1	136.76	137.49	136.18
A4	139.52	140.56	138.88
D3	144.36	145.32	143.83
C4	147.36	147.96	146.31
B4	147.45	148.56	146.95
D4	148.22	149.22	147.51
C3	150.35	151.33	149.63
B3	150.87	151.82	150.07
A3	151.06	152.05	150.44
A4 Ac C=O	168.72	168.84	168.33
B γ Ac C=O	170.74	170.74	170.12
D γ Ac C=O	170.74	170.74	170.12
C=O	170.80	170.76	170.12
A γ Ac C=O	170.83	170.90	170.23
C γ Ac C=O			



Veratrylglycerol- α -dehydrodiconiferyl- β -coniferyl-bis-ether
peracetate, diastereomeric mixture

¹H (acetone)

Atom	H Shifts	Mult	J
A α	5.54	d	5.2
A β	4.87	s	
A γ 1	4.44	td	11.8, 3.7
A γ 2	4.52	td	11.8, 6.2
C α	5.48	d	6.9
C β	3.70	s	
C γ 1	4.28	dt	11.1, 7.5
C γ 2	4.39	dt	11.1, 5.5

Notes:

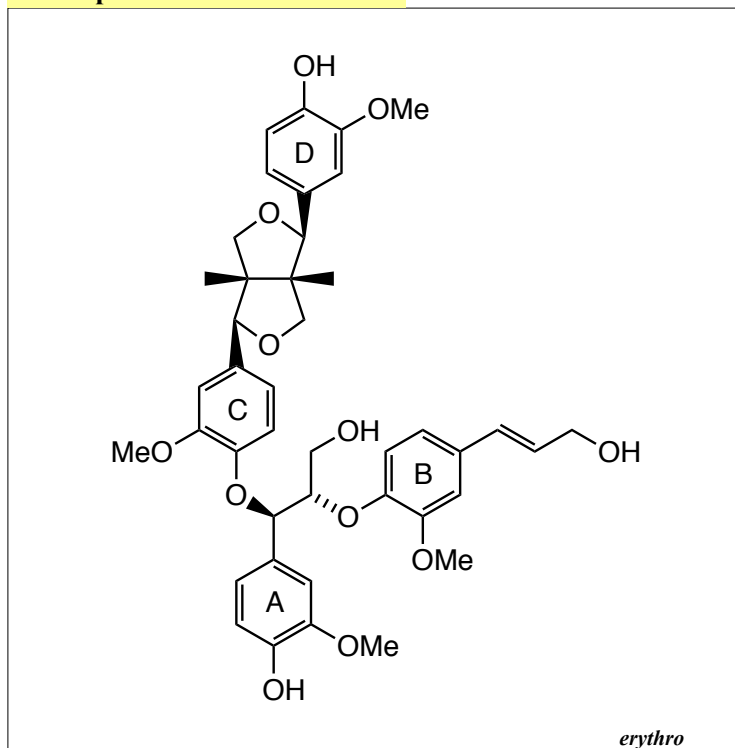
S. Quideau

A3 and A4, C and D OMe's, and B and D γ 's can be interchanged in all solvents Shifts are confirmed for Acetone

S. Quideau, and J. Ralph, *Holzforschung*, 1994, 48(2), 124-132.

Atom	CDCl ₃	Acetone	DMSO
A γ Ac Me	20.75	20.64	20.45
C γ Ac Me	20.75	20.64	20.45
B γ Ac Me	20.98	20.79	20.70
D γ Ac Me	20.98	20.79	20.70
A4 OMe	55.75	55.97	55.33
A3 OMe	55.82	56.06	55.59
B3 OMe	55.86	56.22	55.70
C3 OMe	56.06	56.38	55.79
D3 OMe	55.97		
C β	50.18	51.08	49.16
γ	63.67	63.86	62.64
B γ	65.09	65.38	64.41
D γ	65.17	65.49	64.50
C γ	65.28	65.90	64.71
α	80.14	80.89	78.77
β	81.80	81.73	79.57
C α	88.43	88.65	87.28
B2	110.02	111.28	110.17
C2	110.33	111.45	110.63
D2	110.17	112.16	110.93
A5	110.56	112.22	111.25
A2	110.79	112.31	111.12
D6	115.29	116.31	115.24
C5	116.53	117.46	115.95
B5	118.47	118.91	116.79
C6	118.59	119.11	118.27
B6	119.73	120.48	119.49
A6	119.95	120.98	119.81
D β	121.16	122.19	121.32
B β	121.91	123.04	122.09
D5	127.57	129.06	127.93
A1	130.18	130.90	129.46
D1	130.49	131.46	129.99
B1	131.24	132.08	130.30
B α	133.94	134.26	133.03
C 1	134.12	135.74	133.92
D α	134.32	134.71	133.51
D3	144.37	145.37	143.83
C4	147.38	148.11	146.38
B4	147.71	148.83	147.12
D4	148.21	149.29	147.51
A3	148.83	150.20	148.37
A4	148.93	150.23	148.48
C3	150.39	151.42	149.69
B3	150.78	151.81	150.02
D γ Ac C=O	170.70	170.76	170.05
B γ Ac C=O	170.77	170.76	170.10
A γ Ac C=O	170.82	170.79	170.13
C γ Ac C=O	170.85	170.90	170.23

Compound Number 2025



Guaiacylglycerol- α -pinoresinol- β -coniferyl-bis-ether
diastereomeric mixture

^1H (acetone)

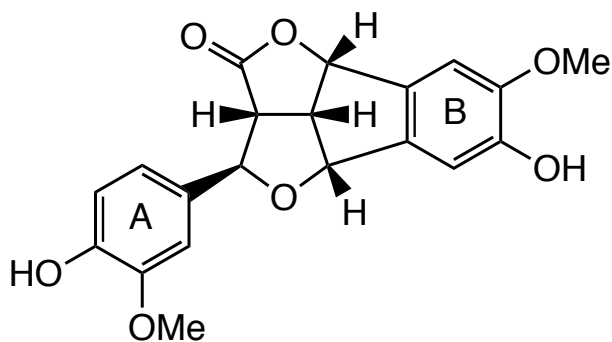
Atom	H Shifts	Mult	J
A α	5.45	d	5.6
A β	4.55	m	
A γ 1	3.82	dd	11.5, 6.5
A γ 2	3.92	dd	11.5, 5.2
C α	4.63		
C β	3.04		
C γ 1	3.77		
C γ 2	4.17		

Notes:

S. Quideau Only run in acetone
S. Quideau, and J. Ralph, A biomimetic route to lignin model compounds via silver (I) oxide oxidation. 2. NMR characterization of non-cyclic benzyl aryl ethers, *Holzforschung*, 1994, 48(2), 124-132.

^{13}C

Atom	CDCl_3	Acetone	DMSO	
D β C β		55.15 55.15		
D3 OMe A3 OMe B3 OMe C3 OMe		56.22 56.25 56.25 56.44		
γ B γ D γ C γ α β C α D α		61.82 63.27 72.23 72.23 81.21 85.38 86.37 86.58		
D2 B2 C2 A2 A5 D5 C5 C6 B5 D6 B6 A6		110.59 111.05 111.43 112.21 115.28 115.50 116.83 118.96 119.06 119.61 120.17 121.53		
B β B α		129.50 129.88		
A1 B1 D1 C1 D4 A4 C4 A3 D3 C3 B3		130.53 132.78 134.10 136.29 146.85 147.24 147.61 148.15 148.30 151.12 151.75		



11-hydroxy-(4-hydroxy-3-methoxyphenyl)-10-methoxy-3a,4,6,6a-tetrahydro 3H-3,4-benzofuro [3,4-c]furan-1-one

¹H (acetone)

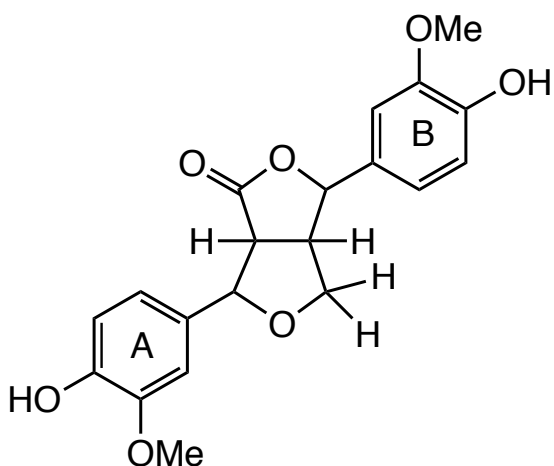
Atom	H Shifts	Mult	J
β	3.36	dd	10.7, 6.4
B β	4.24	dddd	10.6, 7.5, 6.9, 0.6
α	4.72	dquin	6.3, 0.6
B α	5.73	br d	
B γ	5.60	dq	

Notes:

S. Quideau

Ref: S. Quideau and John Ralph. J. Chem Soc. Perkin Trans. 1 1993 - issue 6 - 653-659.

Atom	CDCl ₃	Acetone	DMSO	
B β	50.40	51.13	49.78	
β	53.87	54.58	53.16	
B3 OMe	56.14	56.38	55.67	
A3 OMe	55.95	56.25	55.58	
α	82.38	84.18	83.14	
B α	83.33	84.22	83.27	
B γ	85.74	86.62	85.15	
B2	106.87	108.57	108.24	
A2	108.61	110.78	110.60	
B5	110.88	112.10	111.46	
A5	114.39	115.56	115.12	
A6	118.82	119.80	118.98	
A1	131.09	132.41	130.35	
B1	132.06	133.24	131.52	
B6	133.95	135.28	133.78	
A4	145.52	147.28	146.38	
A3	146.60	148.30	147.50	
B4	148.42	150.03	149.01	
B3	148.69	150.43	149.63	
γ	176.43	177.32	176.86	



4-cis-8-trans-bis (4-hydroxy-3-methoxyphenyl)-3,7-dioxabicyclo
[3-3-0] octan-2-one

¹H (acetone)

Atom	H Shifts	Mult	J
β	3.63	t	8.8
B β	3.35	ddd	9.0, 6.6, 4.6
α	5.05	br d	8.6
B α	5.23	br d	6.6
B γ cis	3.88	dd	9.5, 4.8
B γ trans	4.28	br d	9.5

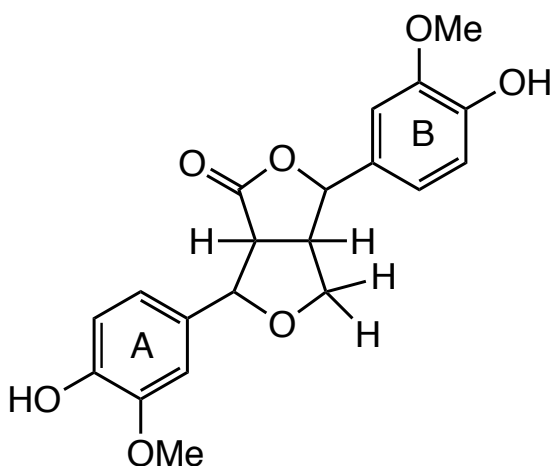
Notes:

S. Quideau
S. Quideau and John Ralph. J. Chem. Soc. Perkin Trans. 1 1993 issue 6 653-659.
Cmpd 14

Atom	CDCl ₃	Acetone	DMSO	
B β	51.31	52.02	50.42	
β	51.67	52.43	51.54	
A3 OMe	55.97	56.28	55.81	
B3 OMe	56.11	56.35	55.91	
B γ	71.63	72.08	71.06	
α	84.00	84.43	83.07	
B α	85.65	86.32	85.45	
B2	107.89	110.68	110.88	
A2	108.78	111.21	110.96	
A5	114.43	115.39	115.28	
B5	114.59	115.80	115.54	
B6	118.83	120.06	119.27	
A6	119.65	120.32	119.48	
A1	127.88	129.78	128.41	
B1	131.26	132.60	130.80	
A4	145.81	147.15	146.24	
B4	146.15	147.82	147.03	
A3	146.60	147.99	147.35	
B3	146.99	148.62	147.96	
γ	174.51	174.93	174.99	

Compound Number 2028

¹³C



4-trans-8-cis-bis(4-hydroxy-3-methoxyphenyl)-3,7-dioxabicyclo [3-3-0]
octan-2-one

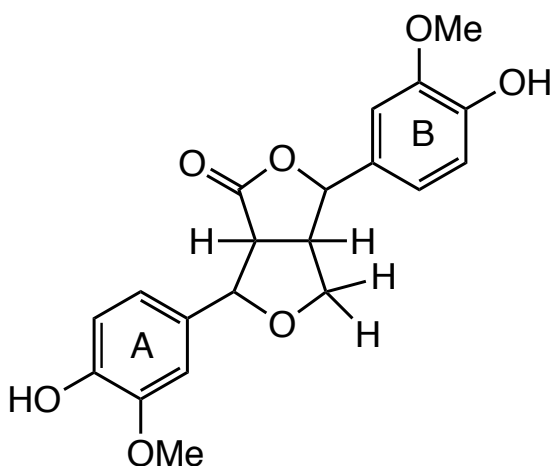
¹H (acetone)

Atom	H Shifts	Mult	J
β	3.65	dd	8.7, 2.6
B β	3.71	m	
γ	5.16	br d	2.6
B α	5.82	br d	5.9
B γ cis	3.80	m	
B γ trans	3.47	dd	9.2, 6.7

Notes:

S. Quideau
S. Quideau and J. Ralph. J. Chem Soc . Perkin Trans. 1 1993 (6) 653-659

Atom	CDCl ₃	Acetone	DMSO	
B β	45.43	46.14		
β	54.80	55.35		
A3 OMe	56.00	56.26		
B3 OMe	56.13	56.34		
B γ	68.66	69.98		
B γ	80.37	81.09		
γ	83.70	84.56		
B2	107.47	109.50		
A2	108.17	110.24		
A5	114.41	115.65		
B5	114.65	115.87		
B6	117.76	118.57		
A6	118.11	119.17		
B1	127.90	129.22		
A1	132.46	133.48		
A4	145.33	147.10		
B4	145.56	147.24		
A3	146.67	148.39		
B3	146.80	148.54		
γ	177.07	177.77		



3,6-bis(4-hydroxy-3-methoxyphenyl)-tetrahydro-furo[3,4-c]furan-1-one
 4-cis-8-cis-bis (4-hydroxy-3-methoxyphenyl)-3,7-dioxabicyclo
 [3-3-0] octan-2-one

¹H (acetone)

Atom	H Shifts	Mult	J
β	3.65	ddd	9.2, 3.7, 0.5
B β	3.39	dddd	9.2, 7.0, 4.6, 3.6, 0.6
α	5.20	dquin	3.7, 0.6
B α	5.39	br d	3.6
B γ cis	4.30	ddd	9.4, 7.0, 0.5
B γ trans	4.02	ddt	9.4, 4.6, 0.5

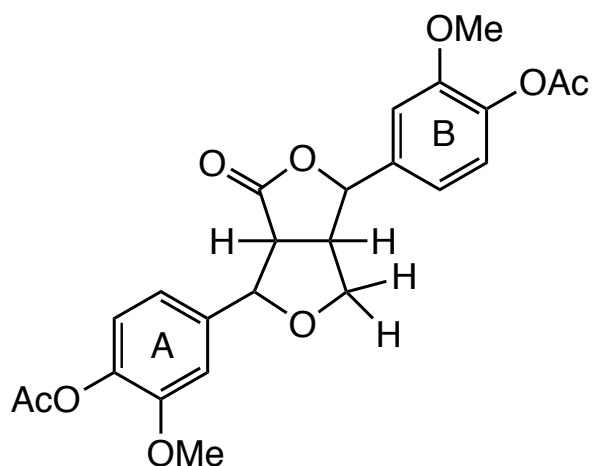
Notes:

S. Quideau
 S. Quideau and J. Ralph. J. Chem. Soc. Perkin Trans. 1 1993 (6) 653-659.

Atom	CDCl ₃	Acetone	DMSO	
B β	49.99	50.38	48.62	
β	53.31	53.71	52.32	
A3 OMe	56.02	50.26	55.61	
B3 OMe	56.08	50.34	55.71	
B γ	72.70	73.44	72.15	
α	83.38	84.43	82.91	
B α	84.59	85.78	84.83	
A2	107.77	110.35	110.30	
B2	108.11	110.45	110.54	
A5	114.42	115.64	115.16	
B5	114.71	115.87	115.34	
A6	118.02	119.30	118.50	
B6	118.40	119.66	118.88	
B1	131.11	132.47	130.58	
A1	132.31	133.17	131.08	
A4	145.34	147.12	146.19	
B4	146.07	147.80	146.85	
A3	146.73	148.35	147.55	
B3	146.94	148.63	147.73	
γ	176.92	177.72	177.14	

Compound Number 2030

¹³C



4-cis-8-cis-bis (4-hydroxy-3-methoxyphenyl)-3,7-dioxabicyclo
[3-3-0] octan-2-one diacetate

¹H (acetone)

Atom	H Shifts	Mult	J
β	3.72	ddd	9.25, 3.8, 0.5
B β	3.45	dddd	9.15, 7.1, 4.8, 3.0, 0.6
B γ trans	4.12	ddt	9.5, 4.8, 0.5
B γ cis	4.39	ddd	9.5, 7.1, 0.5
B α	5.52	br d	3.6
α	5.29	dquin	3.8, 0.6

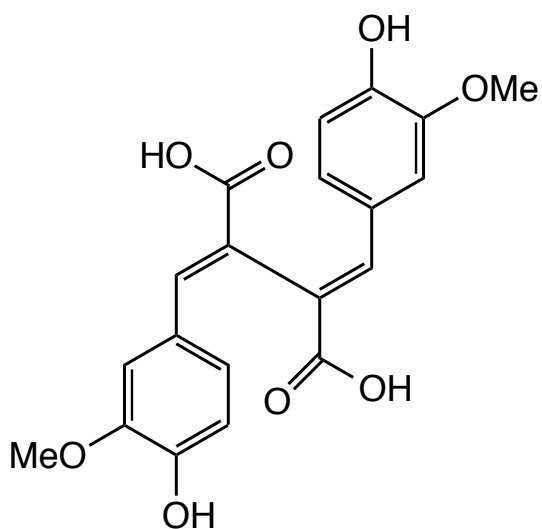
Notes:

S. Quideau
Ralph, Helm, Quideau. J. Chem. Soc. Perkin Trans. 1 1992 2971-2980

Atom	CDCl ₃	Acetone	DMSO	
Ac Me	20.61	20.45	20.39	
Ac Me	20.63	20.45	20.39	
B β	49.89	50.33	48.62	
β	53.14	53.59	52.19	
A3 OMe	55.99	56.24	55.82	
B3 OMe	56.06	56.35	55.95	
B γ	72.80	73.72	72.51	
α	82.99	84.01	82.49	
B α	83.89	84.93	83.93	
A2	109.13	110.86	110.37	
B2	109.35	111.05	110.69	
A6	117.14	118.40	117.87	
B6	117.22	118.53	118.00	
A5	122.98	123.65	122.80	
B5	123.38	123.96	123.07	
B1	138.04	139.95	138.71	
A4	139.26	140.40	138.80	
A1	139.32	140.68	139.21	
B4	139.96	140.96	139.30	
A3	151.35	152.38	150.88	
B3	151.66	152.62	151.05	
Ac C=O	169.04	168.98	168.57	
Ac C=O	168.90	168.94	168.53	
γ	176.66	177.49	176.98	

Compound Number 2031

¹³C



4,4'-dihydroxy-3,3'-dimethoxy- β,β' -bicyanamic acid

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.74	s	
5	6.78	d	8.2
6	7.11	dd	8.2, 2.0
2	7.31	d	2.0
α	7.83	s	

Notes:

S. Quideau

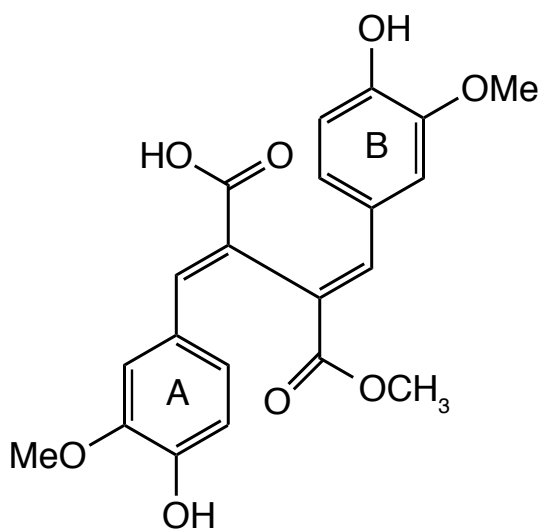
JCS Perkin 1, 3485-98 (1994)

Cmpd 18

As this compound has a plane of symmetry only one set of shifts are reported.

Atom	CDCl ₃	Acetone	DMSO	
OMe		56.05	55.28	
2		113.51	113.23	
5		115.93	115.47	
6		125.60	124.11	
β		126.15	125.12	
1		127.94	126.13	
α		142.26	140.40	
3		148.19	147.29	
4		149.25	148.37	
γ		168.46	168.06	

Compound Number 2032

¹³C

γ'-methoxy-4,4'-dihydroxy-3,3'-dimethoxy-β,β'-biccinnamic acid

¹H (acetone)

Atom	H Shifts	Mult	J
B γ OMe	3.66	s	
A3 OMe	3.72	s	
B3 OMe	3.73	s	
A,B 5	6.78	d	8.2
B6	7.11	dd	8.3, 2.0
A6	7.09	dd	8.3, 2.0
A2	7.25	d	2.0
B2	7.30	d	2.0
B α	7.81	s	
α	7.84	s	

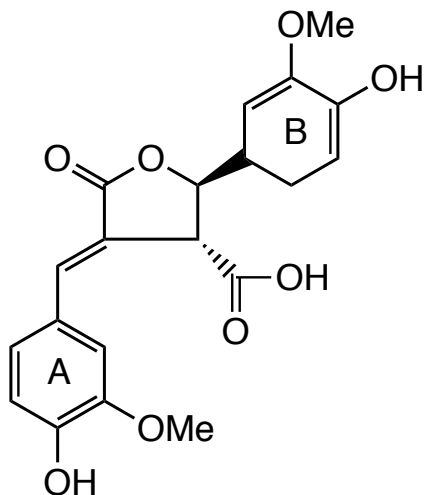
Notes:

S. Quideau

Atom	CDCl ₃	Acetone	DMSO	
B γ OMe		52.28		
B3 OMe		56.04		
A3 OMe		56.04		
A2		113.40		
B2		113.54		
A5		115.95		
B5		115.97		
A6		125.60		
β		125.67		
Bβ		125.67		
B6		125.73		
A1		127.78		
B1		127.81		
B α		142.36		
α		142.47		
B3		148.19		
A3		148.20		
A4		149.32		
B4		149.37		
Bγ		168.22		
γ		168.53		

Compound Number 2033

¹³C



Atom	CDCl ₃	Acetone	DMSO	
B β		54.03	52.64	
A3 OMe		56.27	55.54	
B3 OMe		56.27	55.67	
B α		81.24	80.17	
B2		110.17	110.31	
A2		113.95	113.67	
B5		116.04	115.61	
A5		116.20	115.70	
B6		119.17	118.21	
β		120.45	119.08	
A1		126.54	124.72	
A6		126.58	125.56	
B1		132.37	130.42	
α		140.46	139.48	
B4		147.97	147.07	
A3		148.54	147.72	
B3		148.63	147.76	
A4		150.20	149.54	
γ		171.66	171.02	
B γ		172.12	171.72	

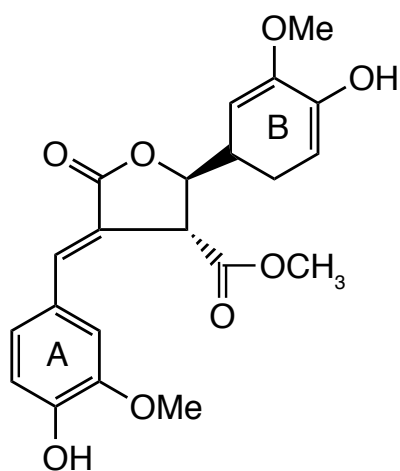
¹H (acetone)

Atom	H Shifts	Mult	J
B3 OMe	3.81	s	
A3 OMe	3.87	s	
B β	4.30	t	2.5
B α	5.75	d	2.8
B 5,6	6.82	m	
A5	6.89	d	8.2
B2	6.98	br s	
A6	7.21	dd	8.2, 2.0
A2	7.37	d	2.0
α	7.61	d	2.1

Notes:

S. Quideau
JCS Perkin 1, 3485-98 (1994)
Cmpd 12b (R=H)

Compound Number 2034

¹³C

Atom	CDCl ₃	Acetone	DMSO	
B γOMe	52.98	53.16	51.98	
B β	53.49	53.78	52.75	
B3 OMe	55.97	56.23	55.46	
A3 OMe	55.97	56.26	55.62	
B α	80.22	80.97	79.74	
B2	107.65	110.12	110.26	
A2	112.04	113.78	113.48	
B5	114.78	116.04	115.53	
A5	114.92	116.24	115.68	
B6	118.22	119.23	118.26	
β	118.38	120.03	118.34	
A1	125.66	126.38	124.48	
A6	125.59	126.42	125.44	
B1	131.08	132.08	130.02	
α	141.06	140.75	139.93	
B4	146.12	147.99	147.11	
A3	146.77	148.52	147.69	
B3	146.89	148.61	147.71	
A4	148.39	150.24	149.62	
γ	170.77	171.45	170.53	
B γ	171.23	171.56	170.70	

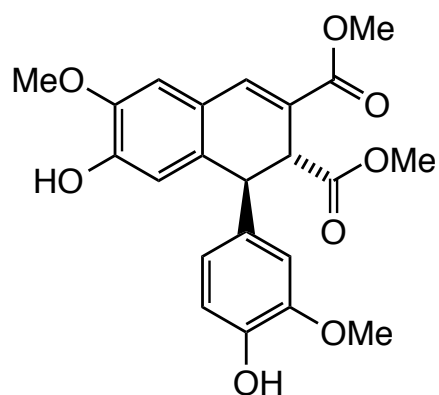
¹H (acetone)

Atom	H Shifts	Mult	J
B γ OMe	3.73	s	
B3 OMe	3.81	s	
A3 OMe	3.88	s	
B β	4.39	t	2.6
B α	5.72	d	3.0
B 5,6	6.79 - 6.85	m	
A5	6.9	d	8.2
B2	6.97	br d	1.5
A6	7.17	dd	8.2, 2.0
A2	7.28	d	2.0
α	7.62	d	2.1

Notes:

S. Quideau

Compound Number 2035

¹³C

Dimethyl 7-hydroxy-6-methoxy-1-(4-hydroxy-3-methoxyphenyl)-trans-1,2-dihydronaphthalene-2,3-dicarboxylate

¹H (acetone)

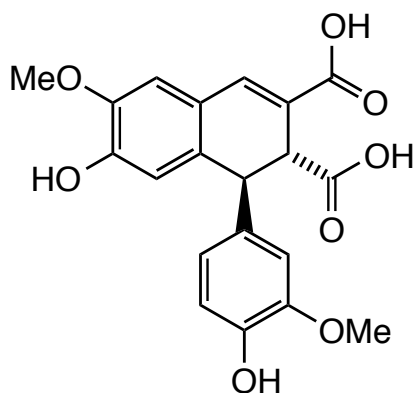
Atom	H Shifts	Mult	J
A γ OMe	3.56	s	
B γ OMe	3.68	s	
A3 OMe	3.75	s	
B3 OMe	3.88	s	
β	3.94	d	3.0
α	4.53	d	3.0
A6	6.39	dd	8.2, 2.0
A5	6.65	d	8.2
B5	6.66	s	
A2	6.76	d	2.0
B2	7.10	s	
B α	7.65	s	

Notes:

S. Quideau

Atom	CDCl ₃	Acetone	DMSO	
α	45.60	46.33	44.69	
β	47.20	48.09	46.74	
B γ OMe	51.87	51.87	51.67	
A γ OMe	52.40	52.34	52.11	
A3 OMe	55.83	56.21	55.62	
B3 OMe	56.03	56.38	55.74	
A2	110.12	112.03	111.65	
B2	111.21	113.27	113.25	
A5	114.17	115.59	115.24	
B5	115.58	116.85	116.06	
A6	120.35	120.83	119.48	
B β	122.37	122.96	120.89	
B1	123.85	124.37	122.47	
B6	131.19	132.09	130.74	
A1	134.28	135.31	133.56	
B α	137.74	138.45	137.92	
A4	144.42	146.29	145.31	
B3	145.78	147.63	146.72	
A3	146.40	148.20	147.39	
B4	147.69	149.68	148.88	
B γ	167.10	167.49	166.52	
γ	172.93	173.17	172.31	

Compound Number 2036

¹³C β - β -coupled dehydrodiferulic acid

7-hydroxy-6-methoxy-1-(4-hydroxy-3-methoxyphenyl)-trans-1,2-dihydronaphthalene-2,3-dicarboxylic acid

¹H (acetone)

Atom	H Shifts	Mult	J
A3 OMe	3.74	s	
B3 OMe	3.86	s	
β	3.88	d	1.8
α	4.61	br d	1.8
A6	6.42	dd	8.2, 2.0
A5	6.64	d	8.2
B5	6.71	s	
A2	6.79	d	2.0
B2	7.04	s	
B α	7.60	s	

Notes:

S. Quideau

JCS Perkin 1, 3485-98 (1994)

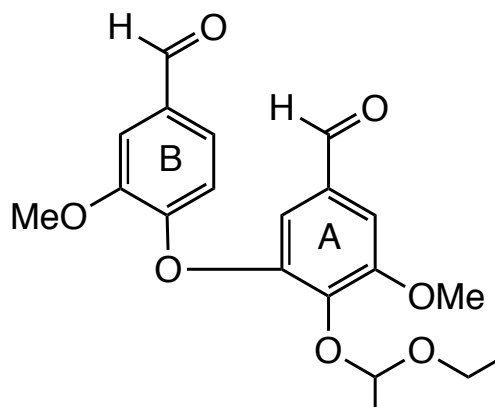
Cmpd 19

Not very soluble in CDCl₃

Atom	CDCl ₃	Acetone	DMSO	
α		46.00	44.25	
β		48.08	47.80	
A3 OMe		56.19	55.59	
B3 OMe		56.39	55.76	
A2		111.98	111.57	
B2		113.06	112.63	
A5		115.48	115.13	
B5		116.92	116.23	
A6		120.67	119.30	
B β		124.34	123.07	
B1		124.64	124.67	
B6		132.35	130.85	
A1		136.12	134.50	
B α		137.58	135.09	
A4		146.06	145.04	
B3		147.48	146.46	
A3		148.10	147.28	
B4		149.29	147.99	
B γ		169.32	169.23	
γ		173.62	173.27	

Compound Number 2037

¹³C



Atom	CDCl ₃	Acetone	DMSO	
'CH3 CH3		15.45 21.28		
B OMe A OMe		56.43 56.66		
CH2		63.26		
CH		104.47		
A2 B2 A6 B5 B6		108.94 112.46 114.45 119.32 125.46		
B1 A1 A4 A3 B3 B4 A5		133.26 134.22 143.42 150.68 151.42 151.95 155.59		
α B α		191.23 191.48		

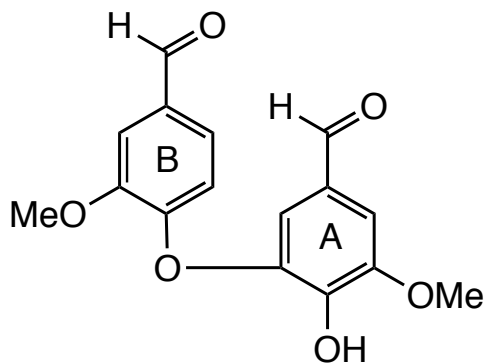
¹H (acetone)

Atom	H Shifts	Mult	J
'CH3 CH3 CH2	1.08 1.38 3.56 -3.89	t d m	7.05 5.1
OMe OMe CH	3.95 3.99 5.53	s s q	5.1
B5 A6 A2 B6 B2 α B α	7.04 7.11 7.42 7.53 7.62 9.85 9.95	d d d dd d s s	8.1 1.8 1.8 8.1 1.9

Notes:

S. Quideau

Compound Number 2038

¹³C

4-0-5-coupled dehydrodivanillin

3-{3-[4-(2-carboxyvinyl)-2-methoxy-phenoxy]-4-hydroxy-5-methoxy-phenyl} acrylic acid

¹H (acetone)

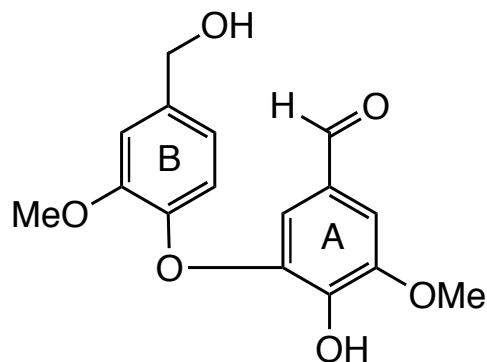
Atom	H Shifts	Mult	J
B OMe	3.95	s	
A OMe	3.98	s	
B5	6.94	d	8.2
A6	7.22	d	1.8
A2	7.40	d	1.8
B6	7.48	dd	8.2, 2.0
B2	7.58	d	2.0
α	9.80	s	
B α	9.92	s	

Notes:

S. Quideau

Atom	CDCl ₃	Acetone	DMSO	
B3 OMe	56.07	56.41	55.85	
A3 OMe	56.56	56.80	56.24	
A2	106.80	108.48	108.09	
B2	110.85	112.26	111.60	
A6	116.92	116.99	116.27	
B5	117.31	117.63	116.31	
B6	125.55	125.55	124.80	
A1	128.69	129.54	127.64	
B1	132.76	133.56	131.84	
A5	142.55	143.79	142.52	
A4	143.30	145.22	144.52	
A3	148.60	150.37	149.47	
B3	150.61	151.49	149.82	
B4	151.08	152.48	151.24	
α	190.05	190.75	190.84	
B α	190.84	191.43	191.57	

Compound Number 2039

¹³C

4-0-5 coupled dehydrovanillin / vanillyl alcohol

Atom	CDCl ₃	Acetone	DMSO	
B3 OMe	55.94	56.19	55.61	
A3 OMe	56.47	56.73	56.15	
B α	64.91	64.34	62.59	
A2	106.40	107.98	107.74	
B2	111.55	112.52	111.09	
A6	114.09	112.62	111.54	
B6	119.49	119.78	118.81	
B5	120.46	121.17	119.98	
A1	128.30	129.00	127.04	
B1	138.45	140.84	139.77	
A4	142.58	143.92	142.63	
B4	143.95	144.30	143.03	
A5	145.16	146.98	145.90	
A3	148.45	149.86	148.93	
B3	150.87	152.00	150.45	
α	190.44	190.91	190.97	

¹H (acetone)

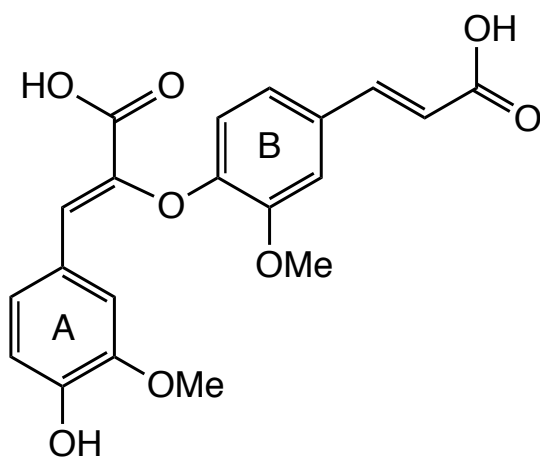
Atom	H Shifts	Mult	J
B3 OMe	3.79	s	
A3 OMe	3.95	s	
B α	4.63	s	
A6	6.91	d	1.8
B 5,6	6.94 - 6.97	m	
B2	7.16	br d	
A2	7.27	d	1.8
α	9.71	s	

Notes:

S. Quideau

Compound Number 2040

¹³C



Atom	CDCl ₃	Acetone	DMSO	
A3 OMe B3 OMe		55.92 56.47	55.09 55.86	
B2 A2		112.39 113.77	111.55 112.98	
B5 A5		114.39 115.96	113.30 115.53	
B β		117.50	117.52	
B6 A1 A6		122.92 125.31 126.06	122.02 123.44 124.62	
α		128.49	127.09	
B1		130.10	128.74	
β B α		138.28 145.25	137.01 143.71	
A3 B4 A4 B3		148.30 148.90 149.46 150.23	147.24 147.42 148.59 148.59	
γ B γ		164.51 167.91	164.11 167.70	

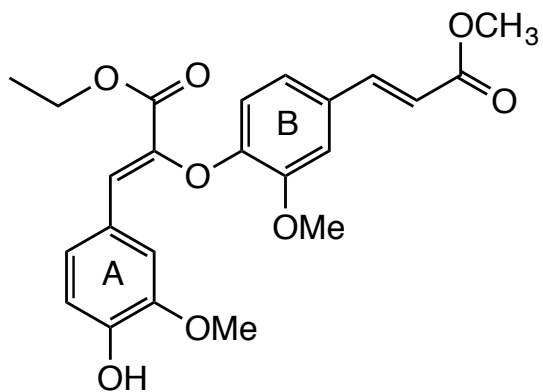
¹H (acetone)

Atom	H Shifts	Mult	J
A3 OMe B3 OMe	3.73 4.00	s s	
B β	6.43	d	15.9
A5 B5	6.82 6.83	d d	8.2 8.3
B6 A6	7.13 7.23	dd dd	8.3, 2.0 8.2, 2.0
α	7.42	s	
B2 A2	7.44 7.52	d d	2.0 2.0
B α	7.59	d	15.9

Notes:

S. Quideau
JCS Perkin 1, 3485-98 (1994)
Cmpd 15

Compound Number 2041



¹³C

Atom	CDCl ₃	Acetone	DMSO	
CH3	14.14	14.47	14.05	
B γ OMe	51.65	51.58	51.32	
A3 OMe	55.59	55.92	55.11	
B3 OMe	56.21	56.49	55.93	
CH2	61.42	61.72	60.96	
B2	111.24	112.45	111.79	
A2	112.03	113.78	113.17	
B5	114.14	114.53	113.46	
A5	114.47	115.99	115.57	
B β	116.32	117.10	116.29	
B6	122.12	122.92	122.27	
A1	124.74	125.19	123.18	
A6	125.54	126.03	124.79	
α	127.80	128.05	127.43	
B1	129.31	130.09	128.78	
β	137.73	138.39	136.44	
B α	144.42	145.02	144.23	
A3	146.43	148.29	147.27	
B4	147.44	148.89	147.43	
A4	147.80	149.48	148.67	
B3	149.16	150.24	148.67	
γ	163.41	163.75	162.67	
B γ	167.50	167.63	166.80	

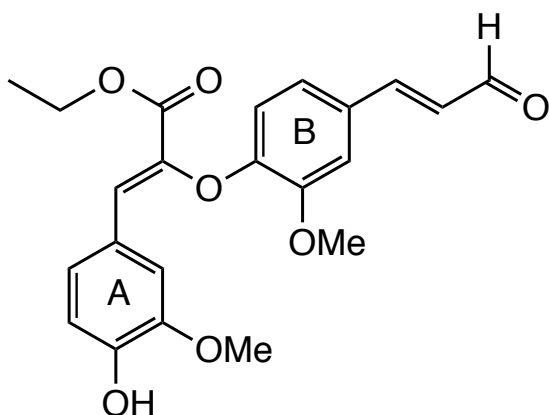
¹H (acetone)

Atom	H Shifts	Mult	J
CH3	1.21	t	7.1
B γ OMe	3.71	s	
A3 OMe	3.73	s	
B3 OMe	3.99	s	
CH2	4.17	q	7.1
B β	6.45	d	16.0
B5	6.79	d	8.3
A5	6.81	d	8.3,
B6	7.12	dd	8.3, 2.0
A6	7.22	dd	8.3, 2.0
α	7.37	s	
B2	7.44	d	2.0
A2	7.49	d	2.0
B α	7.59	d	16.0
Ar OH	8.12	br s	

Notes:

S. Quideau
Toward β-O-4 dehydro diferulic acid
(steryl ether, Z isomer)

Compound Number 2042



¹³C

Atom	CDCl ₃	Acetone	DMSO	
CH3	14.06	14.48	14.05	
B3 OMe	56.15	56.55	55.97	
A3 OMe	55.47	55.94	55.11	
CH2	61.37	61.76	60.99	
B2	111.31	112.58	111.82	
A2	112.06	113.81	113.35	
B5	114.11	114.66	113.44	
A5	114.57	116.03	115.59	
B6	122.87	123.76	123.13	
A1	124.41	125.16	123.13	
A6	125.42	126.08	124.85	
B β	127.19	128.29	128.89	
α	127.90	128.16	127.35	
B1	128.83	130.13	127.53	
β	137.35	138.31	136.34	
A3	146.51	148.31	147.45	
A4	147.59	149.53	147.90	
B4	148.54	149.58	148.78	
B3	149.21	150.38	148.86	
B α	152.33	153.18	152.98	
γ	163.19	163.70	162.62	
B γ	193.42	193.89	194.19	

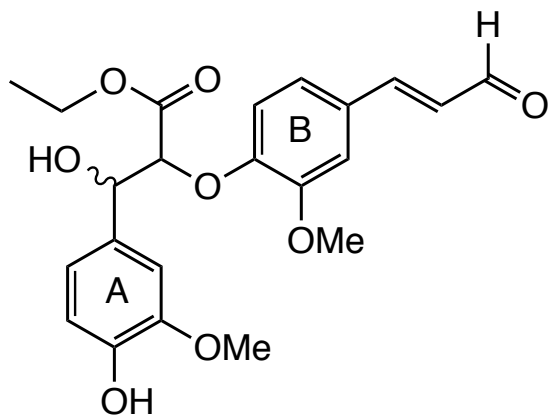
¹H (acetone)

Atom	H Shifts	Mult	J
CH3	1.21	t	7.1
A3 OMe	3.73	s	
B3 OMe	4.00	s	
CH2	4.21	q	7.1
B β	6.70	dd	15.9, 7.7
A5	6.81	d	8.3
B5	6.83	d	8.3
B6	7.18	dd	8.3, 2.0
A6	7.23	ddd	8.3, 2.0, 0.4
α	7.38	s	
A2	7.49	d	2.0
B2	7.50	d	2.0
B α	7.58	d	15.9
B γ	9.65	d	7.7
Ar OH	8.14	s	

Notes:

S. Quideau
Toward β-O-4 dehydro diferulic acid(steryl ether, Z isomer)

Compound Number 2043



erythro

¹³C

Atom	CDCl ₃	Acetone	DMSO	
CH ₃	13.86			
OMe	55.72			
OMe	55.78			
CH ₂	61.33			
α	73.70			
β	82.29			
A2	109.63			
B2	111.09			
A5	113.93			
B5	115.99			
A6	119.80			
B6	122.72			
B β	127.15			
B1	128.79			
A1	130.89			
A3	145.48			
A4	146.36			
B3	149.72			
B4	150.11			
B α	152.38			
γ	168.80			
B γ	193.53			

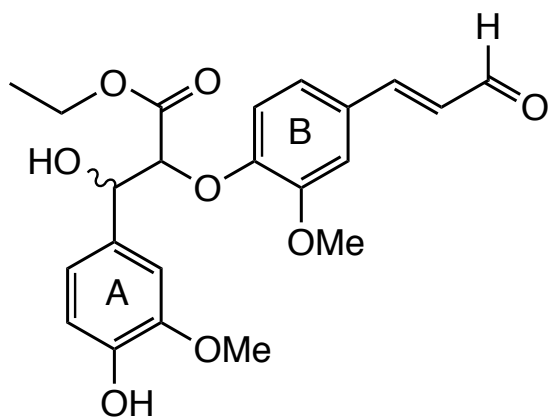
¹H (acetone)

Atom	H Shifts	Mult	J
CH ₃	1.16	t	7.2
OMe	3.85	s	
OMe	3.86	s	
CH ₂	4.15	q	7.1
β	4.81	d	5.4
a	5.16	d	5.4
B β	6.58	dd	15.8, 7.7
B α	7.37	d	15.8
B γ	9.61	d	7.7
Ar OH	6.07		

Notes:

S. Quideau Compds 2043 and 2044 were run as a mixture and the different isomers were assigned. Relative intensities reflect the spectrum of the mixture.e isomer for synthesis of β-O-4 dehydro diferulic acid

Compound Number 2044



threo

¹³C

Atom	CDCl ₃	Acetone	DMSO	
CH ₃	13.73			
OMe	55.67			
OMe	55.82			
CH ₃	61.28			
α	74.49			
β	83.43			
A2	109.51			
B2	110.98			
A5	114.02			
B5	115.56			
A6	119.91			
B6	122.72			
B β	127.19			
B1	128.79			
A1	129.94			
A3	145.73			
A4	146.55			
B3	149.74			
B4	149.92			
B α	152.32			
γ	168.73			
B γ	193.53			

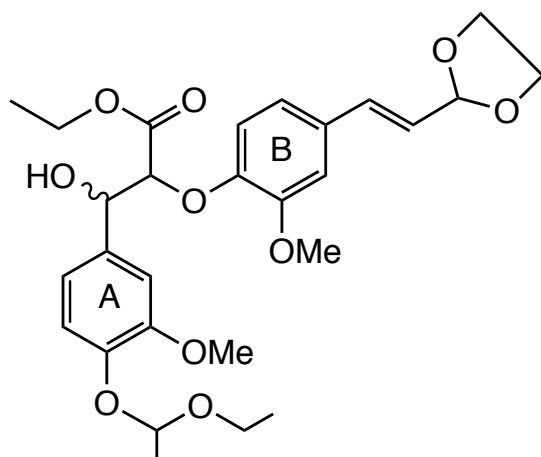
¹H (acetone)

Atom	H Shifts	Mult	J
CH ₃	1.08	t	7.2
OMe	3.85	s	
OMe	3.87	s	
CH ₂	4.04-4.11	m	
β	4.67	d	6.2
α	5.10	d	6.2
B β	6.59	dd	15.8, 7.7
B α	7.38	d	15.8
B γ	9.62	d	7.7
Ar OH	6.10		

Notes:

S.Quideau Compounds 2043 and 2044 were run as a mixture and the different isomers were assigned. Relative intensities reflect the spectrum of the mixture. threo isomer for synthesis of β-O-4 dehydro diferulic acid

Compound Number 2045



erythro

¹³C

Atom	CDCl ₃	Acetone	DMSO	
A γ CH3	13.82			
CH3	14.93			
CH3	20.10			
OMe	55.54			
OMe	55.63			
4 CH2	61.01			
A CH2	61.84			
B CH2	64.82			
B CH2	64.82			
α	73.57			
β	83.09			
	100.92			
	103.59			
	110.04			
	110.76			
	117.40			
	118.63			
	119.09			
	120.07			
	124.08			
	131.25			
	133.82			
	133.84			
	134.08			
	145.39			
	147.22			
	150.12			
	150.40			
γ	169.03			

¹H (chloroform)

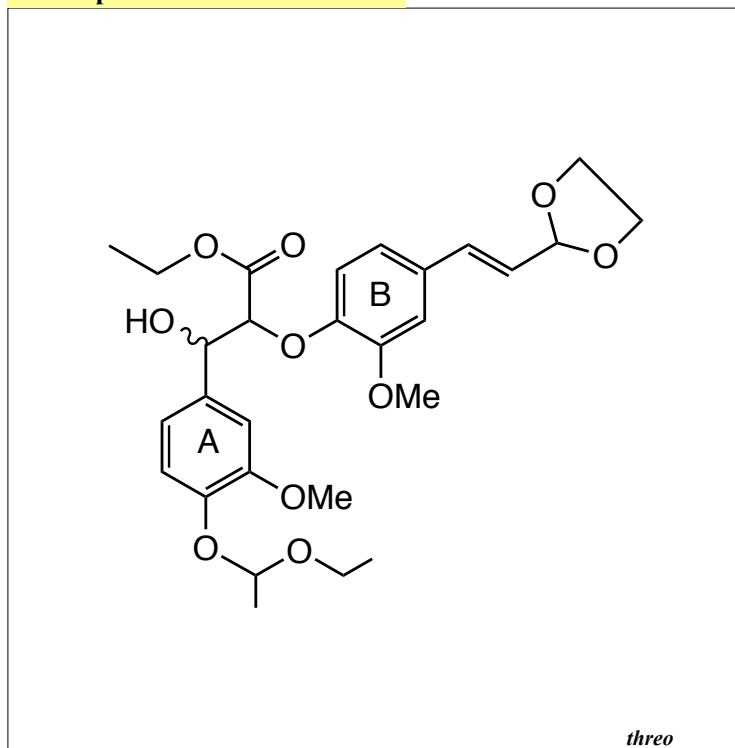
Atom	H Shifts	Mult	J
CH3	1.47	d	5.1
β <i>t</i>	4.56	d	6.6
β <i>e</i>	4.72	d	5.4
α <i>t</i>	5.06	br d	6.3
α <i>e</i>	5.13	br s	
A 4 CH	5.32	q	5.2
B γ	5.36	d	6.0
B β	6.03	dd	15.9, 6.0
B α	6.66	d	16.0

Notes:

S. Quideau
intermediate toward β--O-4 dehydro
diferulic acid

Compound Number 2046

¹³C



Atom	CDCl ₃	Acetone	DMSO	
CH3	-			
CH3	-			
CH3	-			
OMe	55.59			
OMe	55.59			
CH2	61.86			
CH2				
CH2	74.51			
α	84.39			
β	100.94			
	109.98			
	110.69			
	116.92			
	118.70			
	124.14			
	132.73			
	134.06			
	145.67			
	147.26			
	149.92			
	150.00			

¹H (chloroform)

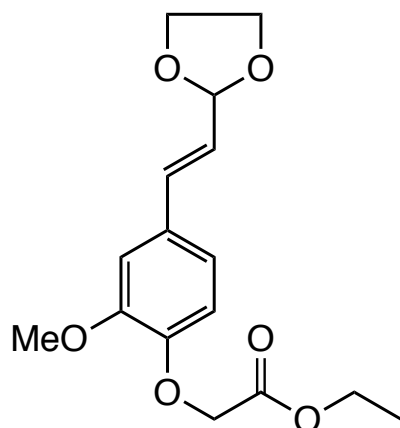
Atom	H Shifts	Mult	J
β	4.56	d	6.6
α	5.06	br d	6.3

Notes:

S. Quideau
intermediate toward b--O-4 dehydro diferulic acid

Compound Number 2047

¹³C



Atom	CDCl ₃	Acetone	DMSO	
CH3	14.09			
OMe	55.84			
CH2	61.27			
CH2	65.01			
CH2	65.01			
CH2	66.42			
γ	103.90			
2	109.88			
5	113.88			
6	120.14			
β	123.75			
α	130.39			
1	134.47			
3	147.58			
4	149.56			
C=O	168.78			

¹H (chloroform)

Atom	H Shifts	Mult	J
CH3	1.26	t	7.1
OMe	3.87	s	
CH2	3.90-4.05	m	
CH2	4.24	q	7.1
CH2	4.67	s	
γ	5.39	d	6.1
β	6.05	dd	15.9, 6.1
α	6.69	d	15.9
5	6.76	d	8.3
6	6.90	dd	8.3, 2.0
2	6.99	d	2.0

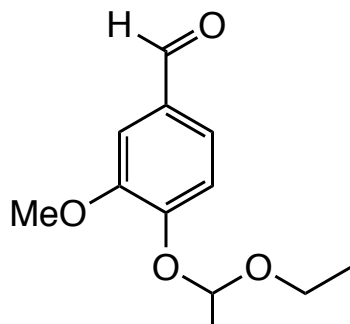
Notes:

S. Quideau

For synthesis of b--O-4 dehydro diferulic acid

Compound Number 2048

¹³C



Atom	CDCl ₃	Acetone	DMSO	
'CH3	15.03			
CH3	19.95			
OMe	55.90			
CH2	61.72			
CH	100.61			
2	109.81			
5	116.59			
6	126.06			
1	130.97			
3	150.78			
4	151.64			
α	190.89			

¹H (chloroform)

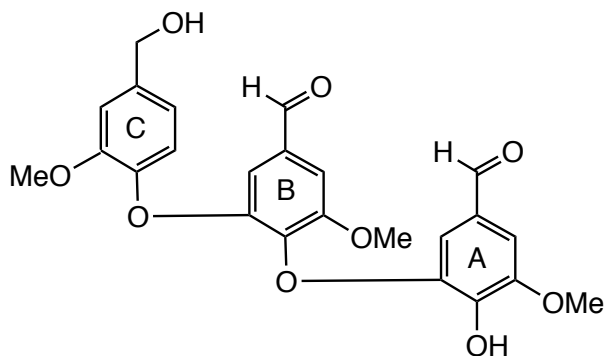
Atom	H Shifts	Mult	J
'CH3	1.21	t	7.1
CH3	1.58	d	5.3
CH2	3.50-3.85	m	
OMe	3.92	s	
CH	5.54	q	5.3
Aromatics	7.21-7.43		
α	9.87	s	

Notes:

S. Quideau
Intermediate for synthesis of β-O-4 dehydro diferulic acid

Compound Number 2049

¹³C



Atom	CDCl ₃	Acetone	DMSO	
C3 OMe		56.07		
A3 OMe		56.75		
B3 OMe		56.89		
C α		64.25		
B2		108.03		
A2		108.40		
B6		109.92		
A6		110.17		
C2		112.36		
C6		119.76		
C5		122.66		
A1		128.73		
B1		134.75		
B4		138.25		
C1		142.09		
C4		142.49		
A4		143.04		
A5		147.16		
A3		149.70		
C3		152.34		
B5		153.71		
B3		155.04		
α		191.02		
B α		191.69		

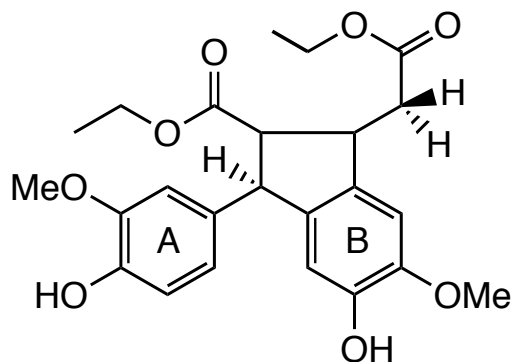
¹H (acetone)

Atom	H Shifts	Mult	J
C3 OMe	3.72	s	
B3 OMe	3.90	s	
A3 OMe	3.94	s	
C α	4.62	s	
B6	6.88	d	1.7
C6	6.94	dd	8.1, 1.7
C5	7.00	d	8.1
A6	7.01	d	1.7
C2	7.14	d	1.7
A2	7.26	d	1.7
B2	7.40	d	1.7
α	9.74	s	
B α	9.86	s	

Notes:

S. Quideau
5-O-4 trimer

Compound Number 2050

¹³C

Atom	CDCl ₃	Acetone	DMSO	
A CH3	14.19	14.52	13.97	
B CH3	14.22	14.47	14.07	
B β	36.90	37.50	36.41	
B α	42.15	43.06	41.74	
α	51.31	52.35	50.93	
A3 OMe	55.93	56.23	55.56	
B3 OMe	56.10	56.39	55.64	
β	58.66	59.09	56.96	
B CH2	60.47	60.79	59.94	
A CH2	60.63	60.95	60.07	
B2	106.61	108.23	107.86	
B5	110.87	112.04	111.25	
A2	110.99	112.60	112.08	
A5	114.29	115.76	115.32	
A6	121.39	121.75	120.35	
A1	134.34	135.02	133.25	
B1	135.12	135.58	133.61	
B6	137.10	137.90	136.47	
A4	144.54	146.45	145.36	
B4	145.61	147.43	146.34	
B3	146.04	147.92	147.08	
A3	146.50	148.37	147.51	
B γ	172.30	172.45	171.45	
γ	172.43	173.00	172.10	

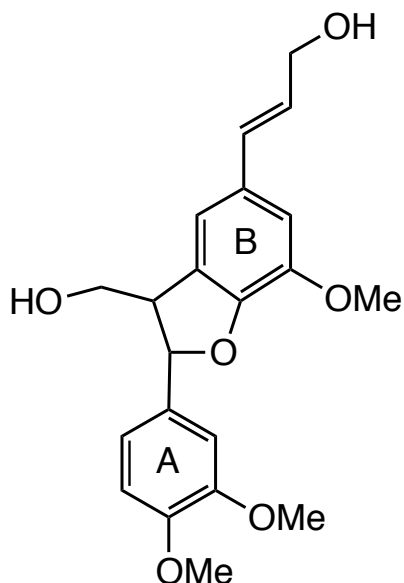
¹H (acetone)

Atom	H Shifts	Mult	J
B β1	2.43	dd	16.0, 8.0
B β2	2.61	dd	16.0, 7.0
β	3.43	dd	9.85, 8.20
B α	3.90	brq	8.0
α	4.56	d	10.1

Notes:

S. Quideau
 Stereochemistry determined from NOESY
 experiments
 αβ- / α6 model

Compound Number 2051

¹³C

4-[3-Hydroxymethyl-5-(3-hydroxypropenyl)-7-methoxy-2,3-dihydrobenzofuran-2-yl]-1,2-dimethoxyphenyl

¹H (acetone)

Atom	H Shifts	Mult	J
β	3.52	br q	
A3 OMe	3.77	s	
A4 OMe	3.78	s	
B3 OMe	3.86	s	
γ's	3.80-3.92	m	
B γ OH	4.14	t	5.50
B γ	4.19	td	5.7, 1.7
α	5.58	d	6.4
B β	6.23	dt	15.8, 5.5
B α	6.52	dt	15.8, 1.7
A5	6.91	d	8.1
A,B6 + B2	6.94-9.67	m	
A2	7.03	d	1.8

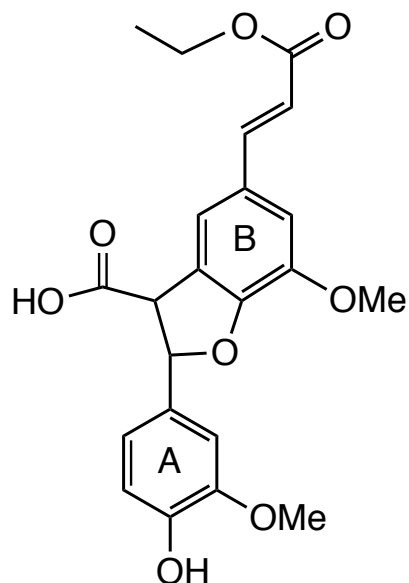
Notes:

S. Quideau
 veratryl phenylcoumaran
 Additional data FLw-79 700MHz

Atom	CDCl ₃	Acetone	DMSO	
β	53.49	54.81	53.12	53.29
A3 OMe	55.92	56.12	55.47	55.38
A4 OMe	55.92	56.12	55.53	55.46
B3 OMe	55.99	56.39	55.68	55.63
B γ	63.81	63.38	61.63	61.75
γ	63.97	64.65	62.90	63.01
α	88.13	88.34	86.99	81.12
A2	109.29	110.84	109.72	109.79
B2	110.50	111.74	110.32	110.41
A5	111.01	112.67	111.68	111.67
B6	114.77	116.08	114.92	114.97
A6	118.70	119.02	118.08	118.13
B β	126.44	128.42	128.05	128.12
B5	128.04	130.30	129.32	129.40
B α	131.32	130.49	128.91	128.94
B1	130.87	132.00	130.60	130.73
A1	133.44	135.59	133.91	134.04
B3	144.48	145.18	143.69	143.79
B4	148.38	148.93	147.03	147.21
A4	149.08	150.15	148.53	148.62
A3	149.19	150.45	148.74	148.84
¹ H				
β	3.62		3.43	3.53
A3 OMe	3.83		3.72	3.70
A4 OMe	3.85		3.73	3.72
B3 OMe	3.89		3.79	3.80
γ's	3.91, 3.97		3.62, 3.71	3.72, 3.84
B γ OH				
B γ	4.29		4.07	4.16
α	5.58		5.49	5.61
B β	6.22		6.20	6.28
B α	6.54		6.45	6.53
A5	6.81		6.92	6.91
B2	6.87		6.82	6.97
B6	6.88		6.93	7.01
A2	6.91		6.93	7.00
A6	6.93		6.87	6.94

Compound Number 2052

¹³C



Atom	CDCl ₃	Acetone	DMSO	
CH3		14.63		
β		55.43		
A3 OMe		56.30		
B3 OMe		56.47		
CH2		60.51		
α		88.70		
A2		110.70		
B2		113.20		
A5		115.72		
B β		116.46		
B6		119.08		
A6		120.05		
B5		128.35		
B1		129.20		
A1		132.64		
B α		145.36		
B3		145.70		
A4		147.70		
A3		148.47		
B4		151.03		
B γ		167.31		
γ		172.24		

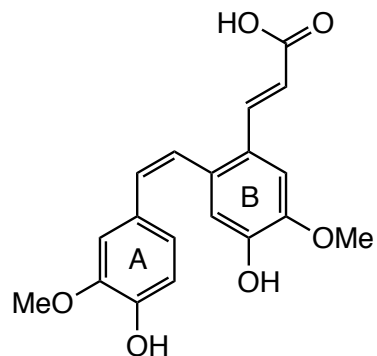
¹H (acetone)

Atom	H Shifts	Mult	J
β	4.37	br d	7.8
α	6.06	d	7.9
B β	6.38	d	15.9
B α	7.60	d	15.9

Notes:

S. Quideau

Compound Number 2053

¹³C

Atom	CDCl ₃	Acetone	DMSO	
A3 OMe B3 OMe		56.25 56.56		
B2 A2 A5		109.15 110.16 115.99		
B β β		116.50 120.61		
B6 A6 B5 B1		120.84 121.14 125.47 126.98		
α		130.68		
A1		130.90		
B α		146.00		
B4 A4 A3 B3		146.96 147.61 148.61 148.83		
B γ		168.22		

¹H (acetone)

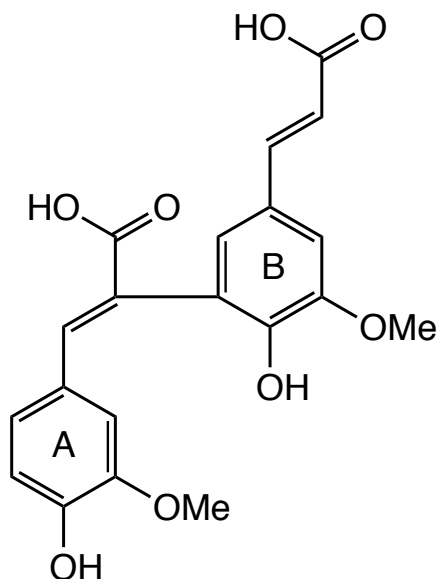
Atom	H Shifts	Mult	J
A3 OMe B3 OMe	3.91 3.95	s s	
B β	6.44	d	15.9
A5	6.83	d	8.1
A6	7.05	dd	8.1, 2.0
A2	7.22	d	2.0
B2	7.23	d	1.9
α	7.31	dd	16.5, 7.38
β	7.33	dd	16.5, 7.38
B6	7.54	d	1.9
B α	7.63	d	15.9

Notes:

S. Quideau

Compound Number 2054

¹³C



Atom	CDCl ₃	Acetone	DMSO	
A3 OMe B3 OMe		55.48 56.55	54.62 56.06	
B2		110.27	109.76	
A2		113.26	112.79	
A5		115.63	115.63	
B β		116.23	115.92	
B5 B6		125.14 125.60	124.57 124.38	
β		126.34	125.90	
A6		126.36	124.95	
B1		127.26	125.66	
A1		127.58	125.88	
α		141.81	139.75	
B α		145.80	144.28	
A3		147.86	145.82	
B4		148.01	147.00	
A4		148.98	148.05	
B3		149.10	148.12	
B γ γ		168.56 169.15	167.86 168.38	

¹H (acetone)

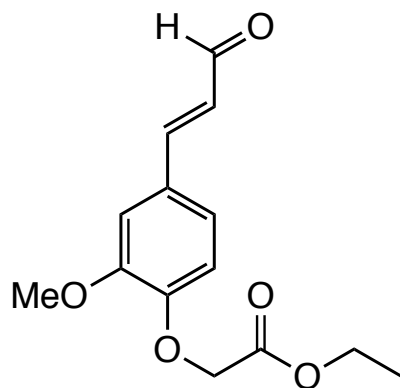
Atom	H Shifts	Mult	J
A3 OMe B3 OMe	3.45 3.95	s s	
B β	6.38	d	15.4
A5	6.71	d	8.2
A2	6.73	d	1.9
A6	6.85	dd	8.2, 2.0
B6	7.03	d	1.9
B2	7.37	d	1.9
B α	7.60	d	15.9
α	7.81	s	

Notes:

S. Quideau
JCS Perkin 1, 3485-98 (1994)
Cmpd 14
Not soluble in CDCl₃

Compound Number 2055

¹³C



Atom	CDCl ₃	Acetone	DMSO	
CH3	14.06			
OMe	55.95			
CH2	61.44			
CH2	65.99			
2	110.77			
5	113.40			
6	122.75			
α	127.17			
1	128.31			
3	149.74			
4	149.96			
β	152.36			
C=O	168.25			
γ	193.41			

¹H (acetone)

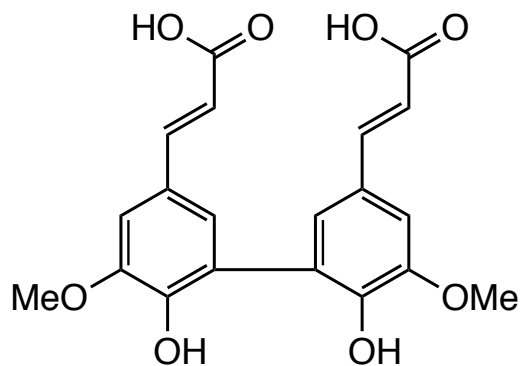
Atom	H Shifts	Mult	J
CH3	1.25	t	7.1
OMe	3.89	s	
CH2	4.23	q	7.1
CH2	4.69	s	
β	6.57	dd	15.8, 7.7
5	6.78	d	7.9
2,6	7.06-7.08	m	
α	7.36	d	15.8
γ	9.62	d	7.7

Notes:

S. Quideau
intermediate for synthesis of β-O-4 dehydro diferulic acid

Compound Number 2056

¹³C



5-5, Dehydrodiferulic Acid

Atom	CDCl ₃	Acetone	DMSO	
OMe		56.52	56.04	
2		109.97	109.44	
β		116.28	115.82	
5		125.62	125.20	
6		126.07	125.05	
1		126.60	124.83	
α		145.89	144.56	
4		147.38	146.43	
3		148.92	147.90	
γ		168.36	167.94	

¹H (acetone)

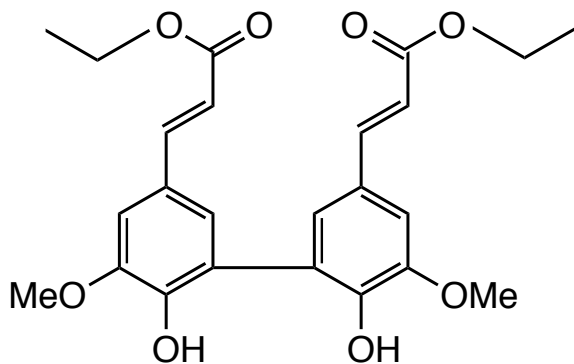
Atom	H Shifts	Mult	J
OMe	3.97	s	
β	6.42	d	15.4
6	7.21	d	2.0
2	7.35	d	2.0
α	7.64	d	15.9

Notes:

S. Quideau JCS Perkin 1, 3485-98 (1994) Cmpd 16
 Note chemical shift differences of 5,6,1 between solvents. Shifts were verified in both solvents As this compound has a plane of symmetry the shifts for the other half are identical.

Compound Number 2057

¹³C



5-5 Dehydrodiferulate diethyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
CH3	1.26	t	7.1
CH2	4.18	q	7.1
OMe	3.97	s	
β	6.43	d	15.9
6	7.20	d	2.0
2	7.36	d	2.0
α	7.62	d	15.9

Notes:

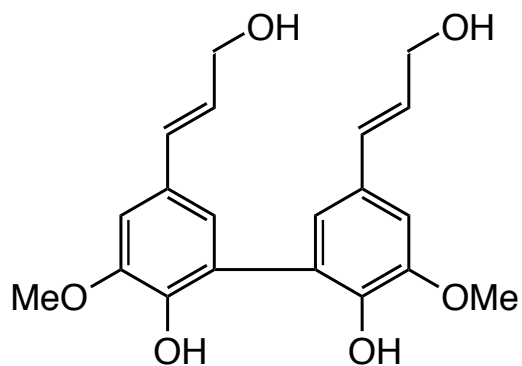
S. Quideau

As this compound has a plane of symmetry the shifts for the other half are identical.

Atom	CDCl ₃	Acetone	DMSO	
CH3	14.31	14.64	14.22	
OMe	56.17	56.56	56.03	
CH2	60.34	60.46	59.63	
2	108.78	109.95	109.47	
β	116.21	116.23	114.70	
5	123.59	125.59	125.20	
6	124.81	126.22	125.35	
1	126.73	126.64	124.58	
α	144.46	145.58	144.98	
4	145.10	147.47	146.84	
3	147.27	148.93	147.94	
γ	167.14	167.39	166.59	

Compound Number 2058

¹³C



5,5' Dehydrodiconiferyl Alcohol

¹H (acetone)

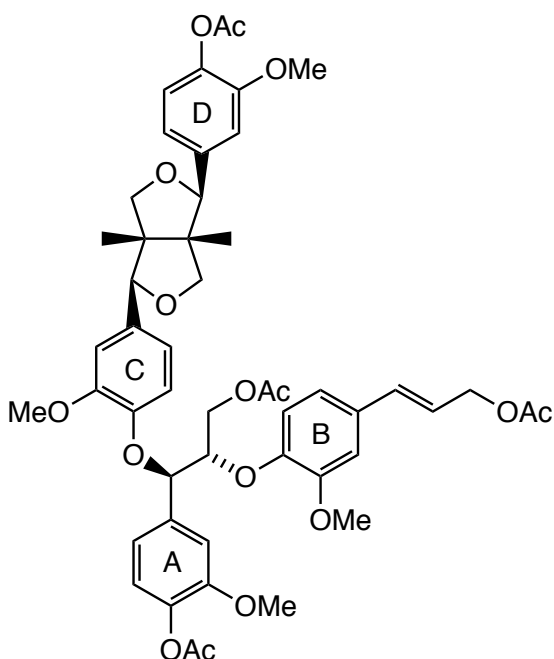
Atom	H Shifts	Mult	J
A3 OMe	3.89	s	
γ	4.21	br d	5.4
β	6.26	dt	15.8, 5..5
α	6.54	dt	15.8, 1.6
A6	6.92	d	2.0
A2	7.06	d	2.0
ArOH	7.42	s	

Notes:

S. Quideau Run only in acetone, no HMBC run. Assignment of quaternary carbons based on shift assignments of diacid/diester parents. Poor solubility on CDCl₃... sample degraded, no DMSO data. As this compound has a plane of symmetry the shifts for the other half are identical.

Atom	CDCl ₃	Acetone	DMSO	
OMe		56.52		
γ		63.49		
2		108.97		
6		123.16		
5		126.15		
β		128.53		
1		129.69		
α		130.57		
4		144.53		
3		148.87		

Compound Number 2059



Guaiacylglycerol- α -pinoresinol- β -coniferyl-bis-ether (Ac'd)

^1H (acetone)

Atom	H Shifts	Mult	J
α	5.60	d	5.6
β	4.86	m	
$\gamma 1$	4.45	dd	11.9, 3.8
$\gamma 2$	4.53	dd	11.9, 5.9
C α	4.66	s	
C α	3.06	m	
C $\gamma 1$	3.83	m	
C $\gamma 2$	4.17	m	
D α	4.74	d	4.5
D γ	4.23	m	

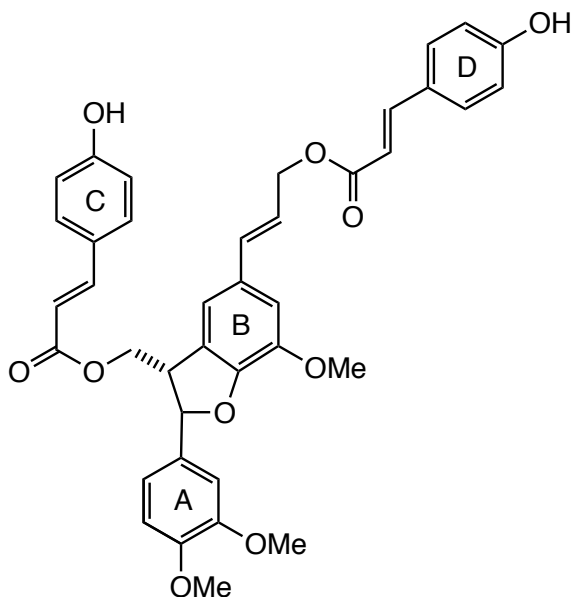
Notes:

S.Quideau
not substantiated in CDCl₃ & d₆ DMSO
Peracetate/diastereomeric mixture

^{13}C

Atom	CDCl ₃	Acetone	DMSO
Ac Me	20.59	20.45	20.35
Ac Me	20.59	20.45	20.35
Ac Me	20.70	20.62	20.43
Ac Me	20.93	20.78	20.70
C β	53.91	55.11	53.49
B β	54.39	55.36	53.74
A3 OMe	55.82	56.19	55.59
B3 OMe	55.95	56.23	55.65
D3 OMe	55.95	56.23	55.71
C3 OMe	56.11	56.40	55.79
A γ	63.45	63.62	62.44
B γ	65.05	65.38	64.40
C γ	71.88	72.37	71.07
D γ	71.88	72.48	71.18
A α	80.34	80.88	78.69
A β	81.87	81.73	79.56
D α	85.53	86.20	84.67
C α	85.64	86.27	84.75
D2	110.01	111.07	110.38
B2	110.35	111.31	110.20
C2	110.39	111.47	110.71
A2	111.55	112.77	111.89
C5	116.58	117.29	115.64
D6	117.93	118.62	116.96
C6	118.19	118.90	118.18
B5	118.87	119.11	117.83
A6	119.65	120.51	119.43
B6	119.65	120.51	119.43
B β	122.08	123.14	122.17
A5	122.45	123.25	122.37
D5	122.73	123.43	122.55
B1	131.55	132.27	130.46
B α	133.93	134.23	133.01
C1	135.13	136.85	135.21
A1	136.93	137.72	136.37
D4	139.19	140.08	138.42
A4	139.62	140.62	138.86
D1	140.23	141.84	140.50
C4	146.94	147.42	145.70
B4	147.63	148.67	147.00
C3	150.46	151.27	149.61
B3	150.93	151.86	150.06
A3	151.12	152.10	150.43
D3	151.27	152.24	150.72
A4 AcC=O	168.71	168.90	168.36
D4 AcC=O	168.98	169.05	168.54
B γ AcC=O	170.68	170.78	170.08
A γ AcC=O	170.76	170.81	170.12

Compound Number 2060



¹³C

Atom	CDCl ₃	Acetone	DMSO	
β	50.40	51.33	49.47	
A3 OMe	55.90	56.09	55.48	
A4 OMe	55.90	56.13	55.76	
B3 OMe	56.03	56.41	55.82	
B γ	65.19	65.42	64.46	
γ	65.38	65.92	64.80	
α	88.86	89.15	87.87	
A2	109.31	110.93	110.01	
B2	110.67	112.25	111.03	
A5	111.06	112.65	111.67	
D β	114.53	115.08	113.68	
C β	115.14	115.49	114.05	
B6	115.39	116.36	115.31	
D3	115.93	116.68	115.77	
D5	115.83	116.68	115.77	
C3	115.96	116.70	115.77	
C5	115.96	116.70	115.77	
A6	118.91	119.44	118.66	
B β	121.37	122.40	121.56	
D1	126.75	126.85	124.94	
C1	126.98	126.97	125.08	
B5	127.79	129.21	128.08	
C2	130.00	130.94	130.34	
C6	130.00	130.94	130.34	
D2	130.06	131.02	130.34	
D6	130.06	131.02	130.34	
B1	130.62	131.51	130.06	
A1	132.86	134.52	133.61	
B α	134.27	134.78	132.79	
B3	144.40	145.42	143.91	
C α	144.94	145.50	144.89	
D α	145.40	145.91	145.13	
B4	148.27	149.42	147.65	
A3	149.14	150.43	148.72	
A4	149.17	150.51	148.81	
D4	158.05	160.61	159.87	
C4	158.23	160.71	159.94	
C γ	167.20	167.23	166.38	
D γ	167.37	167.23	166.38	

¹H (acetone)

Atom	H Shifts	Mult	J
A3,4 OMe	3.77	s	
β	3.85	m	
B3 OMe	3.88	s	
γ1	4.45	dd	11.1, 7.6
γ2	4.58	dd	11.1, 5.4
B γ	4.78	dd	6.5, 1.2
a	5.61	d	7.1
B β	6.31	dt	15.8, 6.5
D β	6.33	d	15.9
C β	6.37	d	15.9
B α	6.70	dt	15.8, 1.2
C,D 3,5	6.88	m	
A5	6.93	d	8.3
A6	7.00	d	8.3, 2.0
A,B 2	7.07	br d	2.0
B6	7.11	br s	
D 2,6	7.51	m	
C 2,6	7.54	m	
C α	7.63	d	15.9
D α	7.53	d	15.9

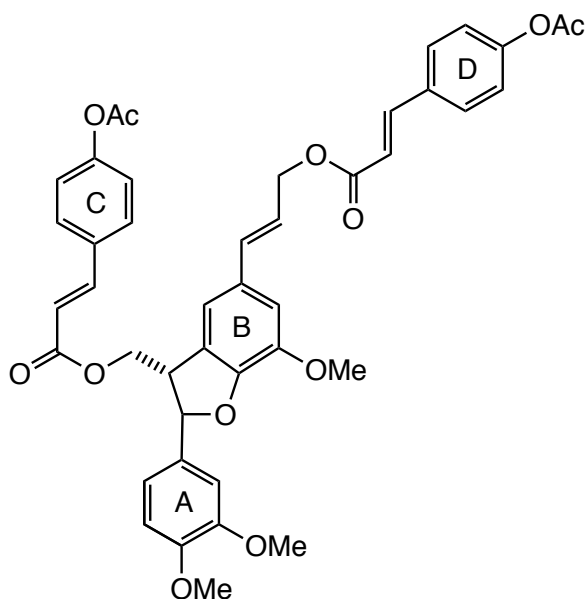
Notes:

S. Quideau

C3,4,5 and D3,4,5 Can be interchanged

not substantiated in CDCl₃ & DMSO

Compound Number 2061



¹³C

Atom	CDCl ₃	Acetone	DMSO	
C4 AcMe	21.08	20.94	20.76	
D4 AcMe	21.08	20.94	20.76	
β	50.45	51.21	49.36	
A3 OMe	55.97	56.08	55.50	
A4 OMe	56.00	56.14	55.50	
B3 OMe	56.13	56.41	55.76	
B γ	65.31	65.71	64.66	
γ	65.56	66.15	64.98	
α	88.94	89.17	87.72	
A2	109.53	110.97	110.11	
B2	110.96	112.28	111.18	
A5	111.26	112.63	111.77	
B6	115.41	116.35	115.30	
D β	117.59	118.61	117.65	
C β	118.21	119.01	118.01	
A6	118.94	119.53	118.65	
B β	121.34	122.17	121.32	
D3	122.14	123.23	122.24	
D5	122.14	123.23	122.24	
C3	122.19	123.23	122.28	
C5	122.19	123.23	122.28	
B5	127.79	129.17	128.02	
C2	129.21	130.16	129.49	
C6	129.21	130.16	129.49	
D2	129.42	130.21	129.53	
D6	129.42	130.21	129.53	
B1	130.66	131.47	130.01	
D1	131.92	132.77	131.47	
C1	132.16	132.91	131.62	
A1	132.96	134.41	132.74	
B α	134.47	134.99	133.72	
C α	143.91	144.43	143.59	
D α	144.39	144.79	143.81	
B3	144.53	145.42	143.87	
B4	148.45	149.44	147.67	
A3	149.36	150.45	148.81	
C4	152.21	153.46	151.99	
D4	152.36	153.53	152.03	
C γ	166.47	166.80	165.84	
D γ	166.61	166.80	165.87	
C4 C=O	168.97	169.45	168.87	
D4 C=O	169.01	169.45	168.87	

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.26	s	
A3,4 OMe	3.76	s	
B3 OMe	3.88	s	
β	~3.88	m	
γ1	4.48	dd	11.1, 7.5
γ2	4.61	dd	11.1, 5.4
B γ	4.81	dd	6.5, 1.3
α	5.61	d	7.2
B β	6.32	dt	15.8, 6.5
A5	6.43	d	8.3
D β	6.50	d	16.0
C β	6.54	d	16.0
B α	6.71	dt	15.8, 1.2
A6	7.00	dd	8.2, 2.0
A2	7.08	d	2.0
B2	7.08	br s	
B6	7.11	br s	
C,D 3,5	7.16-7.21	m	
D 2,6	7.68	m	
C α	7.70	d	16.0
C 2,6	7.72	m	

Notes:

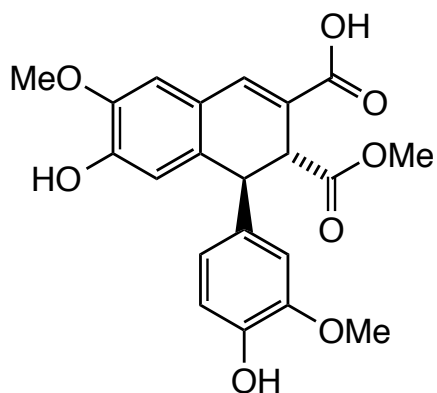
S. Quideau

C4,D4 and Cg,Dg Can be interchanged

Not substantiated in CDCl₃ & DMSO

Compound Number 2062

¹³C



Methyl 7-hydroxy-5-methoxy-1-(4-hydroxy-3-methoxyphenyl)- trans-1,1-dihydronaphthalene-3-carboxylic Acid 2-carboxylate

¹H (acetone)

Atom	H Shifts	Mult	J
A γ OMe	3.55	s	
A3 OMe	3.74	s	
B3 OMe	3.87	s	
β	3.96	d	3.1
α	4.51	d	3.1
A6	6.43	dd	8.3, 1.9
A5	6.657	d	8.3
B5	6.661	s	
A2	6.77	d	2.0
B2	7.06	s	
B α	7.66	s	

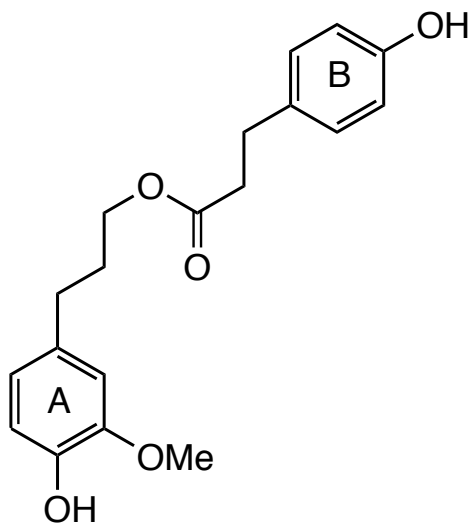
Notes:

S. Quideau

Atom	CDCl ₃	Acetone	DMSO	
α		46.46		
β		48.06		
A γ OMe		52.25		
A3 OMe		56.18		
B3 OMe		56.36		
A2		112.01		
B2		113.11		
A5		115.52		
B5		116.75		
A6		120.82		
B β		123.97		
B1		124.58		
B6		132.08		
A1		135.45		
B α		138.07		
A4		146.14		
B3		147.51		
A3		148.11		
B4		149.34		
B γ		168.80		
A γ		173.44		

Compound Number 2063

¹³C



Dihydroconiferyl 4-hydroxydihydrocinnamate

Atom	CDCl ₃	Acetone	DMSO	
B α	30.11	30.75	29.49	
β	30.40	31.33	29.95	
α	31.75	32.24	30.91	
B β	36.17	36.69	35.47	
OMe	55.87	56.16	55.48	
γ	63.85	64.03	63.13	
A2	110.96	112.73	112.43	
A5	114.28	115.62	115.28	
B3	115.31	116.00	115.03	
B5	115.31	116.00	115.03	
A6	120.93	121.55	120.30	
B2	129.37	130.05	129.04	
B6	129.37	130.05	129.04	
B1	132.46	132.38	130.50	
A1	133.09	133.55	131.83	
A4	143.76	146.58	144.53	
A3	146.40	148.16	147.38	
B4	154.13	156.57	155.55	
B γ	173.26	173.09	172.32	

¹H (acetone)

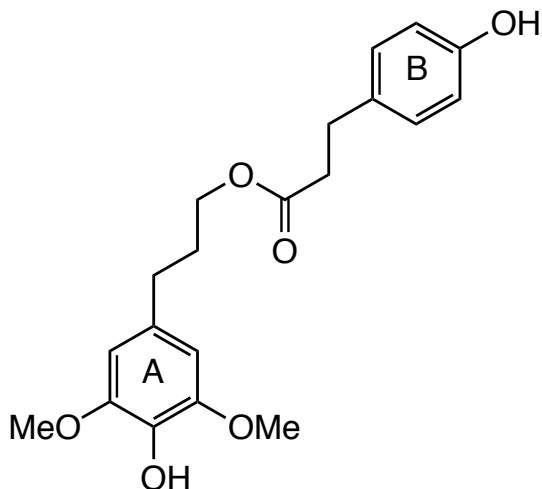
Atom	H Shifts	Mult	J
β	1.86	m	
α	2.55	t	7.4
B β	2.56	t	7.6
B α	2.82	t	7.6
OMe	3.80	s	
γ	4.03	t	6.5
A6	6.61	dd	8.0, 2.0
A5	6.73	d	7.9
B 3,5	6.75	m	
A2	6.79	d	2.0
B 2,6	7.06	m	
ArOH	7.86	s	
ArOH	8.10	s	

Notes:

S. Quideau

Compound Number 2064

¹³C



Dihydrosinapyl dihydro-*p*-coumarate

Atom	CDCl ₃	Acetone	DMSO	
B α	30.11	30.77	29.49	
β	30.41	31.31	29.90	
α	32.26	32.71	31.41	
B β	36.17	36.71	35.46	
OMe	56.27	56.57	55.87	
OMe	56.27	56.57	55.87	
γ	63.82	64.04	63.15	
A2	105.03	106.69	105.63	
A6	105.03	106.69	105.63	
B3	115.32	116.01	115.02	
B5	115.32	116.01	115.02	
B2	129.34	130.07	129.03	
B6	129.34	130.07	129.03	
B1	132.28	132.40	130.50	
A1	132.36	132.59	131.04	
A4	132.93	135.07	133.55	
A3	146.93	148.62	147.85	
A5	146.93	148.62	147.85	
B4	154.19	156.61	155.55	
B γ	173.21	173.08	172.32	

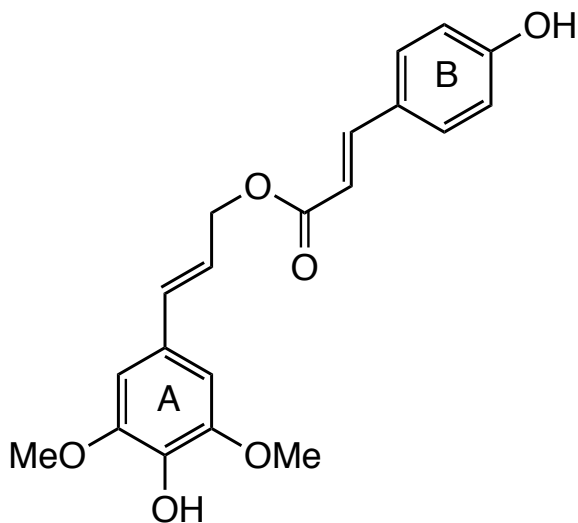
¹H (acetone)

Atom	H Shifts	Mult	J
β	1.87	m	
α	2.55	t	7.6
B β	2.56	t	7.5
B α	2.82	t	7.6
OMe	3.79	s	
γ	4.03	t	6.5
A 2,6	6.48	s	
B 3,5	6.74	m	
A4 OH	6.89	s	
B 2,6	7.06	m	
B4 OH	8.08	s	

Notes:

S. Quideau

Compound Number 2065



Sinapyl p-coumarate

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.84	s	
γ	4.78	dd	6.5, 1.3
β	6.28	dt	15.8, 6.5
B β	6.38	d	15.9
α	6.64	dt	15.8, 1.3
A 2,6	6.79	s	
B 3,5	6.89	m	
B 2,6	7.55	m	
B α	7.63	d	15.9

Notes:

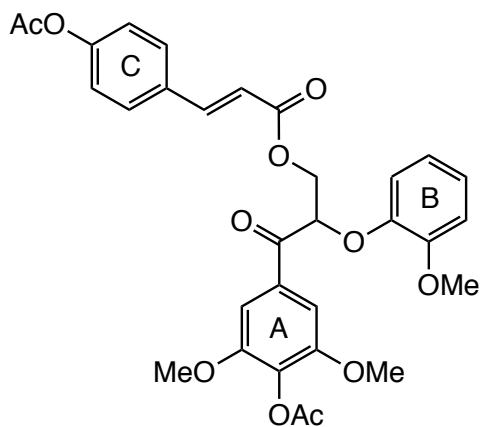
S. Quideau

¹³C

Atom	CDCl ₃	Acetone	DMSO	
OMe	56.28	56.61	55.97	
OMe	56.28	56.61	55.97	
γ	65.15	65.42	64.50	
A2	103.55	105.16	104.20	
A6	103.55	105.16	104.20	
B β	115.15	115.52	114.08	
B3	115.92	116.70	115.78	
B5	115.92	116.70	115.78	
β	121.44	122.07	121.06	
B1	126.98	126.99	125.08	
A1	127.84	128.22	126.47	
B2	129.98	130.95	130.34	
B6	129.98	130.95	130.34	
α	134.53	135.14	134.03	
A4	135.03	137.27	135.80	
B α	144.91	145.45	144.88	
A3	147.10	148.84	148.04	
A5	147.10	148.84	148.04	
B4	158.06	160.62	159.87	
B γ	167.32	167.22	166.40	

Compound Number 2066

¹³C



2-(4-Acetoxy-3,5-dimethoxybenzoyl)-2-(2-methoxyphenoxy)
ethyl 4-acetoxycinnamate

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.26	s	
Ac Me	2.26	s	
B3 OMe	3.75	s	
OMe	3.86	s	
γ1	4.60	dd	12.0, 6.8
γ2	4.86	dd	12.0, 3.6
β	5.96	dd	6.8, 3.6
C α	6.50	d	16.0
B6	6.83	ddd	7.9, 8.8, 2.5
B 1,2,5	6.98	m	
C 3,5	7.18	m	
A 2,6	7.56	s	
C β	7.62	d	16.0
C 2,6	7.69	m	

Notes:

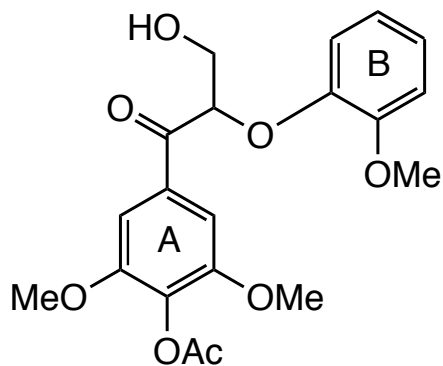
S. Quideau

B5 and C β can be interchanged

Atom	CDCl ₃	Acetone	DMSO	
Ac	20.41	20.21	20.08	
Ac	21.10	20.94	20.83	
B3 OMe	55.71	56.12	55.55	
OMe	56.34	56.68	56.21	
OMe	56.34	56.68	56.21	
γ	64.70	65.07	63.82	
β	80.76	80.41	78.23	
A2	105.93	106.52	105.47	
A6	105.93	106.52	105.47	
B2	112.59	113.82	112.95	
B5	117.42	118.33	116.01	
C β	118.35	118.38	117.39	
B6	121.03	121.64	120.63	
C3	122.18	123.24	122.38	
C5	122.18	123.24	122.38	
B1	123.60	123.34	122.55	
C2	129.32	130.27	129.69	
C6	129.32	130.27	129.69	
C1	131.84	132.66	131.49	
A1	132.66	133.94	132.49	
A4	133.39	134.24	132.55	
C α	144.59	145.13	144.28	
B4	146.72	147.84	146.32	
B3	150.37	151.34	149.51	
A3	152.28	153.40	151.95	
A5	152.28	153.40	151.95	
C4	152.36	153.59	152.13	
C γ	166.62	166.84	165.85	
Ac C=O	168.05	168.13	167.63	
Ac C=O	169.08	169.41	168.94	
α	194.44	194.92	194.02	

Compound Number 2067

¹³C



1-(4-acetoxy-3,5-dimethoxyphenyl)-3-hydroxy-2-(2-methoxyphenoxy)propanone

¹H (acetone)

Atom	H Shifts	Mult	J
B3 OMe	3.77	s	
OMe	3.85	s	
γ	4.10	dd	6.2, 5.0
γ OH	4.28	t	6.2
β	5.56	t	5.0
A 2,6	7.49	s	
B6	6.80	m	
B 1,5	6.41	m	
B2	6.96	m	

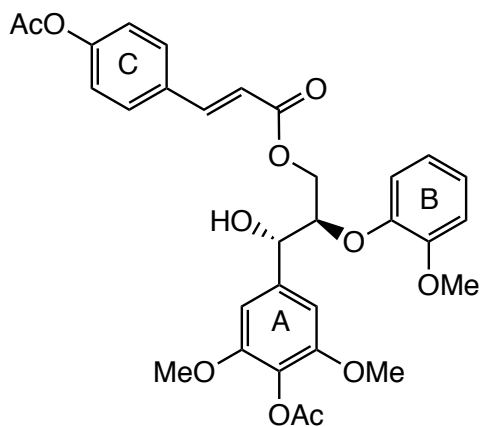
Notes:

S. Quideau

Atom	CDCl ₃	Acetone	DMSO	
Ac Me		20.20		
B3 OMe		56.11		
OMe		56.62		
OMe		56.62		
γ		63.90		
β		84.04		
A2		106.56		
A6		106.56		
B2		113.67		
B5		117.03		
B6		121.61		
B1		123.24		
A4		133.99		
A1		134.39		
B4		148.26		
B3		151.03		
A3		153.25		
A5		153.25		
Ac C=O		168.15		
α		196.77		

Compound Number 2068

¹³C



¹H (acetone)

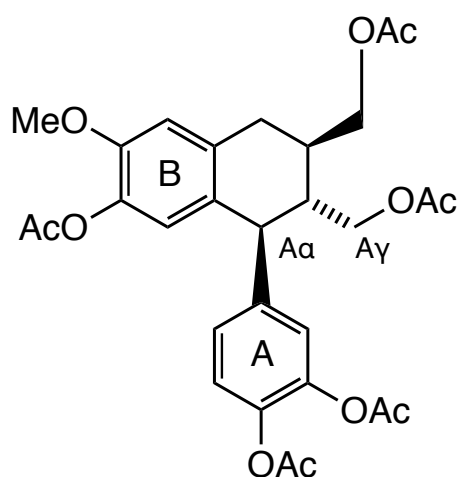
Atom	H Shifts	Mult	J
Ac	2.20	s	
Ac	2.26	s	
OMe	3.78	s	
B3 OMe	3.81	s	
γ1	4.47	dd	11.9, 3.9
γ2	4.52	dd	11.9, 6.1
β	4.73	m	
α OH	4.78	d	4.5
α	5.07	br t	4.8
C β	6.41	d	16.0
B6	6.84	ddd	7.9, 6.4, 2.7
A 2,6	6.88	s	
B 1,2	6.95	m	
B5	7.04	br dd	1.4
C 3,5	7.17	m	
C α	7.51	d	16.0
C 2,6	7.66	m	

Notes:

S. Quideau

Atom	CDCl ₃	Acetone	DMSO	
Ac		20.25		
Ac		20.94		
B3 OMe		56.21		
OMe		56.39		
OMe		56.39		
γ		64.01		
α		73.49		
β		83.04		
A2		104.37		
A6		104.37		
B2		113.66		
C β		118.84		
B5		119.77		
B6		121.73		
C3		123.18		
C5		123.18		
B1		123.67		
A4		128.89		
C2		130.15		
C6		130.15		
C1		132.86		
A1		140.77		
C α		144.38		
B4		148.69		
B3		152.04		
A3		152.89		
A5		152.89		
C4		153.43		
C γ		166.80		
Ac C=O		168.58		
Ac C=O		169.43		

Compound Number 2069



Isotaxiresinol

¹³C

Atom	CDCl ₃	Acetone	DMSO	
A3 Ac Me		20.36		
A4 Ac Me		20.45		
B4 Ac Me		20.50		
Ac Me		20.60		
Ac Me		20.72		
B α		33.50		
B β		36.27		
β		44.34		
α		47.51		
OMe		56.18		
γ		63.57		
B γ		66.69		
B2		112.97		
B5		124.12		
A5		124.36		
A2		124.92		
A6		127.98		
B6		131.84		
B1		135.41		
B4		139.26		
A4		142.08		
A3		143.41		
A1		144.19		
B3		150.55		
A4 Ac C=O		168.52		
B4 Ac C=O		168.63		
A3 Ac C=O		168.92		
Ac C=O		171.04		
Ac C=O		171.05		

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.00	s	
Ac Me	2.01	s	
Ac Me	2.10	s	
β	2.14	m	
Ac Me	2.22	s	
Ac Me	2.24	s	
B β	2.26	m	
B α	2.90	m	
A3 OMe	3.78	s	
γ1	3.90	dd	11.7, 3.5
α	4.06	br d	10.2
Bγ1	4.11	dd	11.2, 6.0
γ2	4.12	dd	11.7, 3.5
B γ2	4.22	dd	11.2, 4.4
B5	6.34	d	0.9
B2	6.88	br s	
A2	7.04	d	2.1
A6	7.10	dd	8.3, 4.1
A5	7.14	d	8.3

Notes:

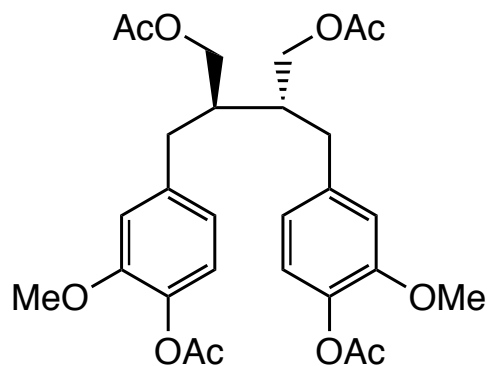
S. Quideau

Diastereal configuration on 6-membered ring --Trans 7,8

Natural occurring isomer is (+), i.e. 7S.8R, 8R'

Compound Number 2070

¹³C



Seco-isolariciresinol

¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	2.00	s	
4 Ac Me	2.21	s	
β	2.22	m	
α1	2.70	dd	13.9, 7.9
α2	2.83	dd	13.8, 6.7
A3 OMe	3.74	s	
γ1	4.03	dd	11.4, 5.5
γ2	4.25	dd	11.4, 6.1
A6	6.70	dd	8.0, 1.95
A2	6.87	d	1.92
A5	6.92	d	8.0

Notes:

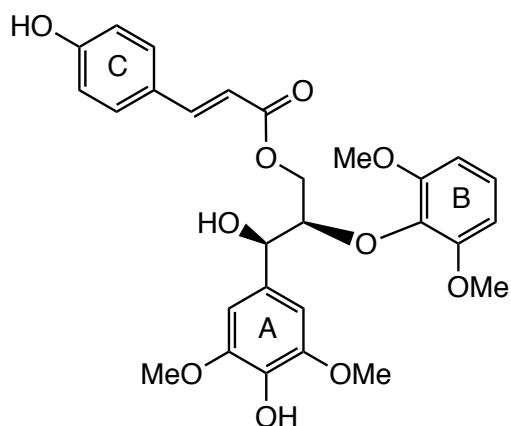
S. Quideau

natural occurring isomer (-), i.e. 8R, 8R'

As this compound has a plane of symmetry the shifts for the other half are identical.

Atom	CDCl ₃	Acetone	DMSO	
4 Ac Me		20.47		
γ AcMe		20.83		
α		35.51		
β		40.81		
γ		64.67		
2		114.00		
6		121.67		
5		123.32		
4		139.14		
1		140.00		
3		152.01		
4 Ac C=O		169.04		
γAc C=O		171.04		

Compound Number 2071

¹³C

Atom	CDCl ₃	Acetone	DMSO	
B OMe	56.01	56.44	55.78	
B OMe	56.01	56.44	55.78	
A OMe	56.25	56.59	55.93	
A OMe	56.25	56.59	55.93	
γ	63.92	64.78	64.09	
α	74.66	74.81	72.17	
β	87.07	86.87	83.84	
A2	103.75	105.39	104.32	
A6	103.75	105.39	104.32	
B2	105.16	106.35	105.58	
B6	105.16	106.35	105.58	
C β	114.87	115.52	114.12	
C3	115.97	116.68	115.82	
C5	115.97	116.68	115.82	
B1	124.30	124.72	123.62	
C1	126.83	126.97	125.07	
C2	129.98	130.92	130.21	
C6	129.98	130.92	130.21	
A1	130.58	132.00	131.16	
A4	134.50	136.27	134.63	
B4	136.62	137.85	136.12	
C α	144.86	145.28	144.38	
A3	146.99	148.38	147.49	
A5	146.99	148.38	147.49	
B3	152.93	154.03	152.97	
B5	152.93	154.03	152.97	
C4	158.23	160.58	159.80	
C γ	167.12	167.12	166.25	

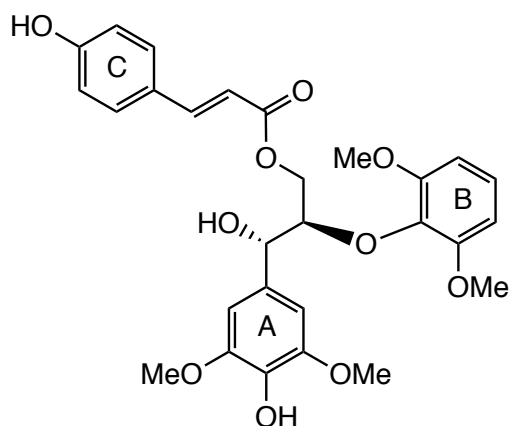
¹H (acetone)

Atom	H Shifts	Mult	J
A 3,5 OMe	3.76	s	
B 3,5 OMe	3.83	s	
γ1	4.06	dd	11.9, 4.2
β	4.27	ddd	7.3, 4.2, 3.1
γ2	4.45	dd	12.0, 3.2
α	5.00	br d	7.1
α OH	4.60	d	3.2
C β	6.33	d	16.0
B 2,6	6.68	d	8.4
A 2,1	6.67	d	0.3
C 3,5	6.89	m	
B1	7.01	dd	8.7, 8.1
C α	7.48	d	16.0
C 2,6	7.53	m	

Notes:

S. Quideau

Compound Number 2072

¹³C*erythro*¹H (acetone)

Atom	H Shifts	Mult	J
A 3,5 OMe	3.79	s	
B 3,5 OMe	3.82	s	
γ1	4.23	dd	11.8, 3.4
γ2	4.45	dd	11.8, 7.3
β	4.58	m	
α OH	4.697	d	3.9
α	4.96	br m	
C β	6.15	d	16.0
B 2,6	6.68	d	8.4
A 2,6	6.71	d	0.7
C 3,5	6.84	m	
B1	7.01	dd	8.6, 8.2
C α	7.33	d	16.0
C 2,6	7.46	m	

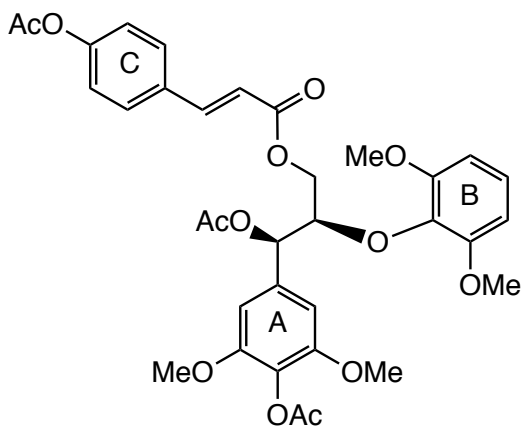
Notes:

S. Quideau

Atom	CDCl ₃	Acetone	DMSO	
B OMe	56.20	56.48	55.77	
B OMe	56.20	56.48	55.77	
A OMe	56.33	56.60	55.92	
A OMe	56.33	56.60	55.92	
γ	62.59	63.57	63.38	
α	71.90	73.19	72.62	
β	83.18	84.40	83.51	
A2	102.78	104.59	103.77	
A6	102.78	104.59	103.77	
B2	105.36	106.34	105.32	
B6	105.36	106.34	105.32	
C β	115.19	115.73	114.12	
C3	115.91	116.65	115.81	
C5	115.91	116.65	115.81	
B1	124.44	124.75	123.40	
C1	126.85	127.03	125.03	
C2	129.88	130.82	130.11	
C6	129.88	130.82	130.11	
A1	129.75	131.66	132.10	
A4	133.91	135.91	134.45	
B4	134.69	136.59	135.92	
C α	144.58	144.99	144.16	
A3	147.00	148.49	147.63	
A5	147.00	148.49	147.63	
B3	153.69	154.53	152.89	
B5	153.69	154.53	152.89	
C4	158.15	160.43	159.74	
C γ	167.29	167.16	166.27	

Compound Number 2073

¹³C



¹H (acetone)

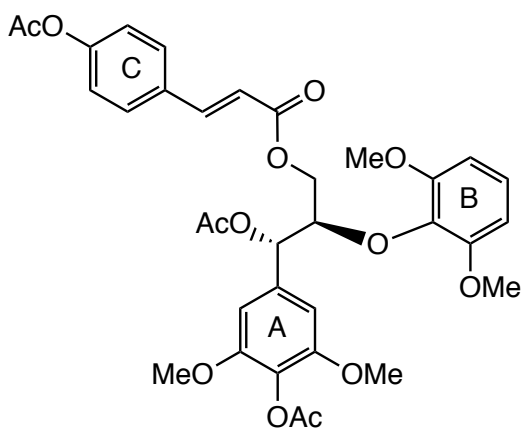
Atom	H Shifts	Mult	J
α Ac Me	1.97	s	
Ac Me	2.02	s	
Ac Me	2.27	s	
OMe	3.78	s	
OMe	3.79	s	
γ1	4.07	dd	11.9, 4.7
γ2	4.41	dd	11.9, 3.8
β	4.68	ddd	6.8, 4.7, 3.8
α	6.18	d	6.8
C β	6.56	d	16.0
B 2,6	6.66	d	8.4
A 2,6	6.86	br s	
B1	6.99	t	8.4
C 3,5	7.19	m	
C α	7.55	d	16.0
C 2,6	7.72	m	

Notes:

S. Quideau

Atom	CDCl ₃	Acetone	DMSO	
Ac Me	20.36	20.23	20.15	
Ac Me	21.02	20.95	20.75	
α Ac Me	21.02	20.95	20.88	
OMe	55.89	56.35	55.80	
OMe	55.89	56.35	55.80	
OMe	56.13	56.49	56.01	
OMe	56.13	56.49	56.01	
γ	64.01	64.66	63.72	
α	75.63	76.79	75.97	
β	80.86	81.83	80.62	
A2	104.10	104.92	103.89	
A6	104.10	104.92	103.89	
B2	105.09	106.22	105.29	
B6	105.09	106.22	105.29	
C β	117.75	118.88	117.82	
C3	122.09	123.20	122.43	
C5	122.09	123.20	122.43	
B1	123.74	124.47	123.68	
A4	128.57	129.54	127.74	
C2	129.19	130.22	129.68	
C6	129.19	130.22	129.68	
C1	131.92	132.90	131.66	
B4	135.42	136.76	135.61	
A1	136.56	137.85	136.15	
C α	143.86	144.48	143.76	
A3	151.94	153.07	151.55	
A5	151.94	153.07	151.55	
C4	152.10	153.46	152.09	
B3	153.14	154.19	152.69	
B5	153.14	154.19	152.69	
C γ	166.24	166.62	165.86	
Ac C=O	168.45	168.46	168.06	
Ac C=O	169.05	169.45	169.06	
Ac C=O	169.68	169.93	169.44	

Compound Number 2074

¹³C

Atom	CDCl ₃	Acetone	DMSO	
Ac Me	20.36	20.24	20.15	
α Ac Me	21.02	20.95	20.76	
Ac Me	21.02	20.95	20.87	
B OMe	55.87	56.32	55.78	
B OMe	55.87	56.32	55.78	
A OMe	56.07	56.47	55.97	
A OMe	56.07	56.47	55.97	
γ	63.13	63.73	62.64	
α	74.50	75.58	74.23	
β	80.92	81.67	80.19	
A2	103.93	104.60	103.45	
A6	103.93	104.60	103.45	
B2	105.05	106.12	105.27	
B6	105.05	106.12	105.27	
C β	117.84	118.80	117.70	
C3	122.03	123.19	122.43	
C5	122.03	123.19	122.43	
B1	124.00	124.72	124.00	
A4	128.37	129.35	127.59	
C2	129.19	130.15	129.57	
C6	129.19	130.15	129.57	
C1	131.98	132.85	131.56	
B4	135.39	136.69	134.77	
A1	135.73	136.77	135.43	
C α	143.73	144.29	143.54	
A3	151.84	153.06	151.58	
A5	151.84	153.06	151.58	
C4	152.04	153.44	152.06	
B3	153.32	154.34	152.85	
B5	153.32	154.34	152.85	
C γ	166.42	166.52	165.70	
Ac C=O	168.49	168.51	168.10	
Ac C=O	169.04	169.44	169.05	
Ac C=O	169.43	170.00	169.49	

¹H (acetone)

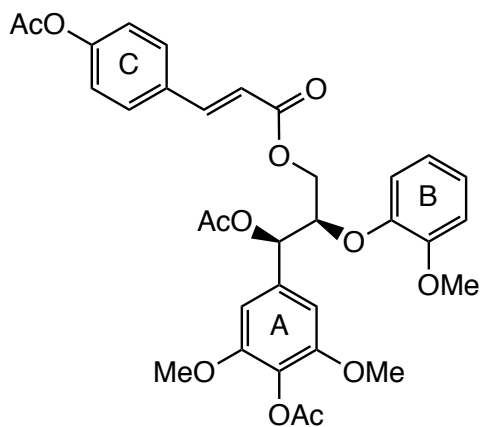
Atom	H Shifts	Mult	J
α Ac Me	2.15	s	
Ac Me	2.21	s	
Ac Me	2.26	s	
B 3,5 OMe	3.79	s	
A 3,5 OMe	3.81	s	
γ1	4.36	dd	11.9, 4.0
γ2	4.53	dd	11.9, 6.2
β	4.80	dt	6.2, 4.0
α	6.14	d	4.2
C β	6.35	d	16.0
B 2,6	6.65	d	8.4
A 2,6	6.83	br s	
B1	6.99	t(dd)	8.4
C 3,5	7.18	m	
C α	7.44	d	16.0
C 2,6	7.66	m	

Notes:

S. Quideau

B3,5 OMe and A3,5 OMe can be interchanged

Compound Number 2075

¹³C

γ-p-coumaroylated syringylglycerol-β04-guaiacol ether (Ac'd)

¹H (acetone)

Atom	H Shifts	Mult	J
α Ac Me	2.04	s	
Ac Me	2.20	s	
Ac Me	2.27	s	
B OMe	3.79	s	
A 3,5 OMe	3.81	s	
γ1	4.19	dd	12.0, 5.5
γ2	4.39	dd	11.9, 3.9
β	4.88	ddd	6.6, 5.5
α	6.15	d	6.6
C β	6.54	d	16.0
B6	6.87	m	
A 2,6	6.88	br s	
B 1,2	6.93 - 7.00	m	
B5	7.08 - 7.10	m	
C 3,5	7.19	m	
C α	7.58	d	16.0
C 2,6	7.71	m	

Notes:

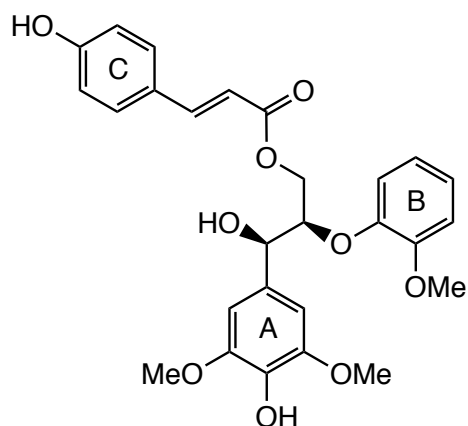
S. Quideau

Not run in DMSO

Atom	CDCl ₃	Acetone	DMSO	
Ac Me	20.42	20.23		
Ac Me	21.10	20.94		
αAc Me	21.10	20.94		
B3 OMe	35.77	56.21		
OMe	56.20	56.51		
OMe	56.20	56.51		
γ	63.39	63.97		
α	74.88	75.92		
β	80.50	80.89		
A2	104.09	105.00		
A6	104.09	105.00		
B2	112.45	113.74		
C β	117.52	118.62		
B5	118.85	119.25		
B6	121.00	121.70		
C3	122.14	123.22		
C5	122.14	123.22		
B1	123.34	123.75		
A4	128.81	129.70		
C2	129.31	130.26		
C6	129.31	130.26		
C1	131.91	132.83		
A1	134.81	136.23		
C α	144.25	144.78		
B4	147.99	149.16		
B3	150.86	151.87		
A3	152.01	153.21		
A5	152.01	153.21		
C4	152.20	153.53		
C γ	166.32	166.64		
Ac C=O	168.47	168.43		
Ac C=O	169.09	169.43		
Ac C=O	169.71	170.03		

Compound Number 2076

¹³C



threo

γ-p-coumaroylated syringylglycerol-β04-guaiacyl ether

¹H (acetone)

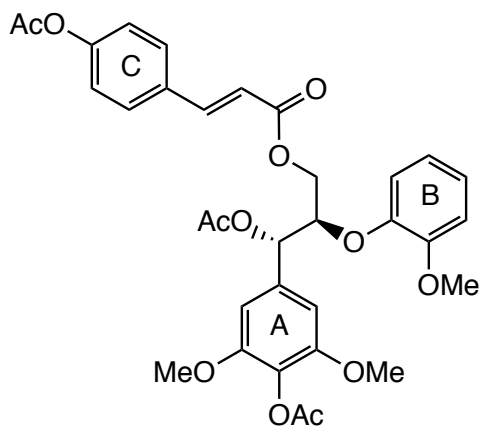
Atom	H Shifts	Mult	J
A OMe	3.79	s	
B3 OMe	3.84	s	
γ1	4.11	dd	12.0, 6.2
γ2	4.36	dd	12.0, 3.4
β	4.57	td	6.1, 3.4
α	4.96	(br)d	5.9
C β	6.31	d	16.0
A 2,6	6.82	d	0.4
B6	6.85-6.90	m	
C 3,5	6.88	m	
B 1,2	6.94-7.01	m	
B5	7.15	dd	7.9, 1.5
C α	7.48	d	16.0
C 2,6	7.51	m	

Notes:

S. Quideau

Atom	CDCl ₃	Acetone	DMSO	
B3 OMe	55.82	56.27	55.60	
OMe	56.31	56.59	55.88	
OMe	56.31	56.59	55.88	
γ	63.19	64.23	63.47	
α	74.70	74.11	71.53	
β	86.09	84.42	81.02	
A2	103.82	105.41	104.24	
A6	103.82	105.41	104.24	
B2	112.19	113.60	112.70	
C β	114.66	115.30	113.86	
C3	115.95	116.68	115.78	
C5	115.95	116.68	116.25	
B5	120.53	119.33	116.25	
B6	121.45	121.82	120.71	
B1	124.12	123.52	121.71	
C1	126.89	126.96	125.00	
C2	130.04	130.97	130.30	
C6	130.04	130.97	131.30	
A1	130.29	132.11	131.22	
A4	134.73	136.36	134.67	
C α	145.18	145.57	144.84	
A3	147.11	148.47	147.58	
A5	147.11	148.47	147.58	
B4	147.91	149.37	147.86	
B3	150.91	151.80	149.91	
C4	158.08	160.60	159.87	
C γ	166.86	167.15	166.38	

Compound Number 2077

¹³C

γ-p-coumaroylated syringylglycerol-β04-guiacol ether (Ac'd)

¹H (acetone)

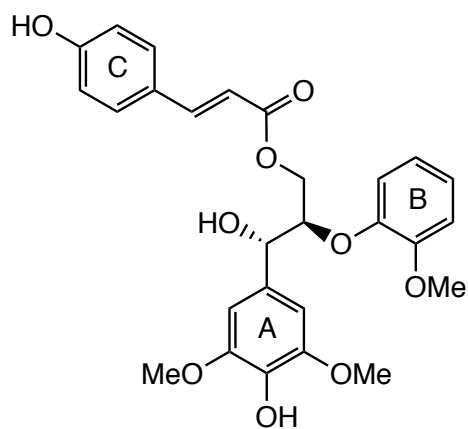
Atom	H Shifts	Mult	J
α Ac Me	2.09	s	
Ac Me	2.21	s	
Ac Me	2.26	s	
B3 OMe	3.81	s	
A OMe	3.81	s	
γ1	4.43	dd	11.9, 4.3
γ2	4.49	dd	11.9, 5.8
β	4.94	m	
α	6.12	d	5.1
C β	6.45	d	16.0
B6	6.85	m	
A 2,6	6.89	d	0.4
B 1,2	6.95-7.00	m	
B5	7.03-7.06	m	
C 3,5	7.19	m	
C α	7.57	d	16.0
C 2,6	7.69	m	

Notes:

S. Quideau

Atom	CDCl ₃	Acetone	DMSO	
Ac Me	20.40	20.24	20.12	
α Ac Me	21.01	20.90	20.70	
Ac Me	21.06	20.94	20.84	
B3 OMe	55.73	56.20	55.61	
A OMe	56.14	56.50	55.97	
A OMe	56.14	56.50	55.97	
γ	62.98	63.41	62.35	
α	74.17	74.99	73.53	
β	80.31	80.38	78.34	
A2	104.43	105.14	104.10	
A6	104.43	105.14	104.10	
B2	112.51	113.75	112.88	
C β	117.59	118.57	117.53	
B5	119.50	119.79	117.81	
B6	120.95	121.65	120.69	
C3	122.09	123.21	122.38	
C5	122.09	123.21	122.38	
B1	123.58	124.02	122.81	
A4	128.67	129.57	127.73	
C2	129.28	130.22	129.63	
C6	129.28	130.22	129.63	
C1	131.93	132.79	131.51	
A1	134.92	136.25	134.99	
C α	144.23	144.74	143.94	
B4	147.24	148.36	146.75	
B3	151.07	152.03	150.27	
A3	151.98	153.07	151.48	
A5	151.98	153.07	151.48	
C4	152.16	153.51	152.08	
C γ	166.44	166.63	165.76	
Ac C=O	168.49	168.48	168.01	
Ac C=O	169.06	169.43	168.97	
α Ac C=O	169.48	169.95	169.34	

Compound Number 2078



erythro

γ -p-coumaroylated syringylglycerol- β 04-guaiacyl ether

^1H (acetone)

Atom	H Shifts	Mult	J
OMe	3.80	s	
B3 OMe	3.81	s	
γ 1	4.41	dd	11.8, 3.8
γ 2	4.47	dd	11.8, 6.4
β	4.68	ddd	6.4, 5.0, 3.8
α	4.98	br d	4.9
C β	6.25	d	16.0
A 2,6	6.81	brs	
B6	6.83	m	
C 3,5	6.87	m	
B 1,2	6.91-6.96	m	
B5	7.05	br dd	7.8, 1.5
C α	7.44	d	16.0
C 2,6	7.48	m	

Notes:

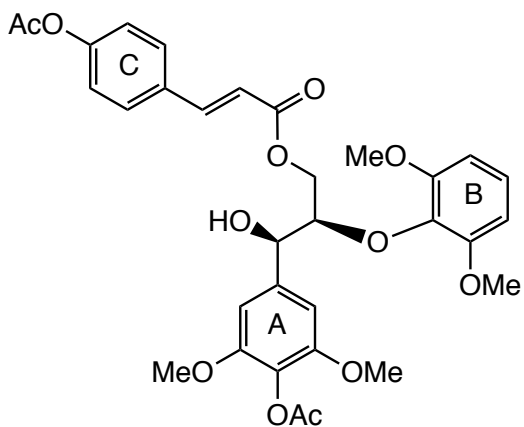
S. Quideau

^{13}C

Atom	CDCl_3	Acetone	DMSO	
B3 OMe	55.83	56.23	55.54	
OMe	56.29	56.60	55.90	
OMe	56.29	56.60	55.90	
γ	62.70	64.04	63.29	
α	72.39	73.51	71.77	
β	84.23	83.41	80.92	
A2	103.13	105.23	104.38	
A6	103.13	105.23	104.38	
B2	112.22	113.63	112.74	
C β	114.40	115.37	113.93	
C3	115.95	116.67	115.75	
C5	115.95	116.67	115.75	
B5	120.53	119.55	116.89	
B6	121.46	121.72	120.62	
B1	124.03	123.46	121.83	
C1	126.44	126.92	124.99	
C2	129.98	130.90	130.24	
C6	129.98	130.90	130.24	
A1	130.16	132.59	132.05	
A4	134.15	136.12	134.61	
C α	145.25	145.42	144.71	
A3	147.00	148.42	147.52	
A5	147.00	148.42	147.52	
B4	147.02	148.91	147.52	
B3	151.42	152.00	150.03	
C4	158.68	160.58	159.82	
C γ	167.39	167.28	166.41	

Compound Number 2079

¹³C



¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.19	s	
Ac Me	2.27	s	
A OMe	3.75	s	
B OMe	3.82	s	
γ1	4.16	dd	11.9, 4.6
β	4.38	ddd	6.3, 4.5, 3.6
γ2	4.50	dd	11.9, 3.6
α	5.07	br d	6.4
C β	6.47	d	16.0
B 2,6	6.68	d	8.4
A 2,6	6.87	br s	
B1	7.01	t	8.4
C 3,5	7.19	m	
C α	7.63	d	16.0
C 2,6	7.70	m	

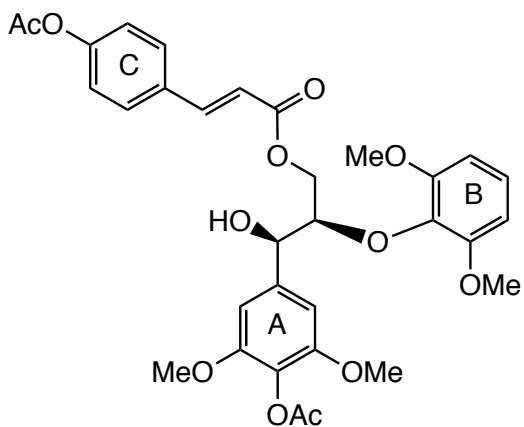
Notes:

S. Quideau

Atom	CDCl ₃	Acetone	DMSO	
Ac Me		20.25		
Ac Me		21.06		
A OMe		56.36		
A OMe		56.36		
B OMe		56.45		
B OMe		56.45		
γ		64.93		
α		74.56		
β		85.88		
A2		104.48		
A6		104.48		
B2		106.35		
B6		106.35		
C β		118.98		
C3		123.19		
C5		123.19		
B1		124.80		
A4		128.98		
C2		130.17		
C6		130.17		
C1		132.93		
B4		137.65		
A1		140.28		
C α		144.26		
A3		152.82		
A5		152.82		
C4		153.43		
B3		154.07		
B5		154.07		
C γ		166.65		
Ac C=O		168.54		
Ac C=O		169.45		

Compound Number 2080

¹³C



¹H (acetone)

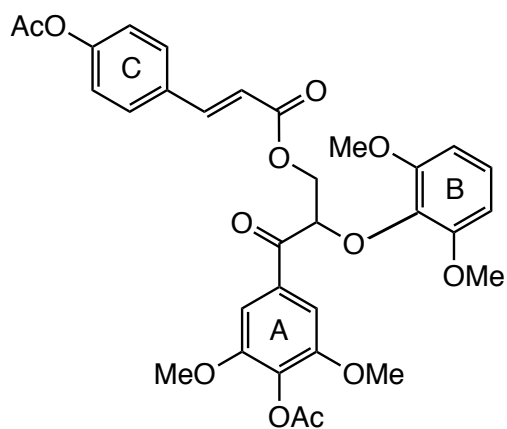
Atom	H Shifts	Mult	J
Ac Me	2.19	s	
Ac Me	2.26	s	
A OMe	3.78	s	
B OMe	3.83	s	
γ1	4.30	dd	11.7, 3.8
γ2	4.51	dd	11.7, 6.9
β	4.62	m	
α	5.05	br t	3.7
C β	6.34	d	16.0
B 2,6	6.09	d	8.4
A 2,6	6.82	br s	
B1	7.03	t	8.4
C 3,5	7.17	m	
C α	7.44	d	16.0
C 2,6	7.66	m	

Notes:

S. Quideau

Atom	CDCl ₃	Acetone	DMSO	
Ac Me		20.26		
Ac Me		20.94		
A OMe		56.38		
A OMe		56.38		
B OMe		56.48		
B OMe		56.48		
γ		63.67		
α		73.30		
β		84.07		
A2		103.76		
A6		103.76		
B2		106.31		
B6		106.31		
C β		119.10		
C3		123.16		
C5		123.16		
B1		124.83		
A4		128.69		
C2		130.11		
C6		130.11		
C1		132.93		
B4		136.57		
A1		140.05		
C α		144.00		
A3		152.94		
A5		152.94		
C4		153.36		
B3		154.51		
B5		154.51		
C γ		166.71		
Ac C=O		168.59		
Ac C=O		169.45		

Compound Number 2081

¹³C¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.26	s	
Ac Me	2.28	s	
B OMe	3.72	s	
A OMe	3.85	s	
γ1	4.63	dd	11.7, 6.2
γ2	4.74	dd	11.7, 4.6
β	5.69	dd	6.2, 4.6
C β	6.39	d	16.0
B 2,6	6.64	d	8.4
B1	6.49	t	8.4
C 3,5	7.17	m	
C α	7.50	d	16.0
A 2,6	7.58	br s	
C 2,6	7.64	m	

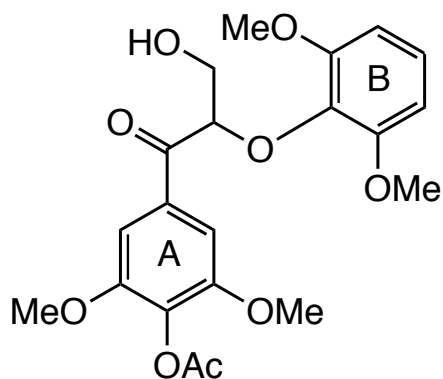
Notes:

S. Quideau

Atom	CDCl ₃	Acetone	DMSO	
Ac Me	20.40	20.23	20.12	
Ac Me	21.08	20.95	20.85	
B OMe	55.88	56.31	55.80	
B OMe	55.88	56.31	55.80	
A OMe	56.28	56.67	56.20	
A OMe	56.28	56.67	56.20	
γ	64.49	64.90	63.77	
β	81.85	81.50	79.82	
B2	105.11	106.18	105.39	
B6	105.11	106.18	105.39	
A2	106.37	106.93	105.86	
A6	106.37	106.93	105.86	
C β	117.67	118.55	117.57	
C3	122.15	123.25	122.45	
C5	122.15	123.25	122.45	
B1	124.23	124.99	124.07	
C2	129.21	130.19	129.61	
C6	129.21	130.19	129.61	
C1	131.90	132.72	131.48	
A4	133.05	133.96	132.28	
A1	133.49	134.72	133.31	
B4	135.68	136.63	135.12	
C α	144.02	144.62	143.83	
A3	152.08	153.20	151.80	
A5	152.08	153.20	151.80	
C4	152.16	153.52	152.11	
B3	153.03	154.07	152.53	
B5	153.03	154.07	152.53	
C γ	166.34	166.55	165.73	
Ac C=O	168.06	168.19	167.72	
Ac C=O	169.08	169.43	169.02	
α	194.81	195.26	184.38	

Compound Number 2082

¹³C



Atom	CDCl ₃	Acetone	DMSO	
Ac Me		20.21		
B OMe		56.28		
B OMe		56.28		
A OMe		56.61		
A OMe		56.61		
γ		63.35		
β		86.41		
B2		106.22		
B6		106.22		
A2		106.51		
A6		106.51		
B1		124.92		
A4		133.59		
A1		135.01		
B4		137.01		
A3		153.06		
A5		153.06		
B3		153.77		
B5		153.77		
Ac C=O		168.18		
α		196.25		

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.27	s	
B OMe	3.73	s	
A OMe	3.86	s	
γ + γ OH	3.90-3.98	m	
β	5.22	dd	5.7, 4.5
B 2,6	6.67	d	8.4
B1	7.02	dd t	8.6, 8.2, 8.4
A 2,6	7.48	s	

Notes:

S.Quideau