Supplementary data

Terpenoids and Phenylpropanoids in *Ligularia duciformis*, *L. kongkalingensis*, *L. nelumbifolia*, and *L. limprichtii*

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Table S1. Differences in the sequence of the rDNA ITS1-5.8S-ITS2 region.[1]

Sample no.	ITS1																	5.8S	ITS2																			
							1	1	1	1	1	1	2	2	2	2	1											1	1	1	1	1	1	1	2	2
		1	6	6	6	7	0	1	1	3	8	8	0	0	2	2	3		2	2	2	3	4	4	6	7	7	9	0	0	0	5	5	6	9	1	2
	8	3	4	5	8	4	8	0	7	2	4	8	4	5	3	4	8		6	7	8	3	1	4	9	0	2	9	1	4	7	1	6	8	9	7	1
1	C	K	G	G	C	C	R	T	T	Y	Y	C	A	S	[6]	[6]	G		T	C	R	G	G	T	Y	C	A	C	C	C	C	Y	S	A	C	Y	C
2	C	T	G	G	C	C	A	T	T	T	C	C	A	C	G	C	G		T	C	G	A	G	T	C	C	A	C	C	C	C	T	G	A	Y	C	C
3	C	T	G	G	C	T	A	T	T	T	C	C	A	C	[6]	[6]	G		[5]	C	G	A	G	T	C	C	A	C	C	Y	C	T	G	A	T	C	Y
4	Y	T	G	G	C	C	A	T	T	T	C	C	A	C	G	C	G		T	C	G	A	G	T	C	Y	A	Y	C	C	Y	Y	G	A	C	C	C
5	C	G	G	G	Y	C	G	T	T	C	T	C	A	C	-	-	G		T	C	A	G	G	T	C	C	A	C	C	C	C	C	G	A	C	T	C
6[2]	C	T	G	G	C	C	A	T	T	T	C	C	A	C	G	C	G		T	C	G	A	G	Y	C	Y	A	C	C	C	C	Y	G	W	Y	C	C
7	C	K	R	K	C	C	R	Y	W	Y	Y	C	R	C	[6]	[6]	G		T	C	R	R	G	T	C	C	A	C	Y	C	C	Y	G	A	C	C	C
8	C	T	G	G	C	C	A	T	T	T	C	Y	A	C	G	C	G		[5]	Y	G	A	G	T	Y	C	A	C	C	C	C	T	G	A	T	C	C
9[3]	C	T	G	G	C	C	A	T	T	T	C	Y	A	C	G	C	G		T	C	R	A	G	T	C	C	A	C	C	C	C	T	G	A	T	C	C
Ref[4]	C	T	G	G	C	C	A	T	T	T	C	C	A	C	G	C	K		T	C	G	G	K	T	Y	C	W	C	C	Y	C	T	G	A	C	C	C

1 K=C+T; R=A+G; S=C+G; W=A+T; Y=C+T; -, deletion.

2 A sequence with A inserted between positions 22 and 23 in ITS2 was also present.

3 Accession no. LC333008 (*L. limprichtii*).

4 A *L. duciformis* sequence in the GenBank/EMBL/DDBJ database (ID=LC128585).

5 A sequence with TT in place of T was also present.

6 Two sequences with and without GC were present.

Figure S1. ^{1}H NMR spectrum of **2**.

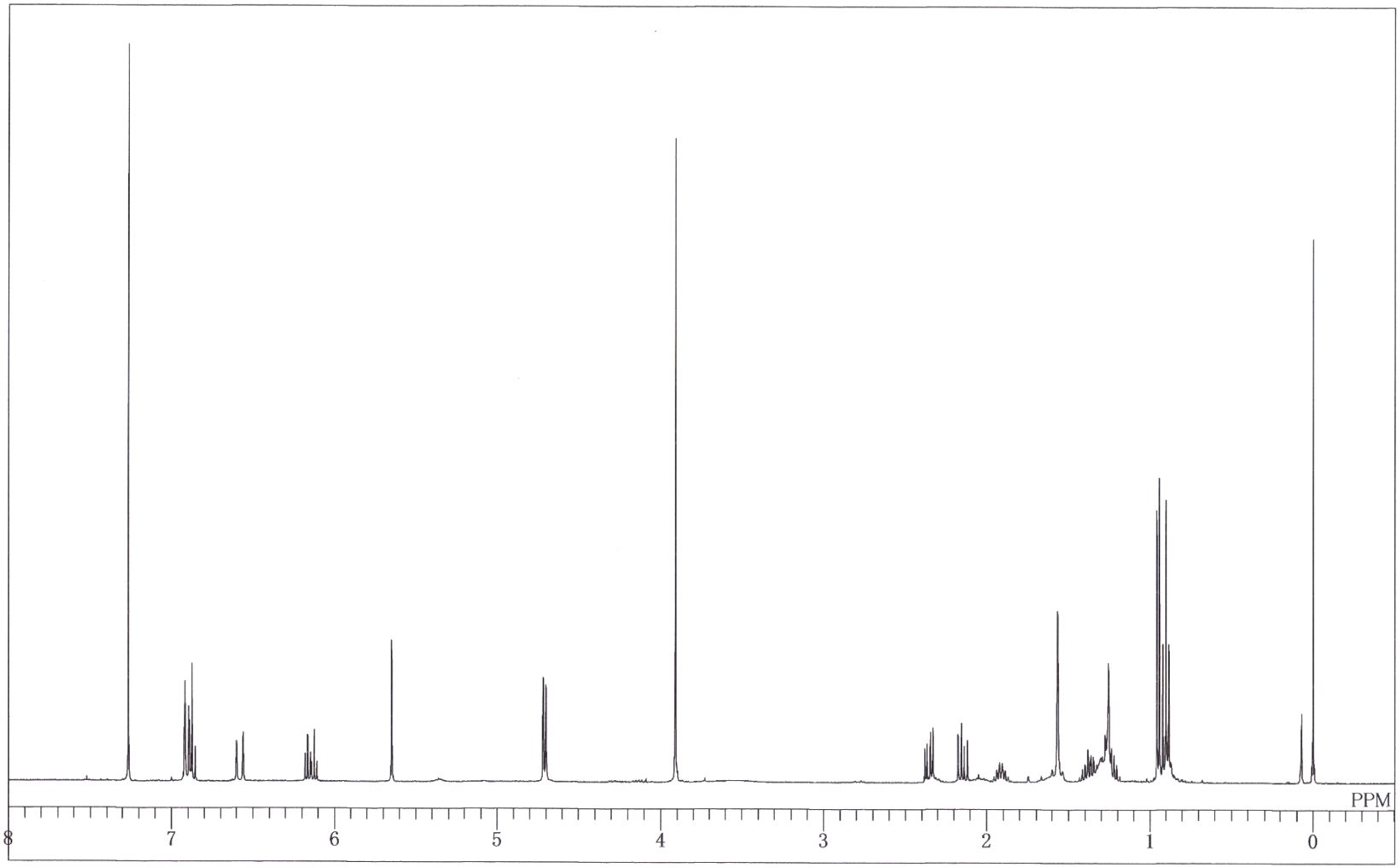


Figure S2. ^{13}C NMR spectrum of **2**.

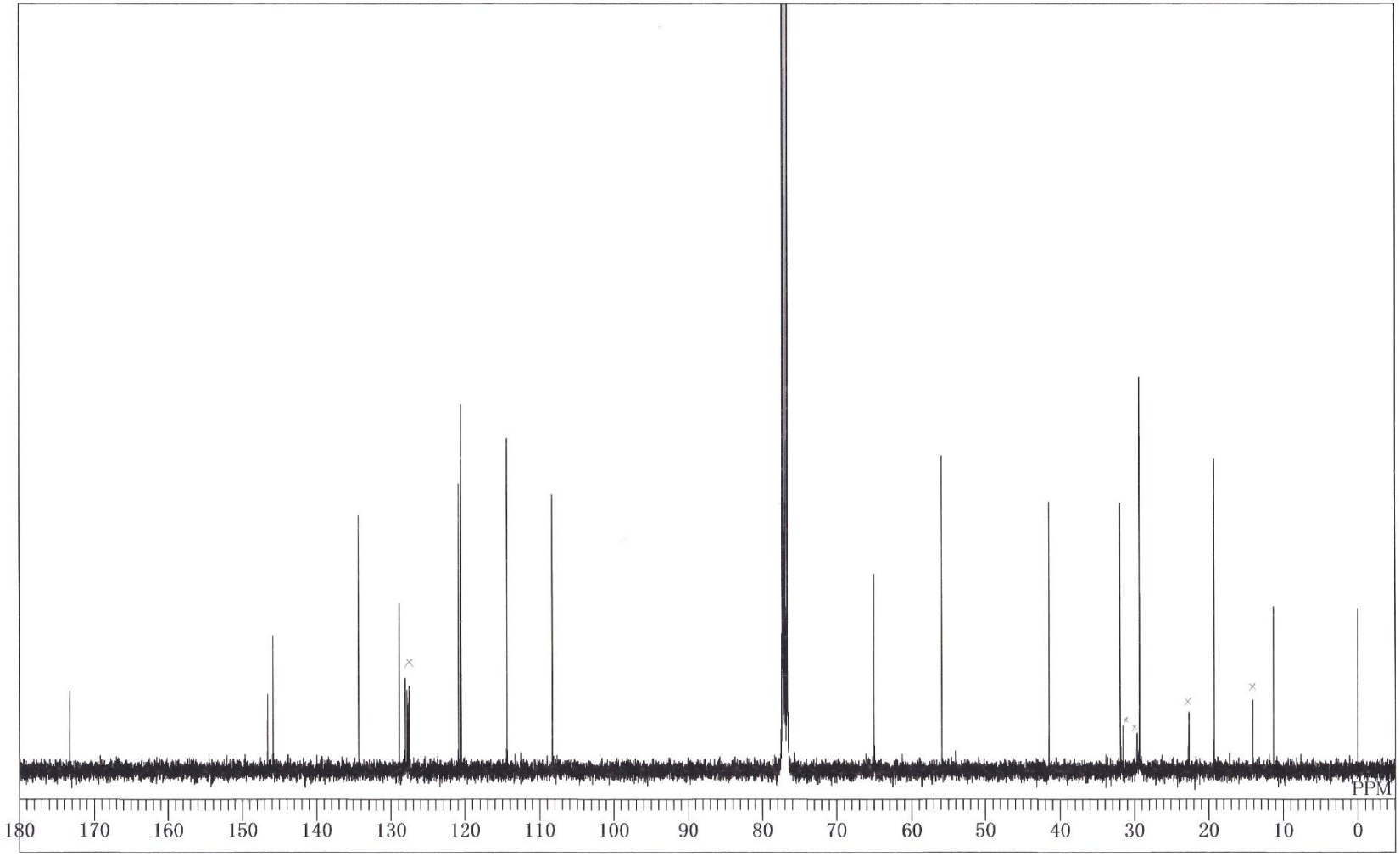


Figure S3. ^{1}H NMR spectrum of **8**.

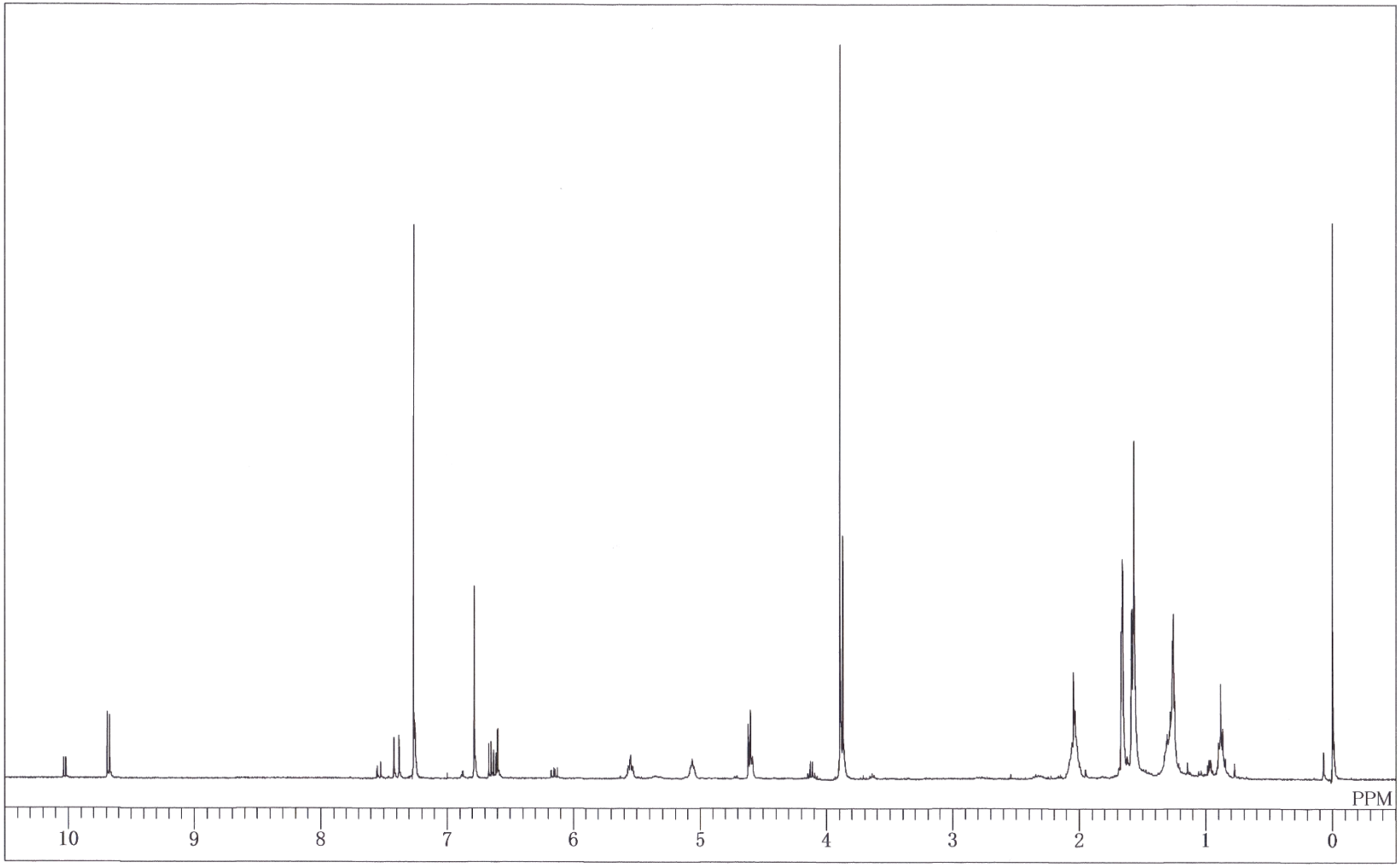


Figure S4. ^{13}C NMR spectrum of **8**.

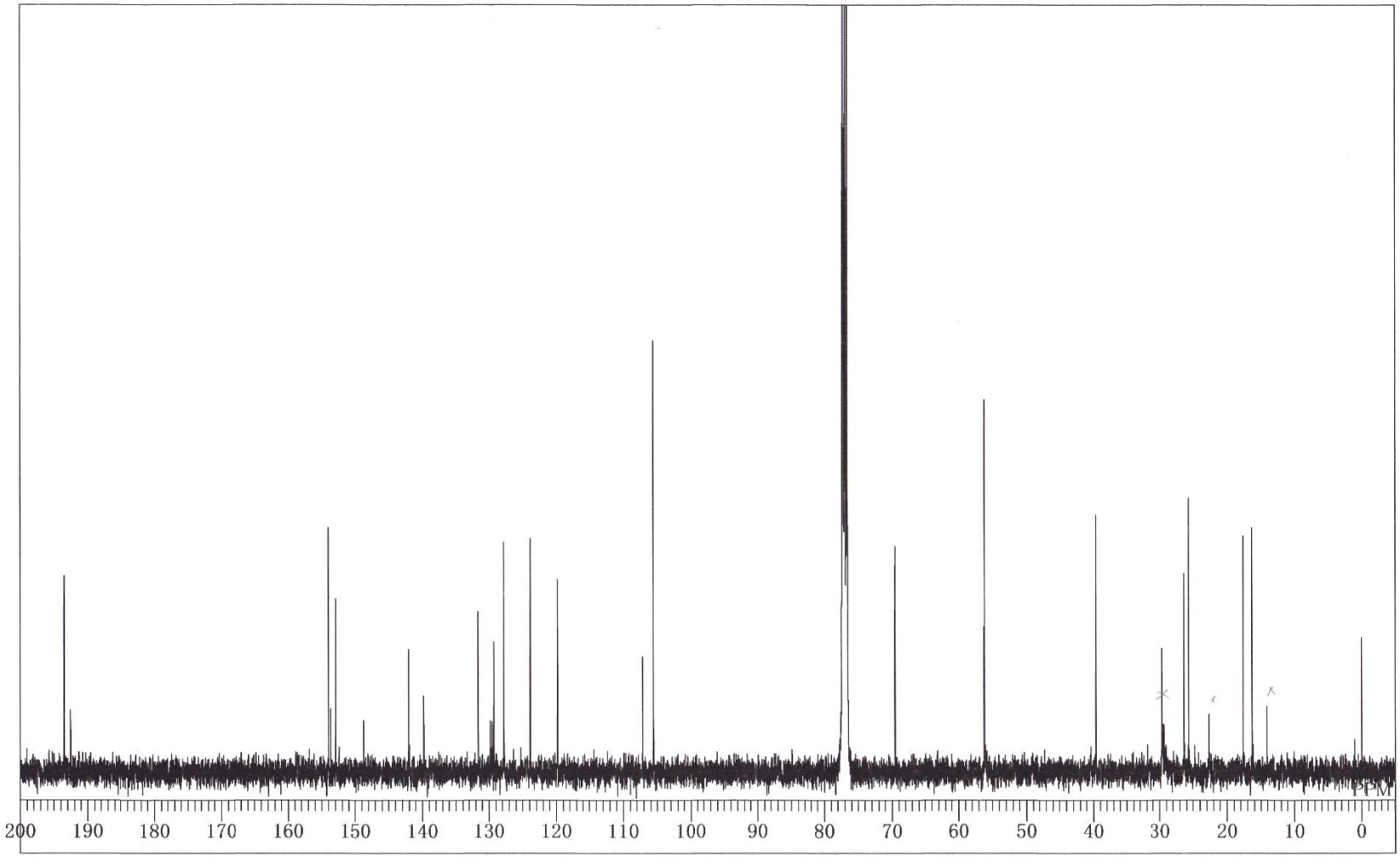
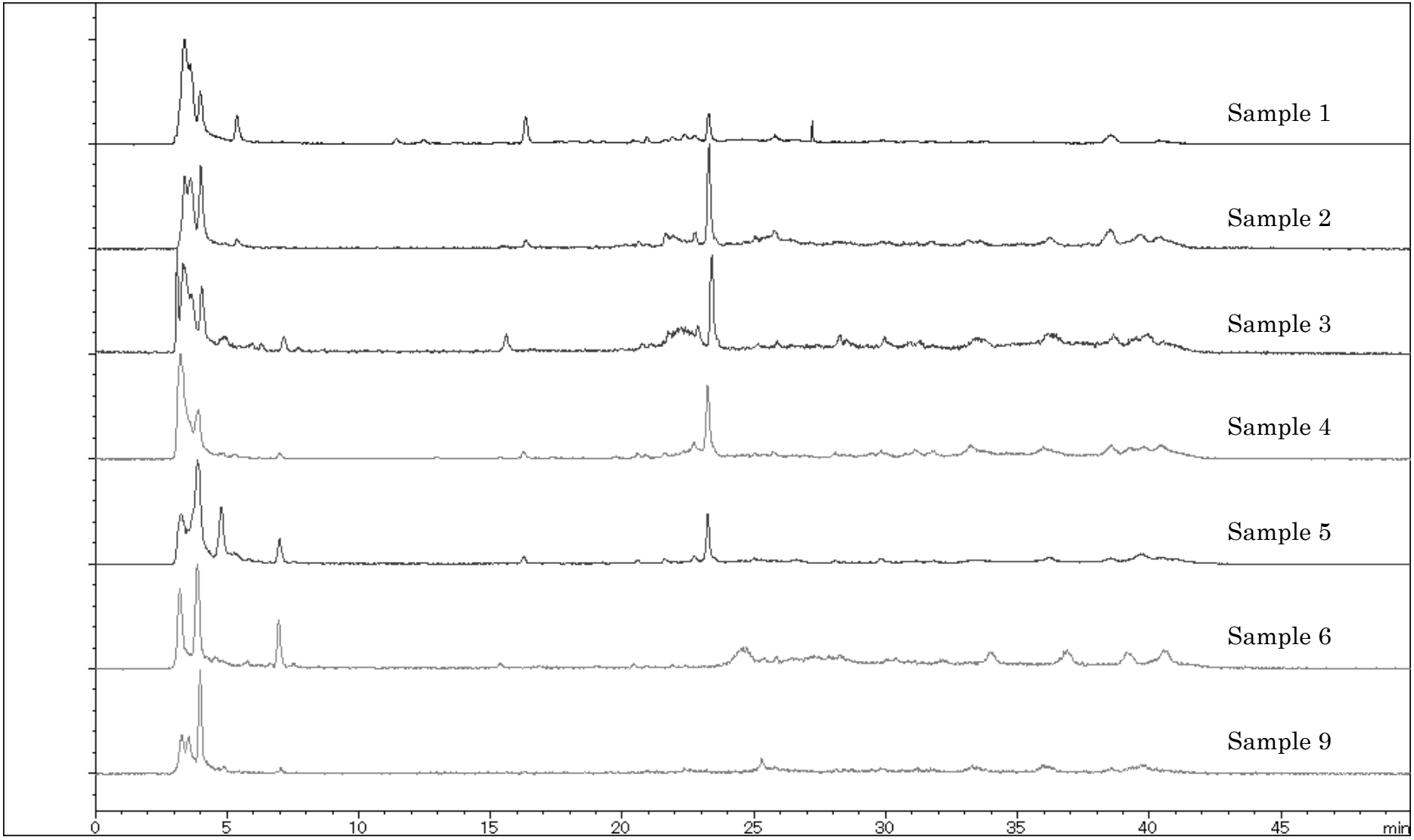


Figure S5. LCMS profile (total ion chromatogram) of samples 1-6 and 9.[1]



1 A peak at t_R = 23.3 min is an impurity contaminated during sampling procedure.