TE’

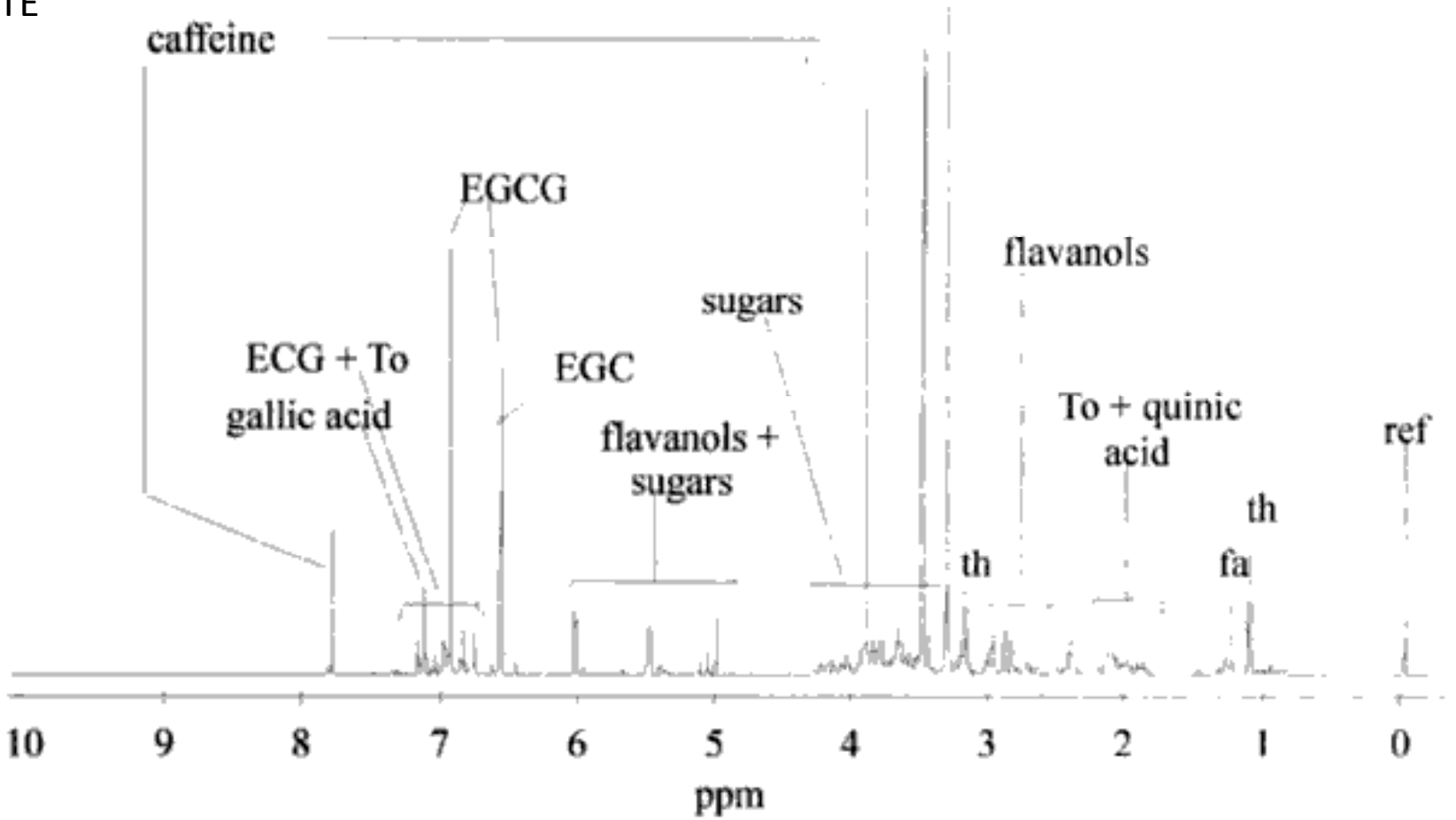

Fig. 6.3 400 MHz ^{1}H NMR spectrum of a ‘Longjing’ (or ‘Dragon Well’) Chinese green tea. Key to assignments: ref, reference; th, theanine; fa, fatty acids; To, theogallin; EGC, (−)-epigallo-catechin; ECG, (−)-epicatechin-3-gallate; EGCG, (−)-epigallo-catechin-3-gallate.

SUCCHI FRUTTA

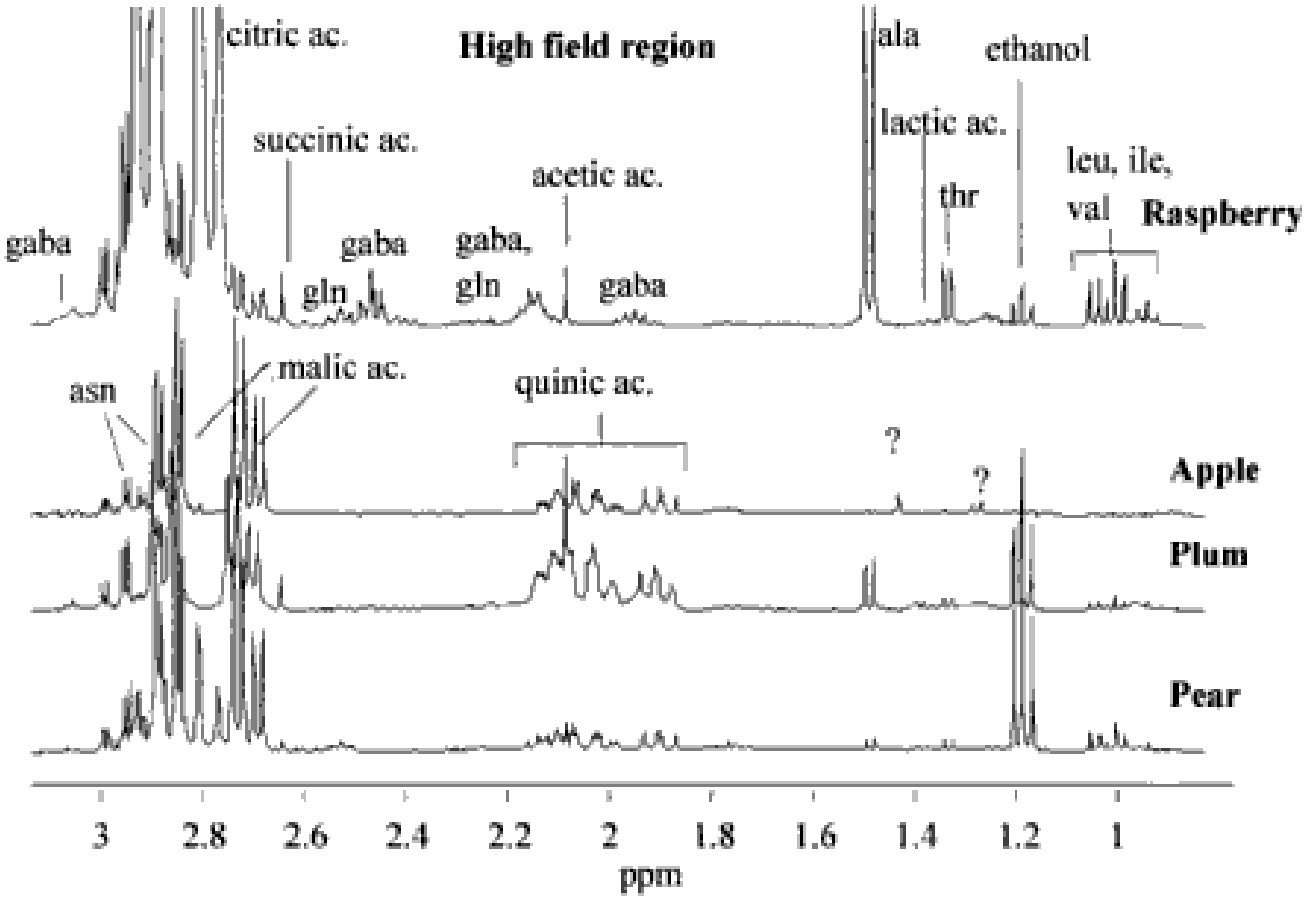

Fig. 6.2 400 MHz ^{1}H NMR spectra of typical raspberry, apple, pear and plum juices: high field region. Key to assignments: leu, leucine; ile, isoleucine; val, valine; thr, threonine; ac., acid; ala, alanine; gaba, γ-amino-butyric acid; gln, glutamine; asn, asparagine.

SUCCO ARANCIA

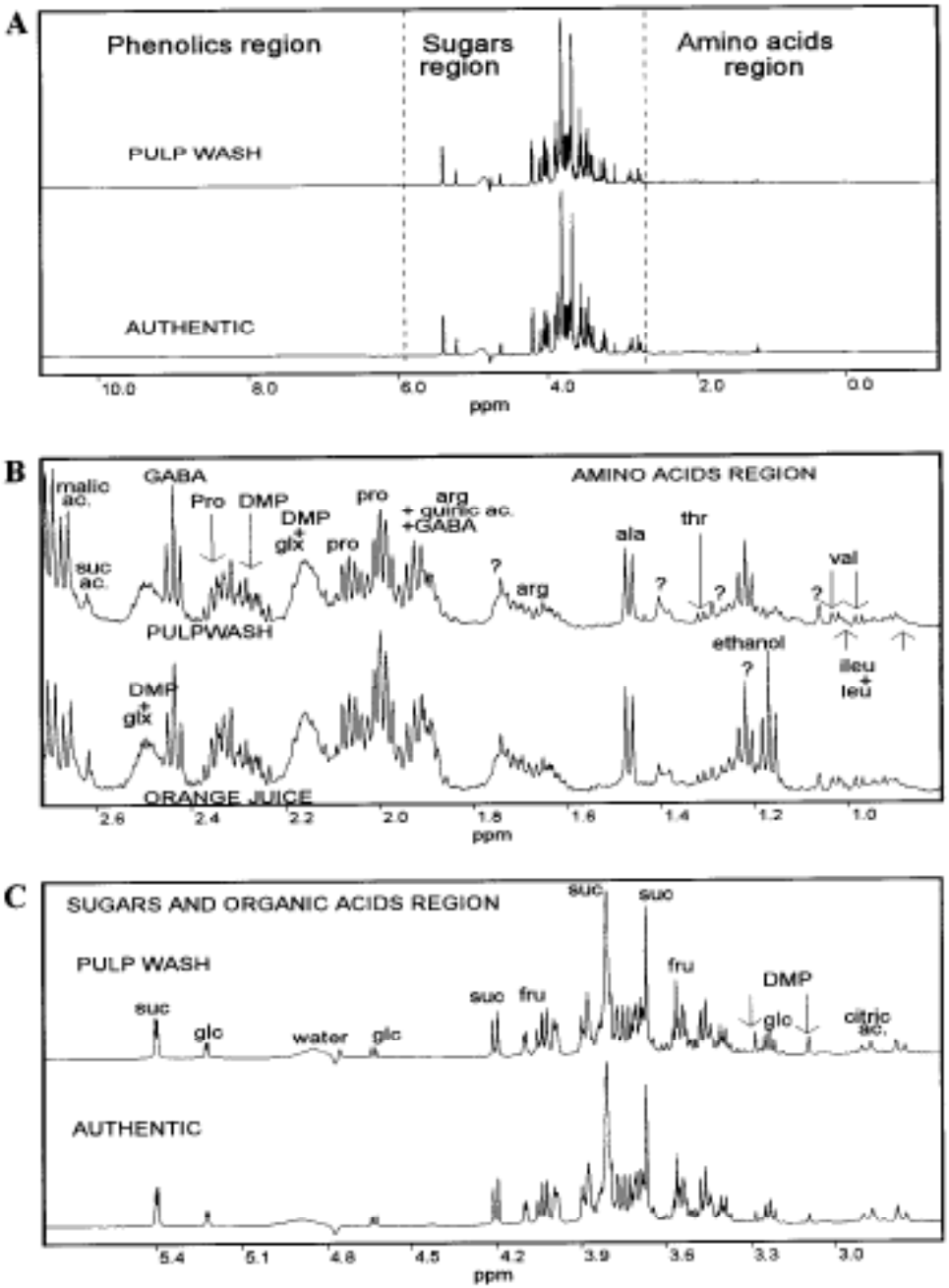

Figure 1. (A) 500 MHz ^{1}H NMR spectra of typical orange juice and pulp wash samples (overall view); (B) expanded view, high-field region (key: suc. ac., succinic acid; GABA, γ-aminobutyric acid; glx, glutamine/glutamic acid; DMP, dimethylproline); (C) midfield region (key: suc, sucrose; glc, glucose; fru, fructose).

OLII

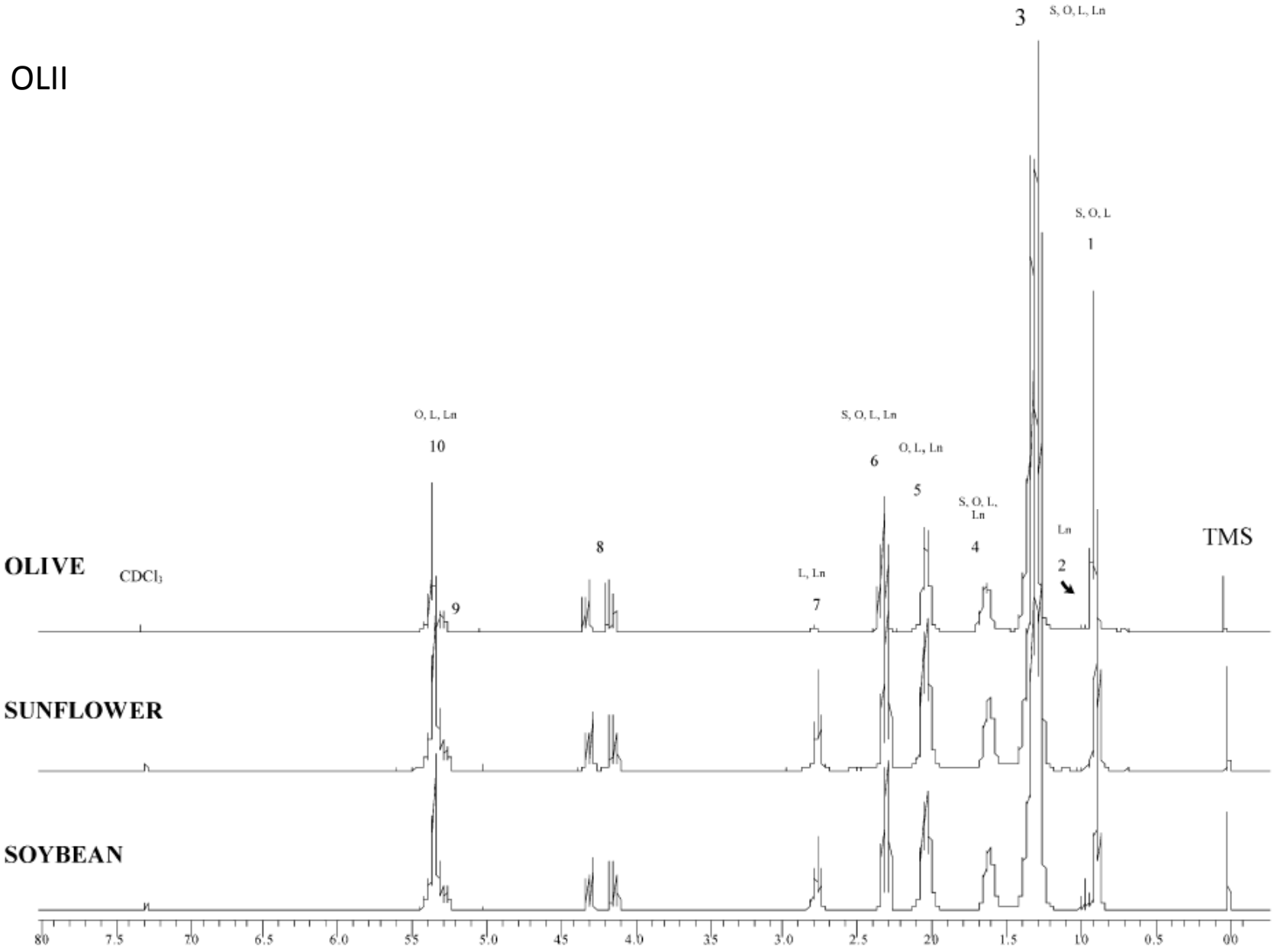

Fig. 1. ^{1}H NMR spectra of olive, sunflower and soybean oils. S, O, L and Ln refer to saturated, oleic, linoleic and linolenic acyl groups respectively. Signal numbering corresponds with that in Table 1.

OLII

Table 1. Chemical shift assignments of the ^{1}H NMR signals of the main components of edible oils and fats

Signal	Chemical shift (ppm)	Functional group	Intensity[a]	Authors
1	0.90–0.80	–C**H**$_3$ (acyl group)	m	Segre and Mannina (1997)
1.a	0.823	saturated and oleic (or ω-9)		
1.b	0.839	linoleic (or ω-6)		
2	1.00–0.90	–C**H**$_3$ (acyl group)	v	Segre and Mannina (1997)
2.a	0.925	linolenic (or ω-3)		
3	1.40–1.15	–(C**H**$_2$)$_n$– (acyl group)	l	Segre and Mannina (1997)
3.a	1.194	saturated		
3.b	1.230	oleic		
3.c	1.280	linoleic and linolenic		
4	1.70–1.50	–OCO–CH$_2$–C**H**$_2$– (acyl group)	m	Segre and Mannina (1997)
4.a	1.553	saturated		
4.b	1.557	oleic		
4.c	1.567	linoleic and linolenic		
5	2.10–1.90	–C**H**$_2$–CH=CH– (acyl groups)	m	Segre and Mannina (1997)
5.a	1.948	oleic		
5.b	1.996	linoleic		
5.c	1994 and 2.030	linolenic		
6	2.35–2.20	–OCO–C**H**$_2$– (acyl group)	m	Segre and Mannina (1997)
6.a	2.219	saturated		
6.b	2.226	oleic		
6.c	2.238	linoleic and linolenic		
—	2.38[b]	–OCO–C**H**$_2$–C**H**$_2$– (docosahexaenoic acyl groups)	v	Aursand *et al.* (1993)
7	2.80–2.70	=HC–C**H**$_2$–CH= (acyl groups)	v	Segre and Mannina (1997)
7.a	2.718	linoleic		
7.b	2.754	linolenic		
8	4.32–4.10	–C**H**$_2$OCOR (glyceryl group)	m	Segre and Mannina (1997)
9	5.26–5.20	>C**H**OCOR (glyceryl group)	s	Segre and Mannina (1997)
10	5.40–5.26	–C**H**=C**H**– (acyl group)	m	Segre and Mannina (1997)

[a] l, large; m, medium: s, small; v, variable.
[b] Signal only present in fish oils.