

CBPS 1483577 Supplemental Material

Suppl. Table 1. Major components of essential oils of feed additive HRB1, identified by GC/MS

Yield rate of extraction (% of dry material)		0.33
Compound (% of essential oil)		
1	Copaene	1.06
2	Camphor	5.12
3	β -Caryophyllene	14.42
4	Menthol	9.81
5	α -Caryophyllene	2.01
6	Azulene, 1,2,3,4,5,6,7,8-octahydro-1,4-dimethyl-7-(1-methylethenyl)-, [1S-(1.alpha.,4.alpha.,7.alpha.)]-	1.85
7	Ylangene	1.01
8	Isobornyl formate	1.58
9	β -Eudesmene	4.99
10	α -Bulnesene	4.69
11	Germacrene D	1.01
12	Caryophyllene oxide	7.26
13	Globulol	1.13
14	Eugenol acetate	5.15
15	Thymol	4.14
16	Viridiflorol	1.25
17	Cinnamyl tiglate	1.09
18	Aromadendrene oxide-(2)	0.99
19	Isoaromadendrene epoxide	1.78
20	Aromadendrene oxide-(1)	1.94
21	n-Hexadecanoic acid	5.06

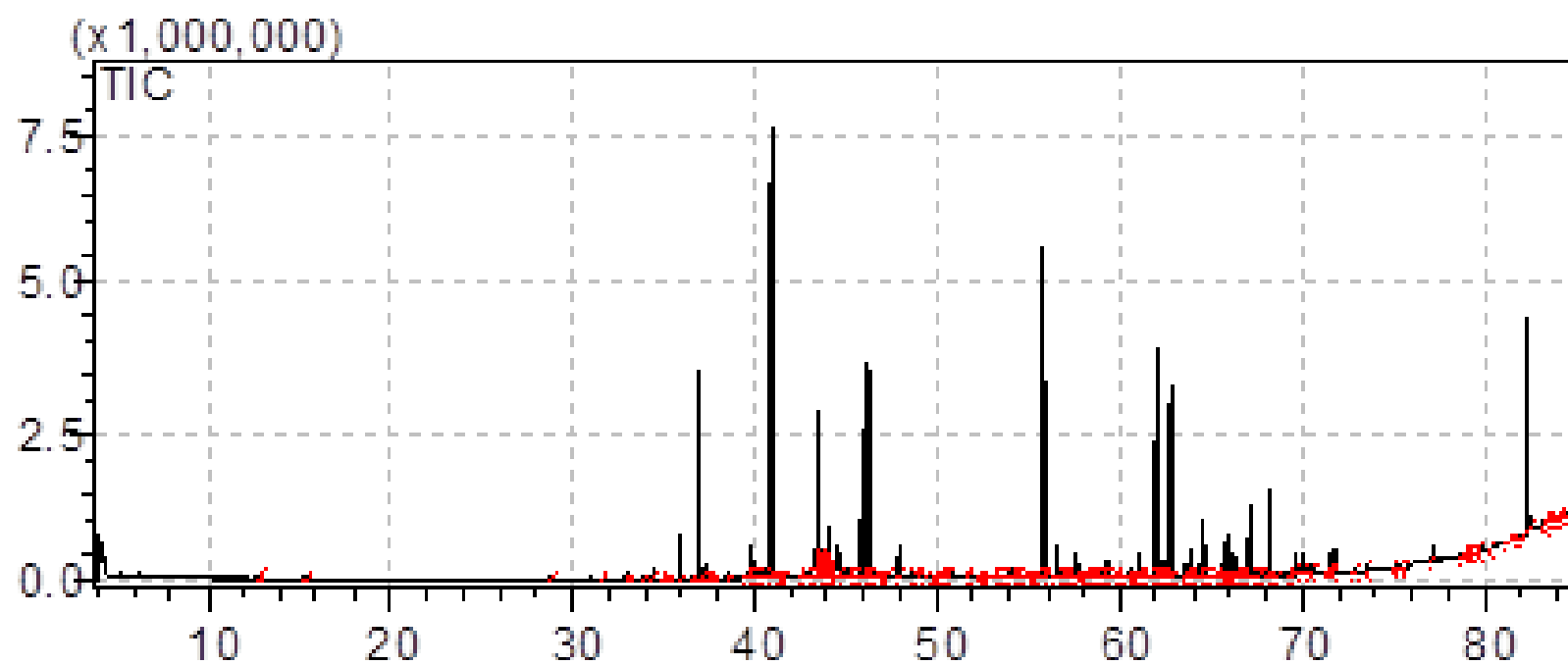
Suppl. Table 2. Major components of essential oils of feed additive HRB2, identified by GC/MS

Yield rate of extraction (% of dry material)		0.22
Compound (% of essential oil)		
1	Copaene	1.89
2	Linalool	1.34
3	β -Caryophyllene	8.87
4	Menthol	1.46
5	Chavicol methyl ether	0.99
6	Borneol	2.74
7	β -Eudesmene	7.15
8	α -Bulnesene	7.35
9	α -Himachalene	1.05
10	Germacrene D	1.00
11	Dihydropseudoionone	0.99
12	Caryophyllene oxide	2.31
13	Nonanoic acid, 9-oxo-, methyl ester	1.89
14	Hexahydrofarnesyl acetone	3.18
15	Eugenol	3.49
16	Nonanoic acid	2.00
17	Thymol	1.04
18	Carvacrol	1.43
19	Hexadecanoic acid, methyl ester	2.50
20	Isoaromadendrene epoxide	2.16
21	Aromadendrene oxide-(1)	1.91
22	Ledol	1.45
23	Dodecanoic acid	1.59
24	Tetradecanoic acid	1.39
25	Nonanedioic acid, dimethyl ester	2.09
26	n-Hexadecanoic acid	14.22

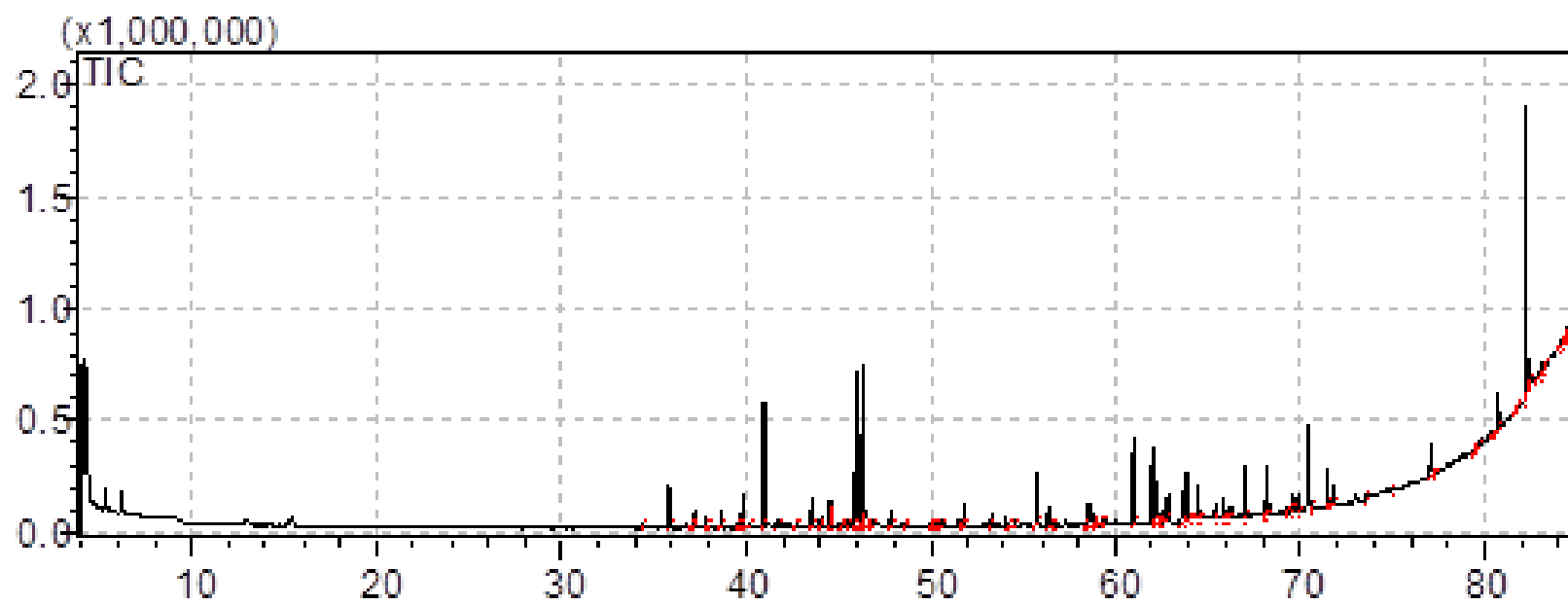
Suppl. Table 3. Major components of essential oils of feed additive HRB3, identified by GC/MS

Yield rate of extraction (% of dry material)		0.93
Compound (% of essential oil)		
1	Linalool	9.95
2	Menthyl acetate	1.02
3	Isopulegol	1.00
4	Menthol	69.58
5	Chavicol methyl ether	13.97

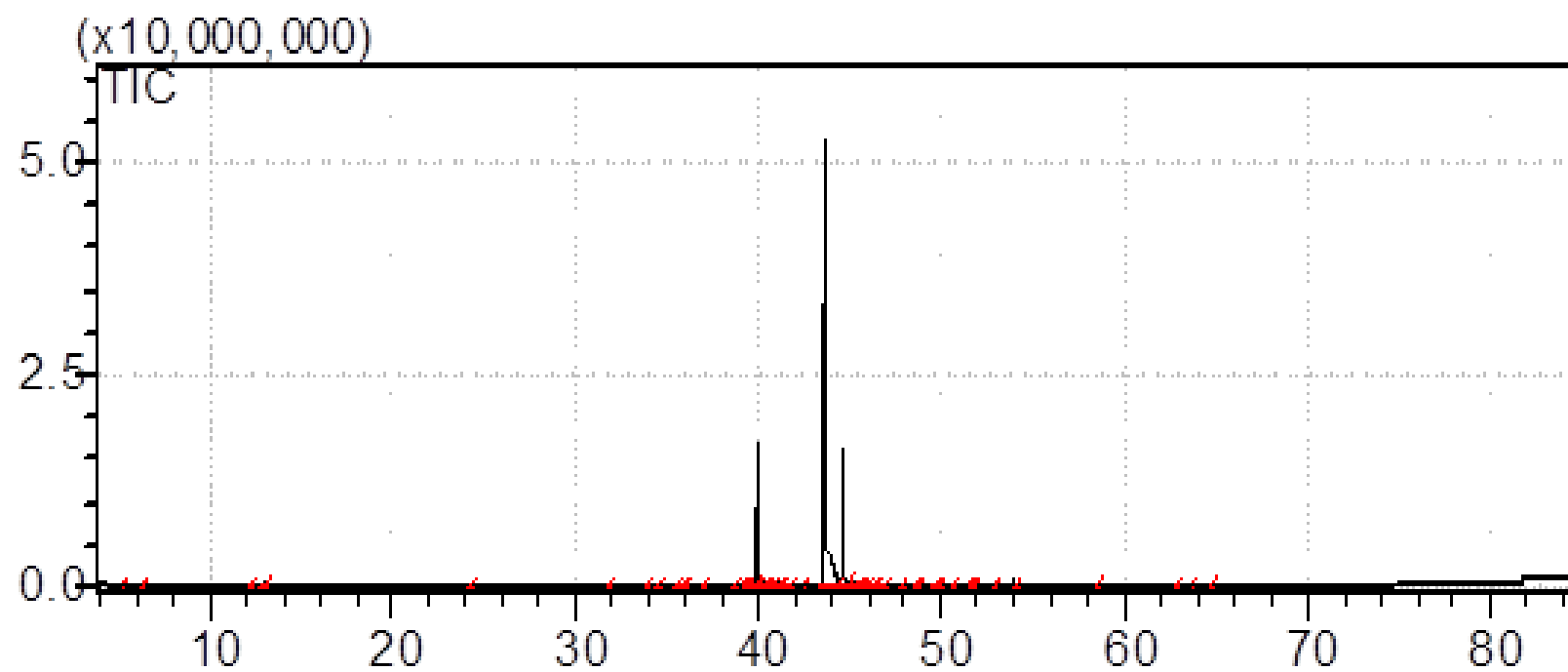
Suppl. Figure 1.Chromatograph of essential oils of feed additive HRB1, identified by GC/MS



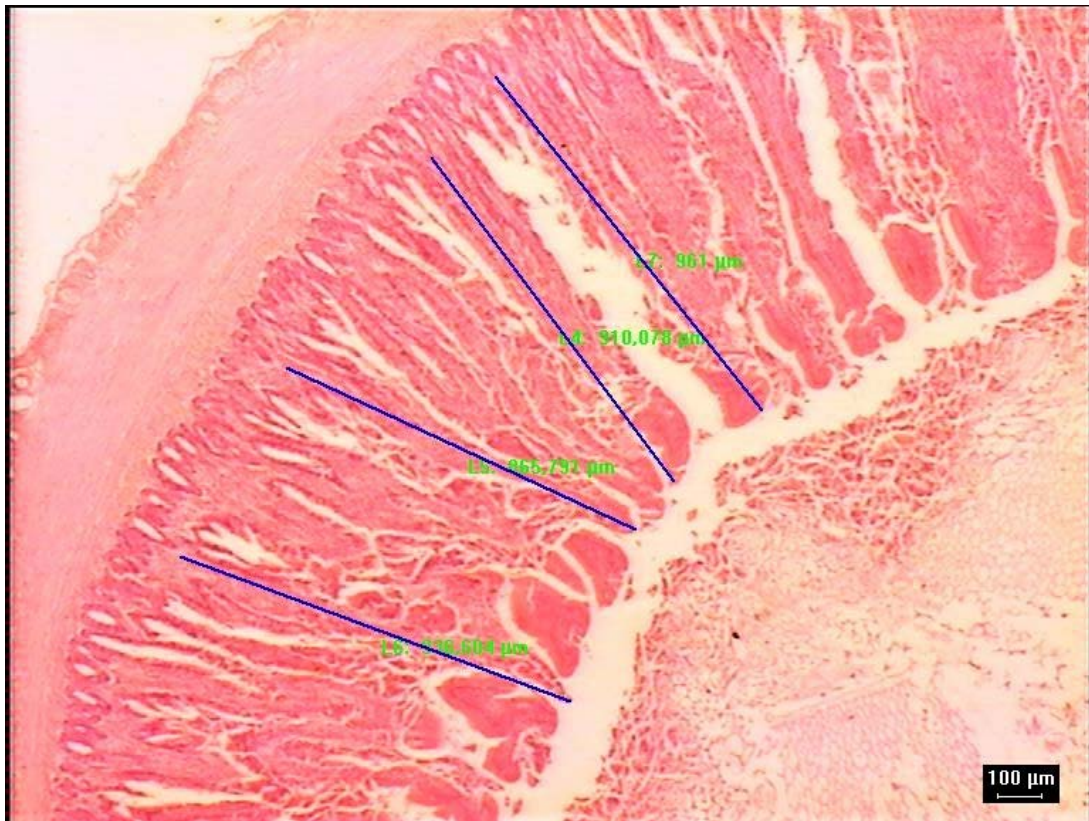
Suppl. Figure 2. Chromatograph of essential oils of feed additive HRB2, identified by GC/MS



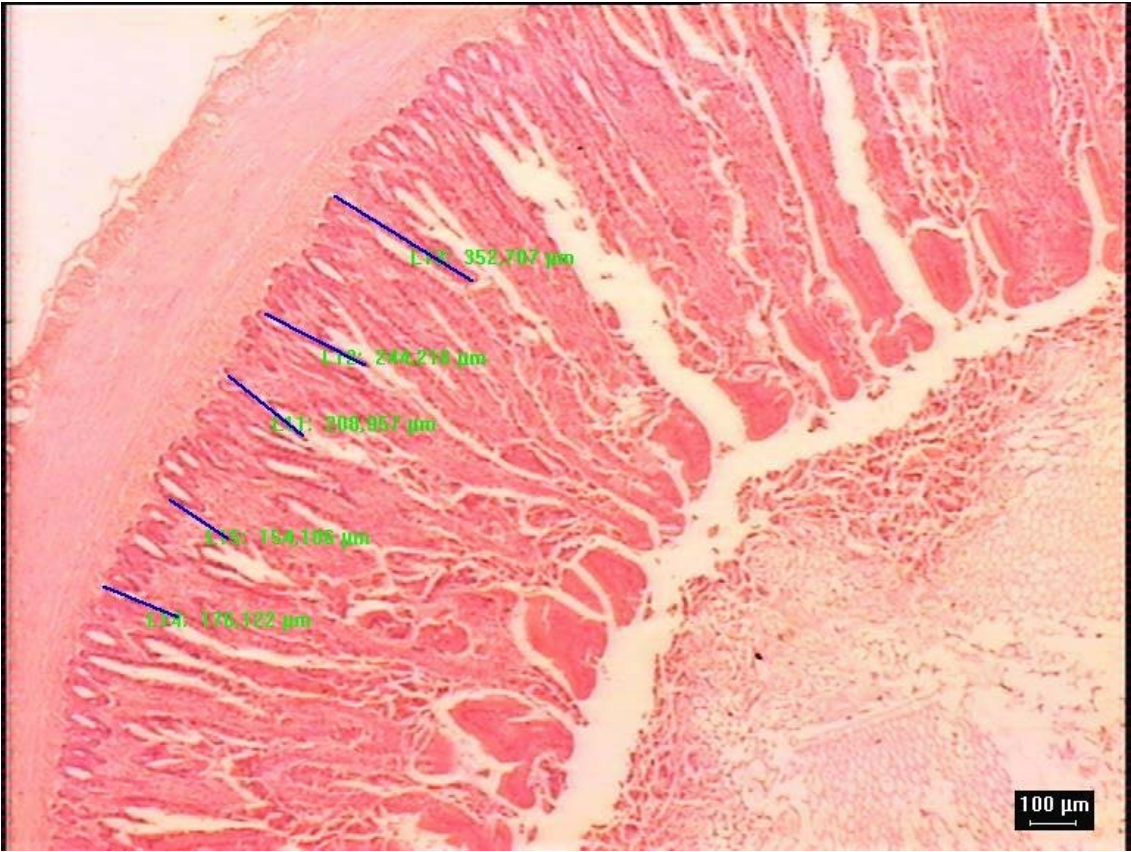
Suppl. Figure 3. Chromatograph of essential oils of feed additive HRB3, identified by GC/MS



Suppl. Figure 4. HRB1 group: Villous height determination in the jejunum of chicken



Suppl. Figure 5. HRB1 group: Crypt depth determination in the jejunum of chicken



Suppl. Figure 6. HRB3group: Goblet cell determination in the jejunum of chicken

