Supplementary material

Enhanced glucose uptake in human liver cells and inhibition of carbohydrate hydrolyzing enzymes by Nordic berry extracts

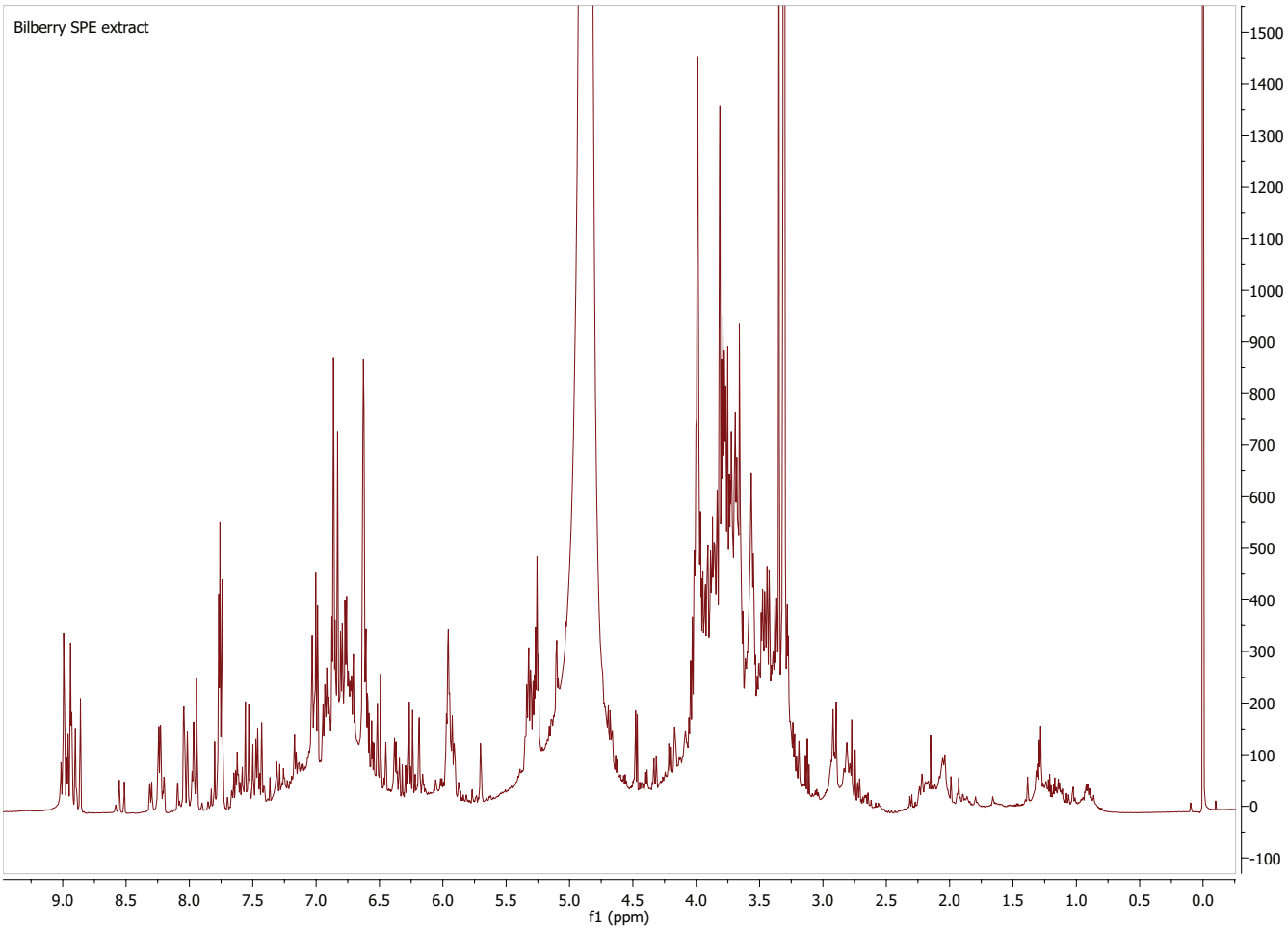
Giang Thanh Thi Ho[a], Thi Kim Yen Nguyen[a,b], Eili Tranheim Kase[b], Margey Tadesse[a], Hilde Barsett[a] and Helle Wangensteen[a*]

[a] Department of Pharmaceutical Chemistry, School of Pharmacy, University of Oslo, P. O. Box 1068 Blindern, 0316 Oslo, Norway

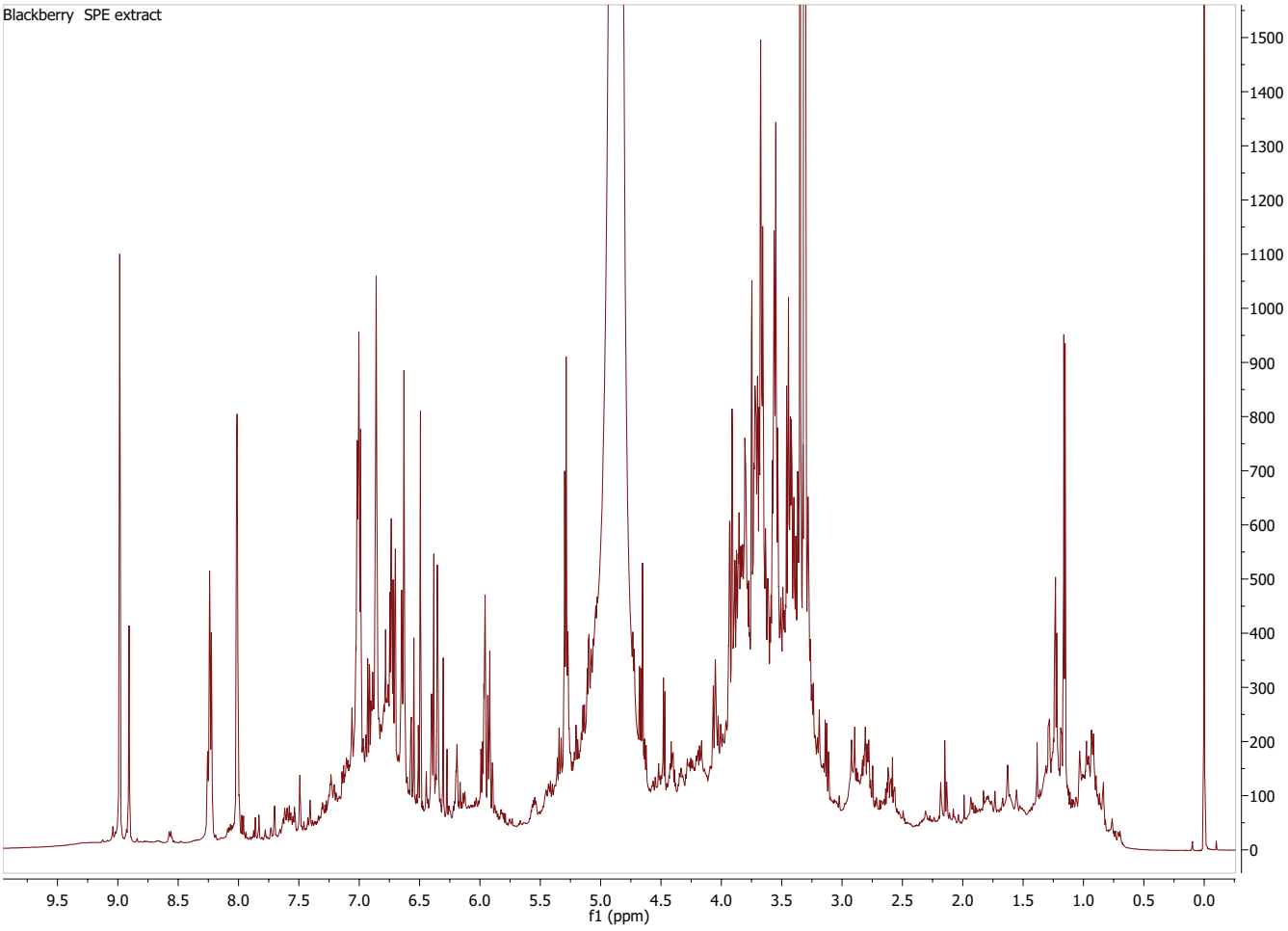
[b] Department of Pharmaceutical Biosciences, School of Pharmacy, University of Oslo, P. O. Box 1068 Blindern, 0316 Oslo, Norway

Supplementary material: ^{1}H NMR spectra of SPE berry extracts used in this study.

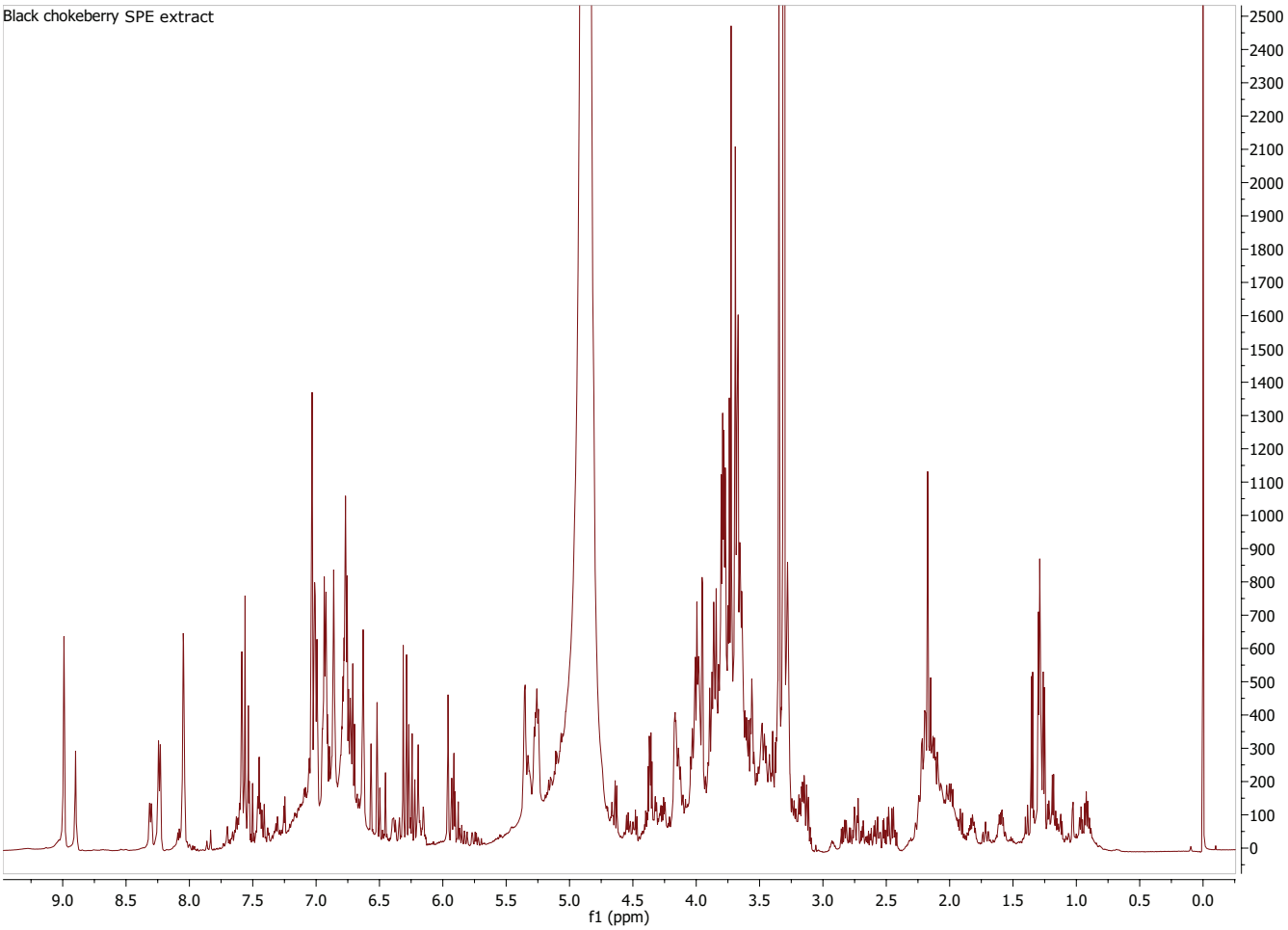
S1.


Bilberry SPE extract
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
-100
9.0
8.5
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
f1 (ppm)

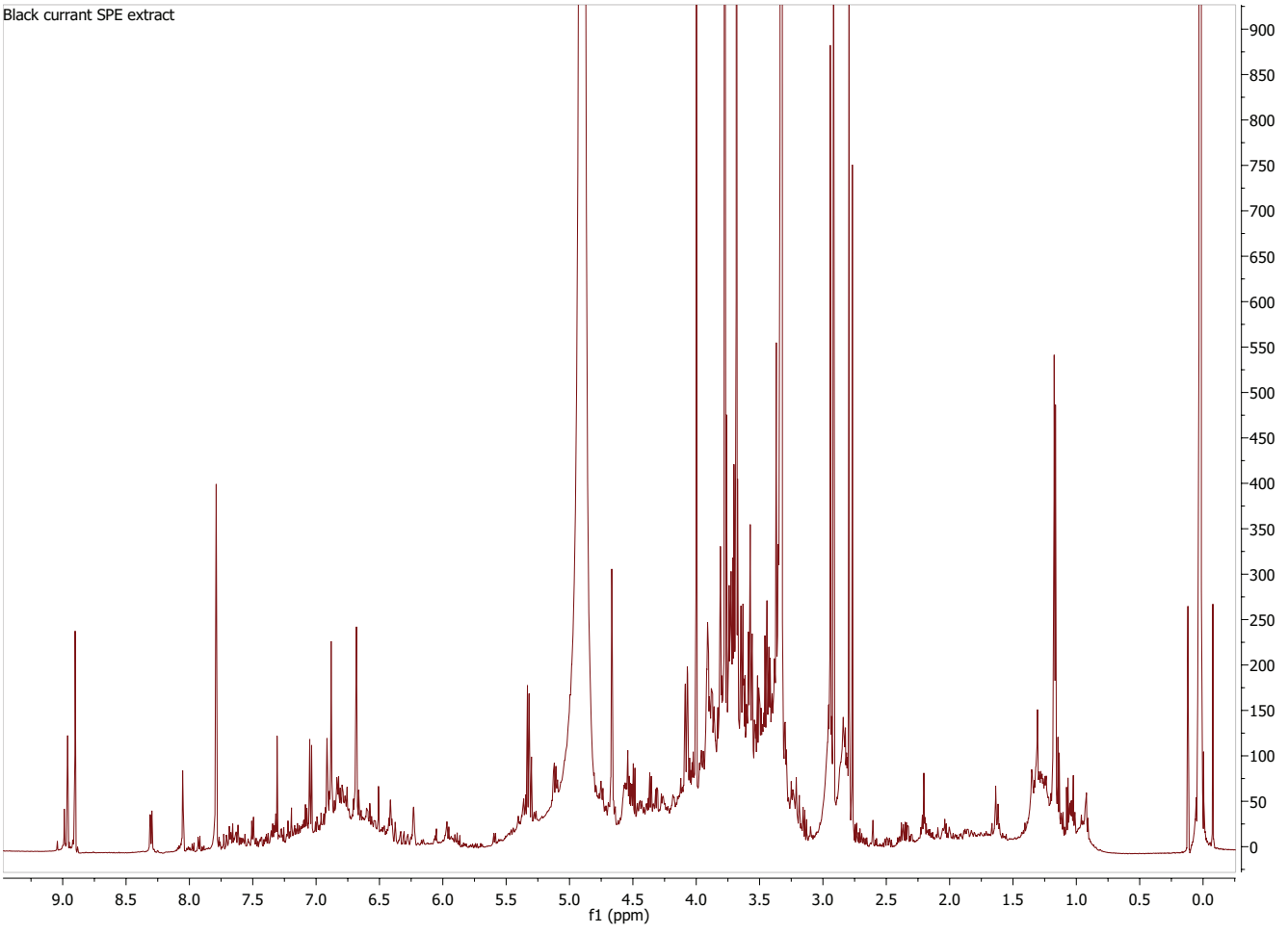
S2.


Blackberry SPE extract
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
9.5
9.0
8.5
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
f1 (ppm)

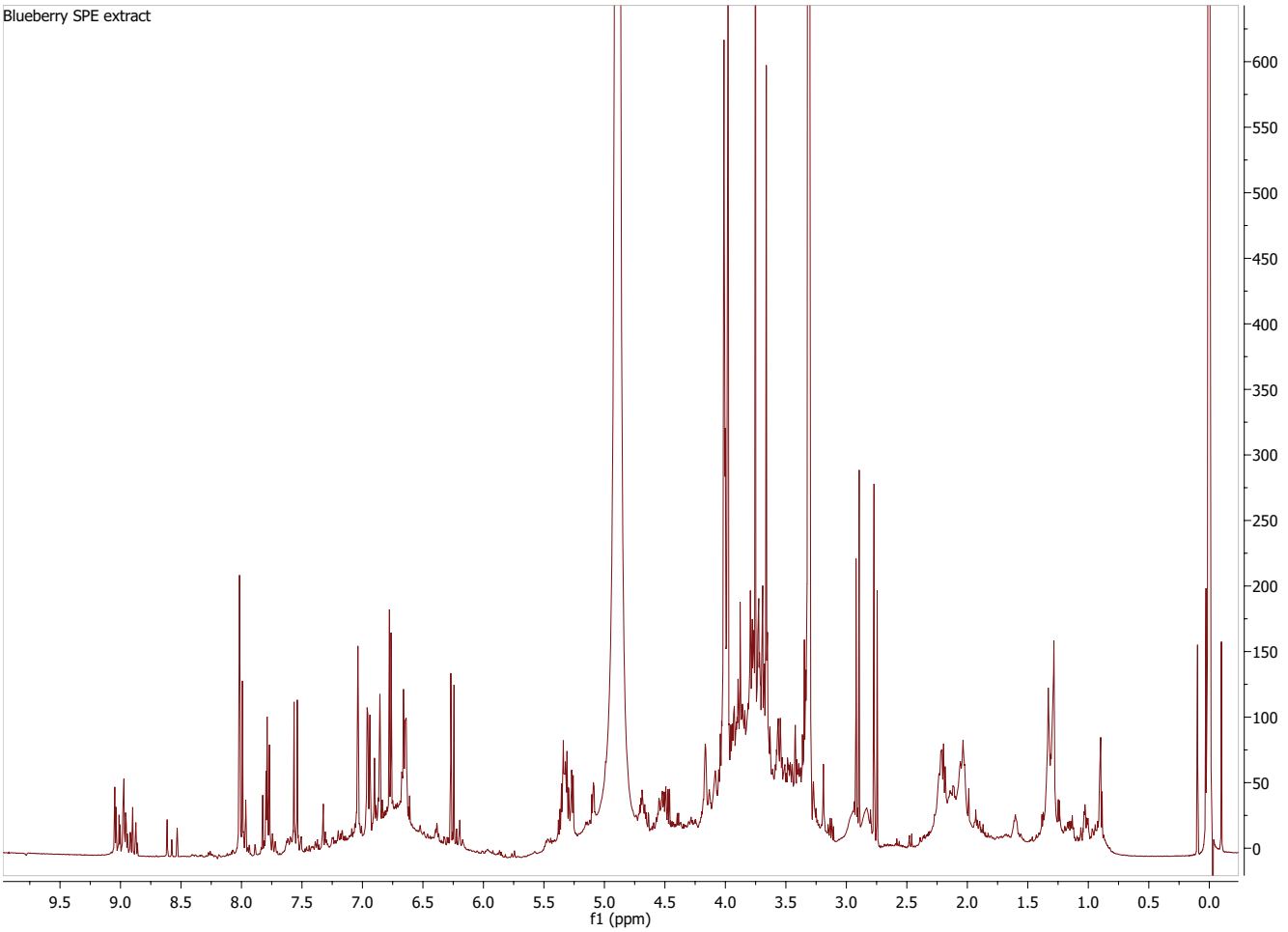
S3.


Black chokeberry SPE extract
f1 (ppm)

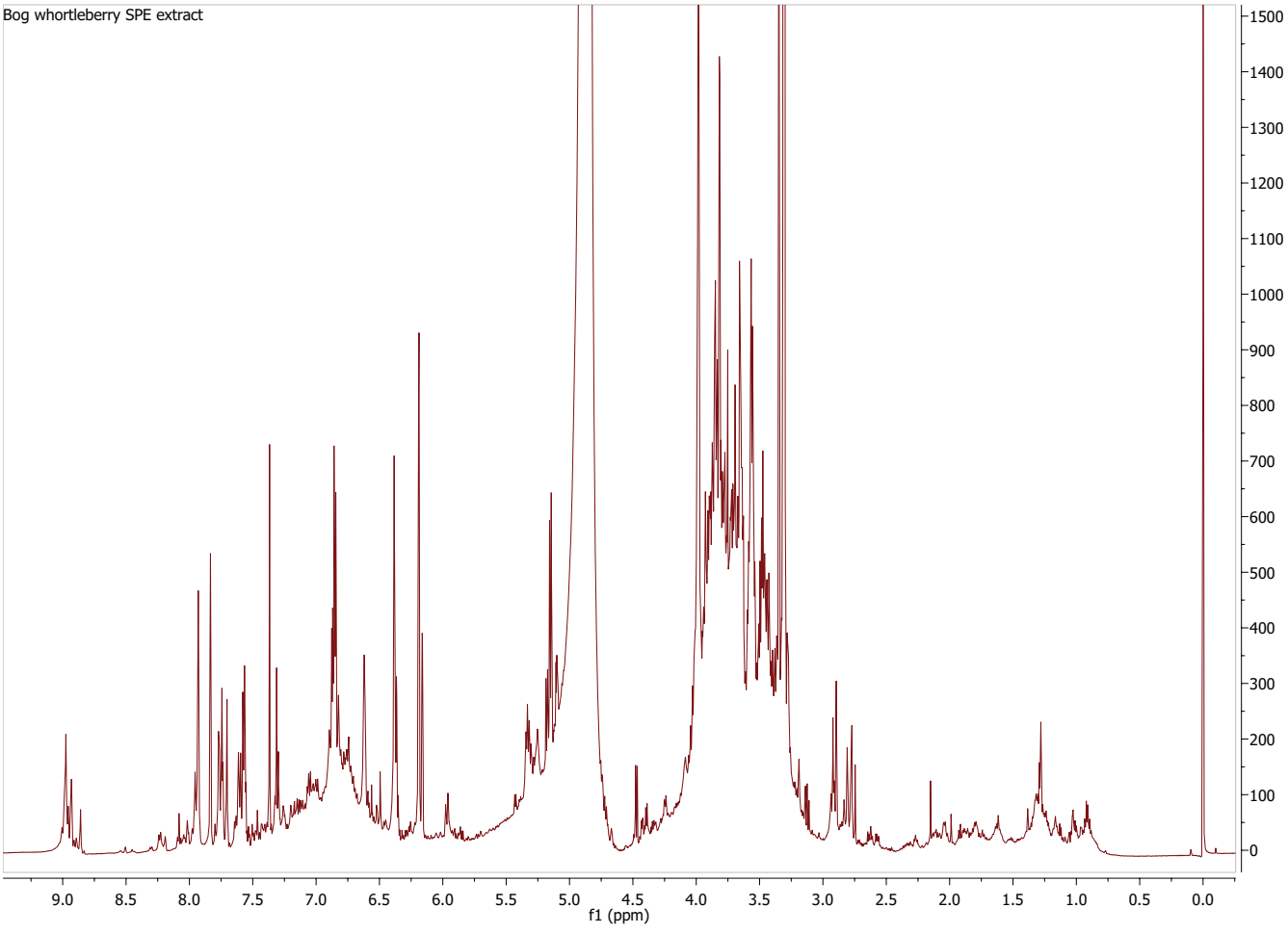
S4.


Black currant SPE extract
f1 (ppm)

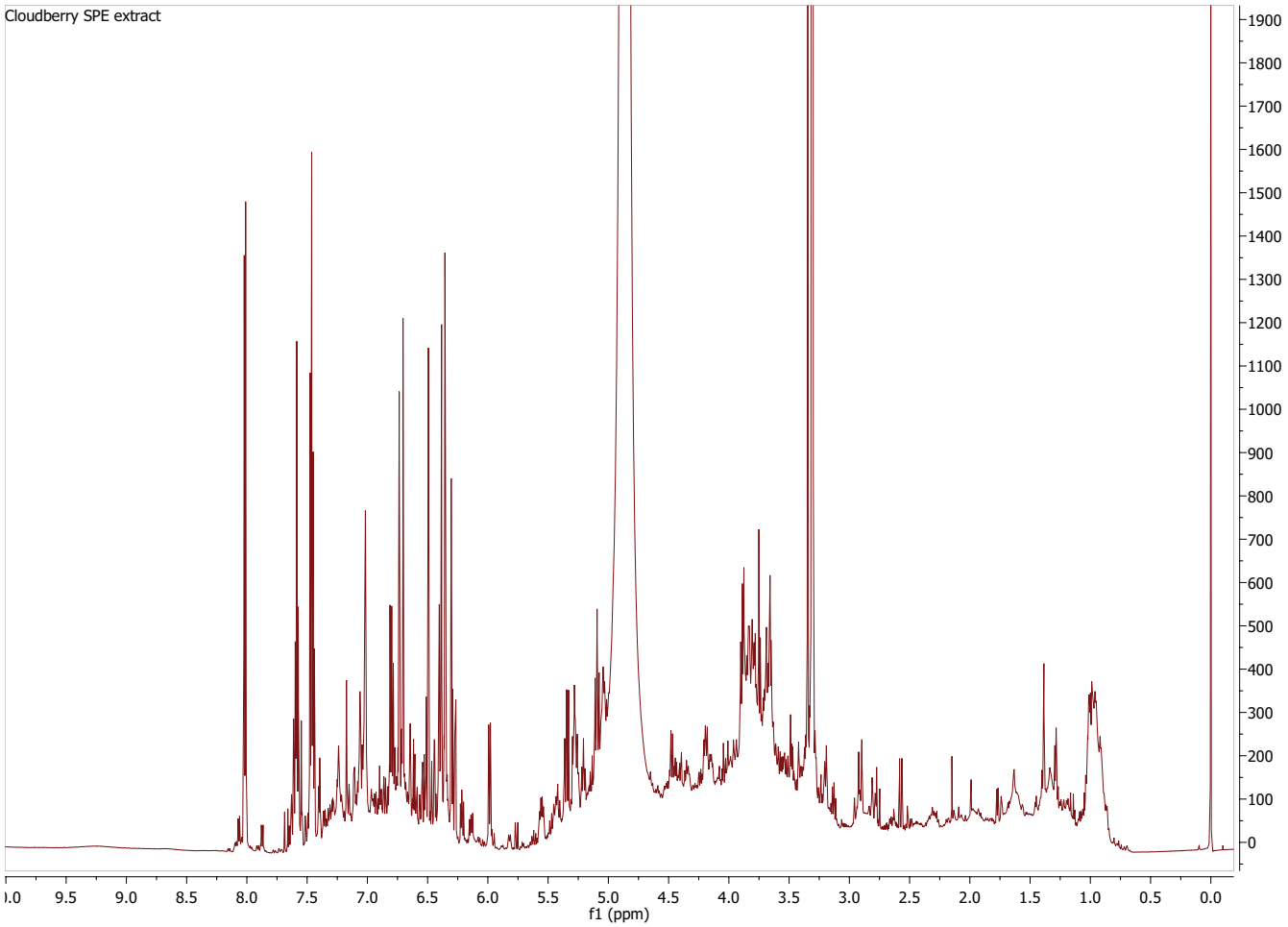
S5.


Blueberry SPE extract
600
550
500
450
400
350
300
250
200
150
100
50
0
9.5 9.0 8.5 8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0
f1 (ppm)

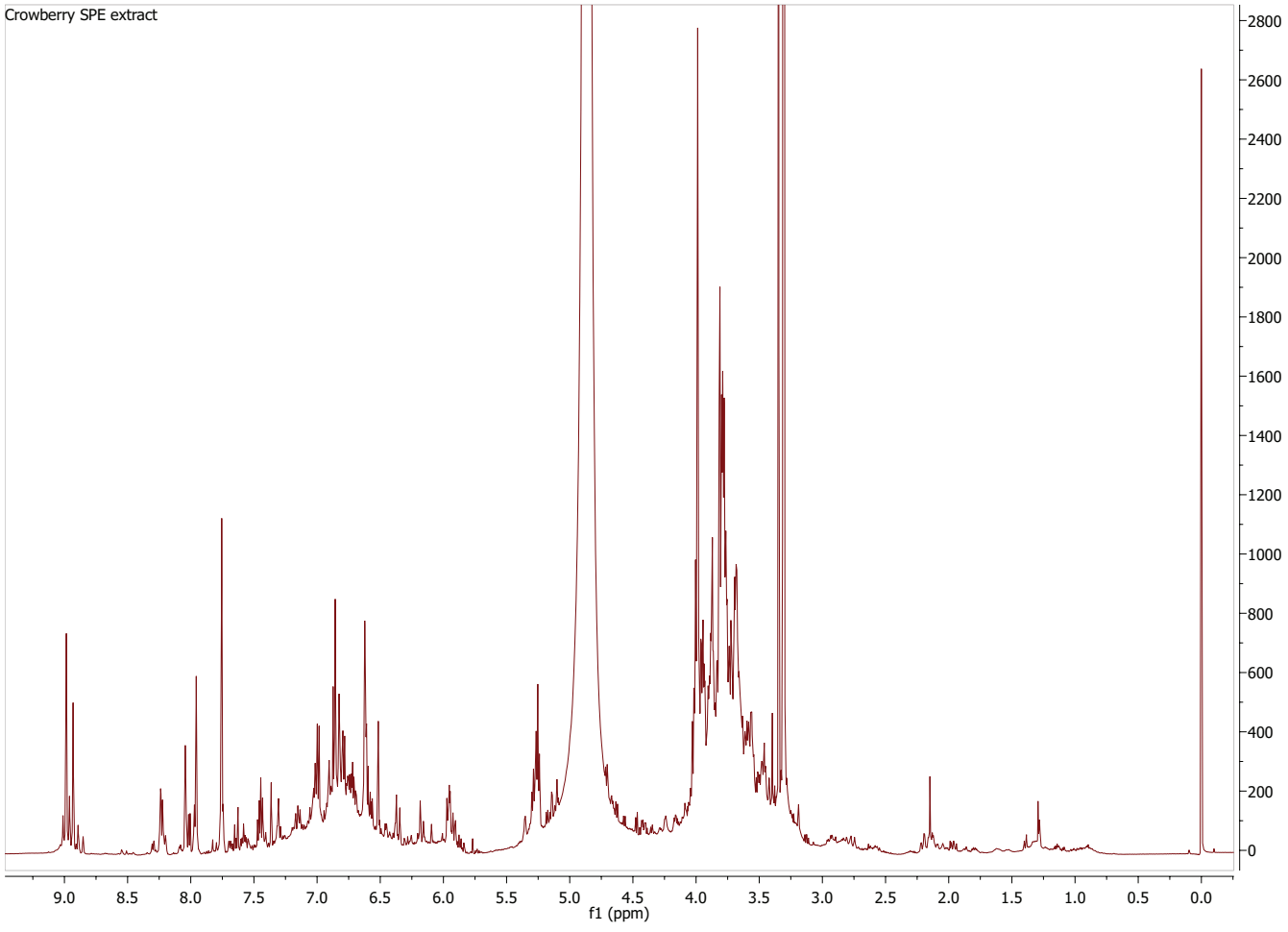
S6.


Bog whortleberry SPE extract
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
9.0 8.5 8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0
f1 (ppm)

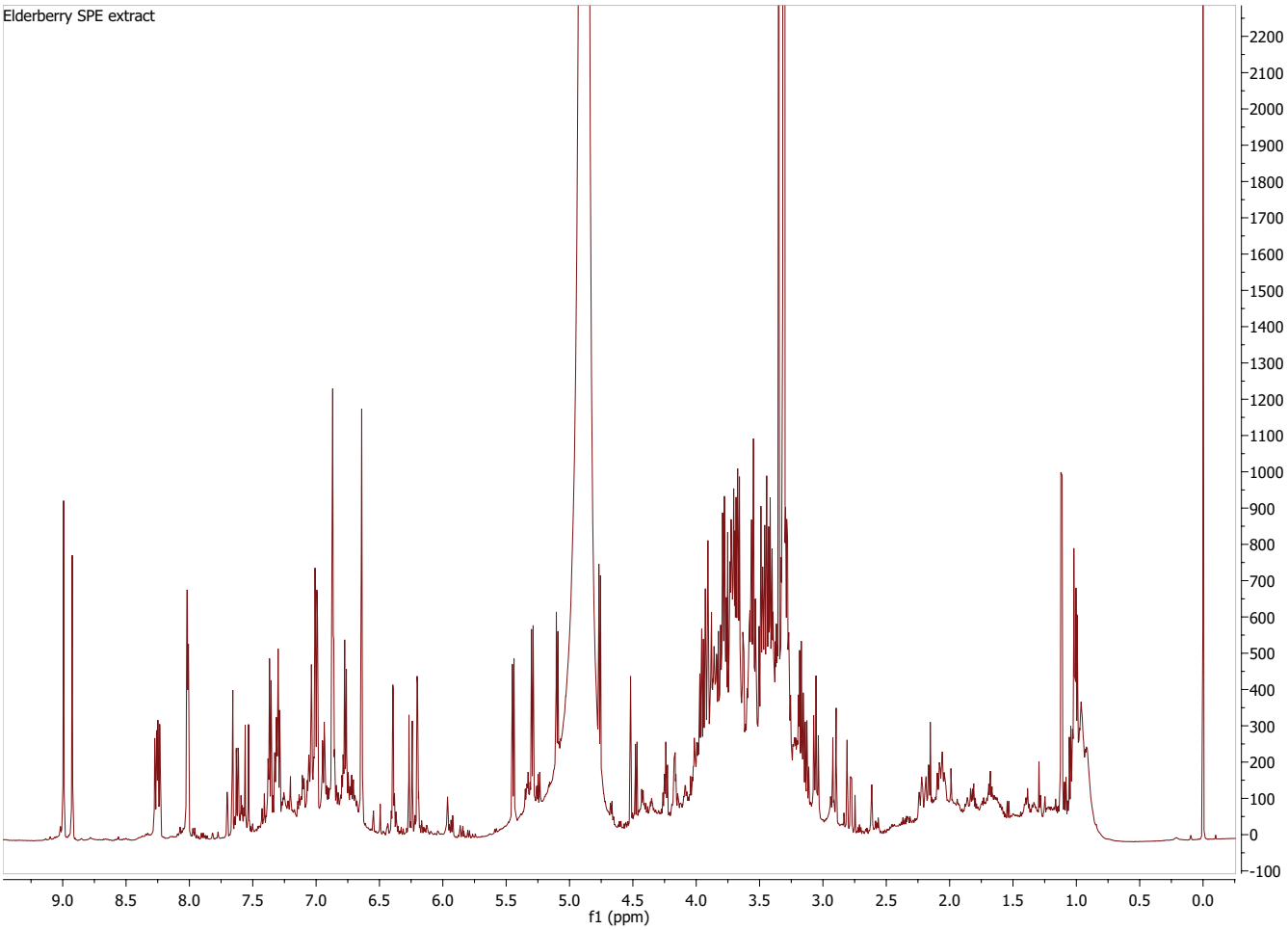
S7.



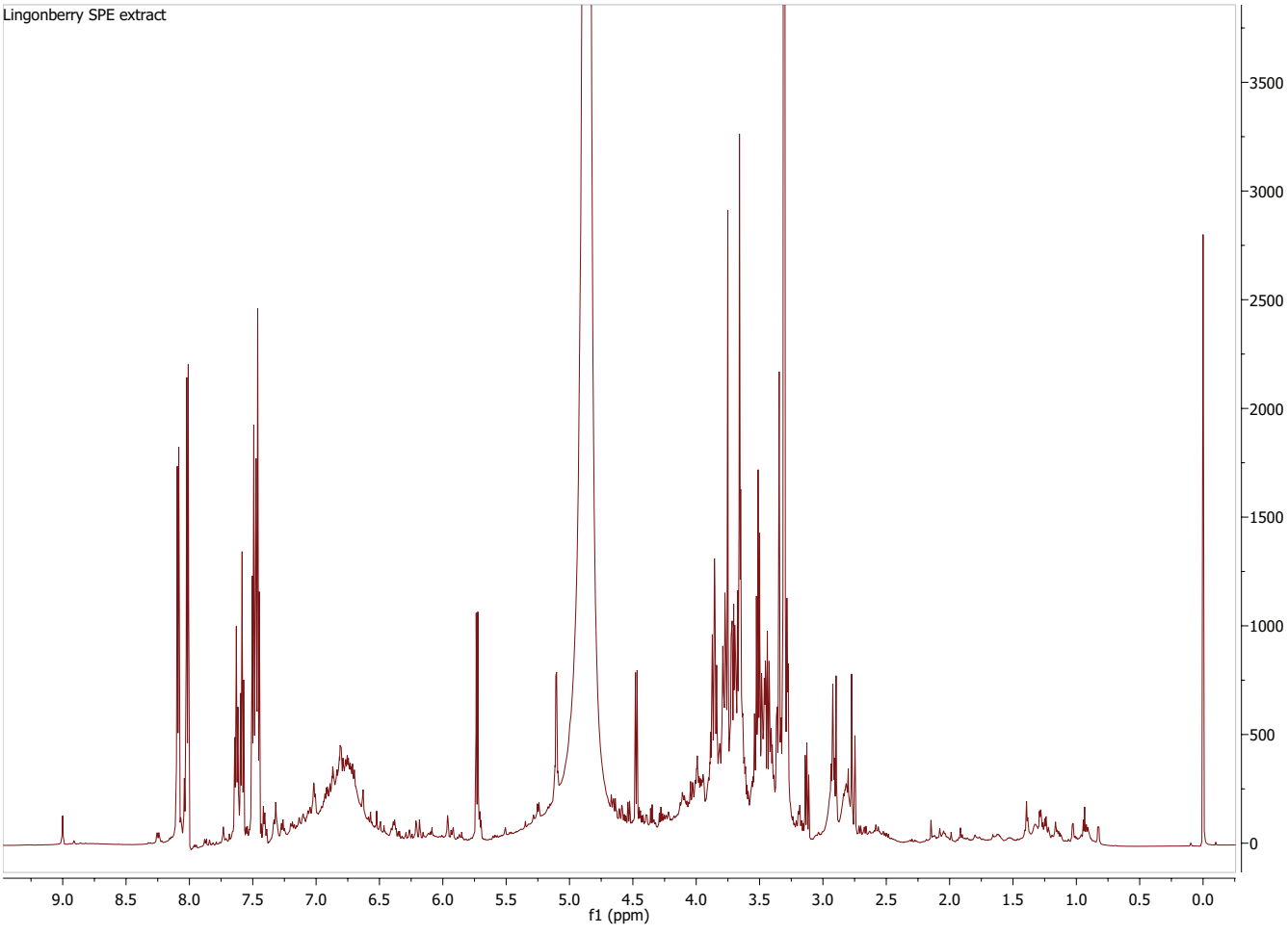
S8.



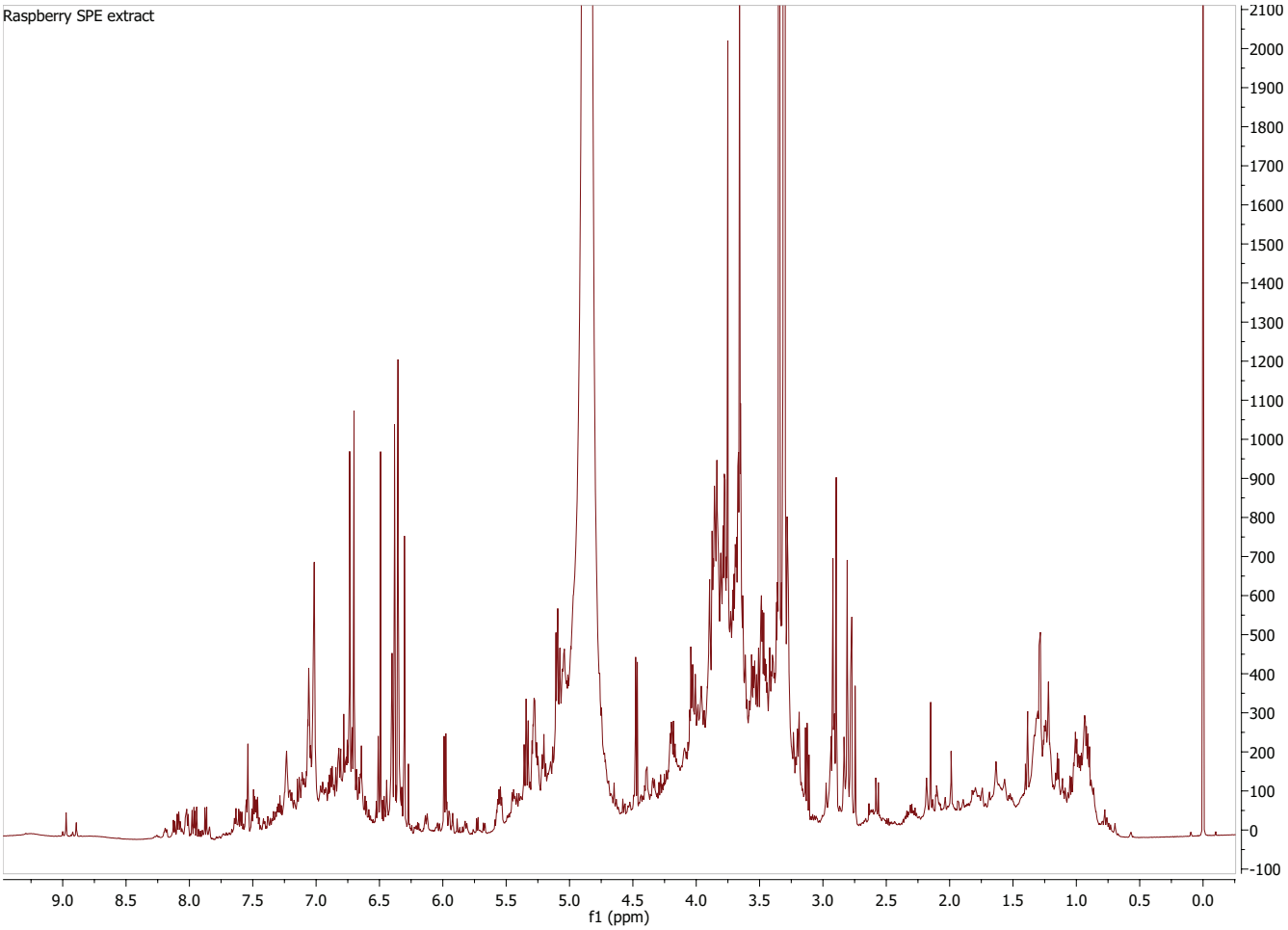
S9.


Elderberry SPE extract
f1 (ppm)

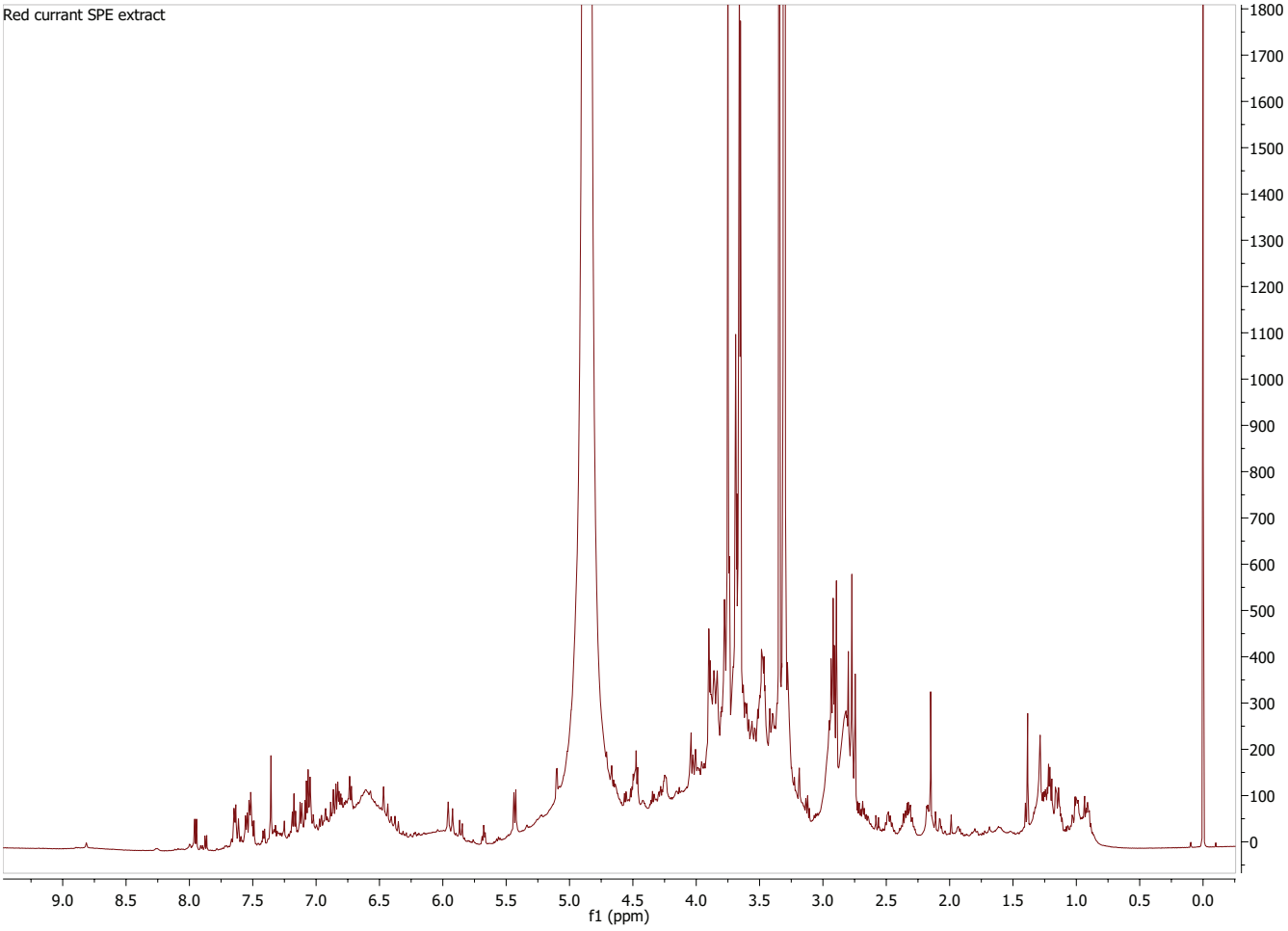
S10.


Lingonberry SPE extract
f1 (ppm)

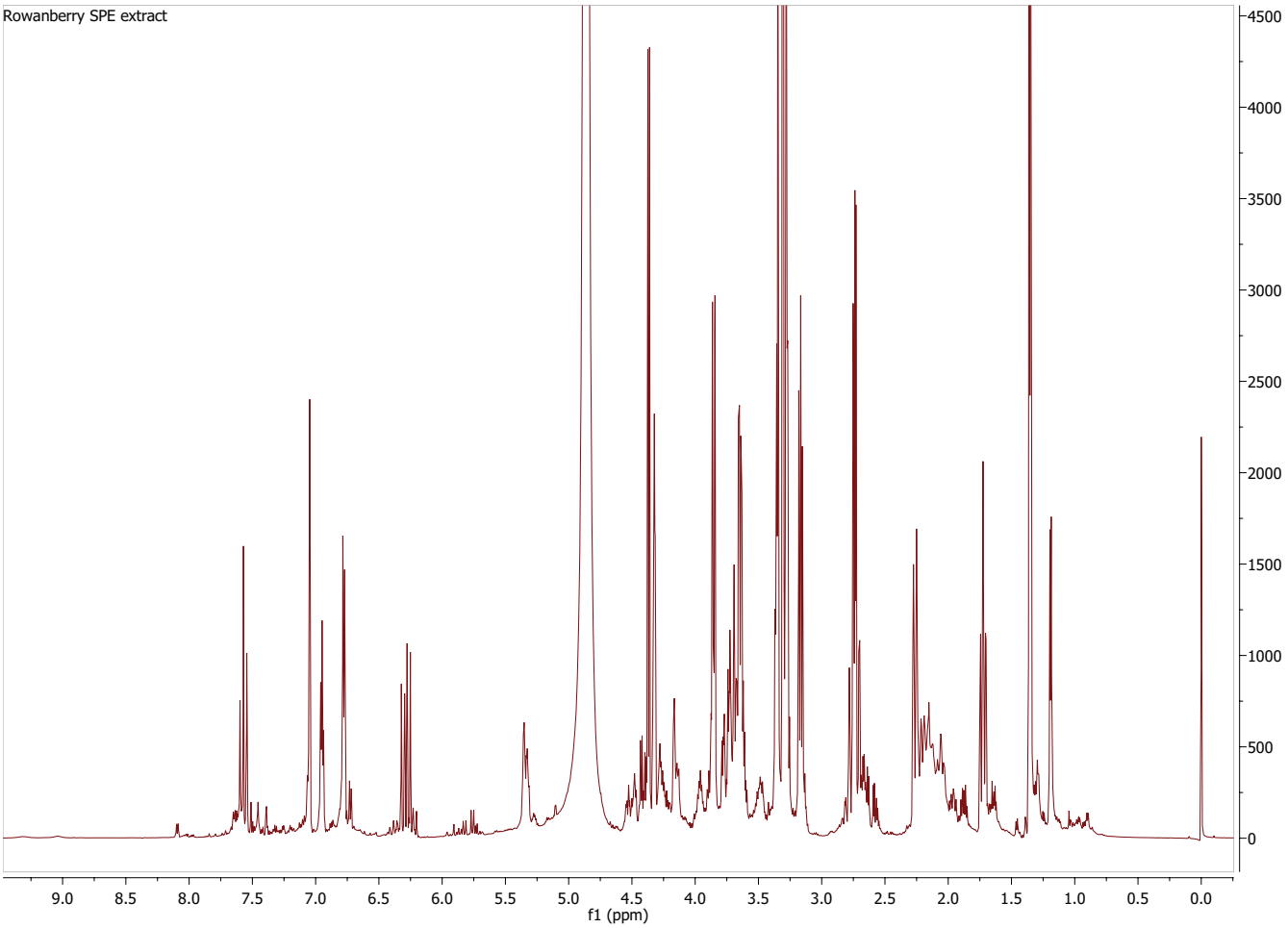
S11.



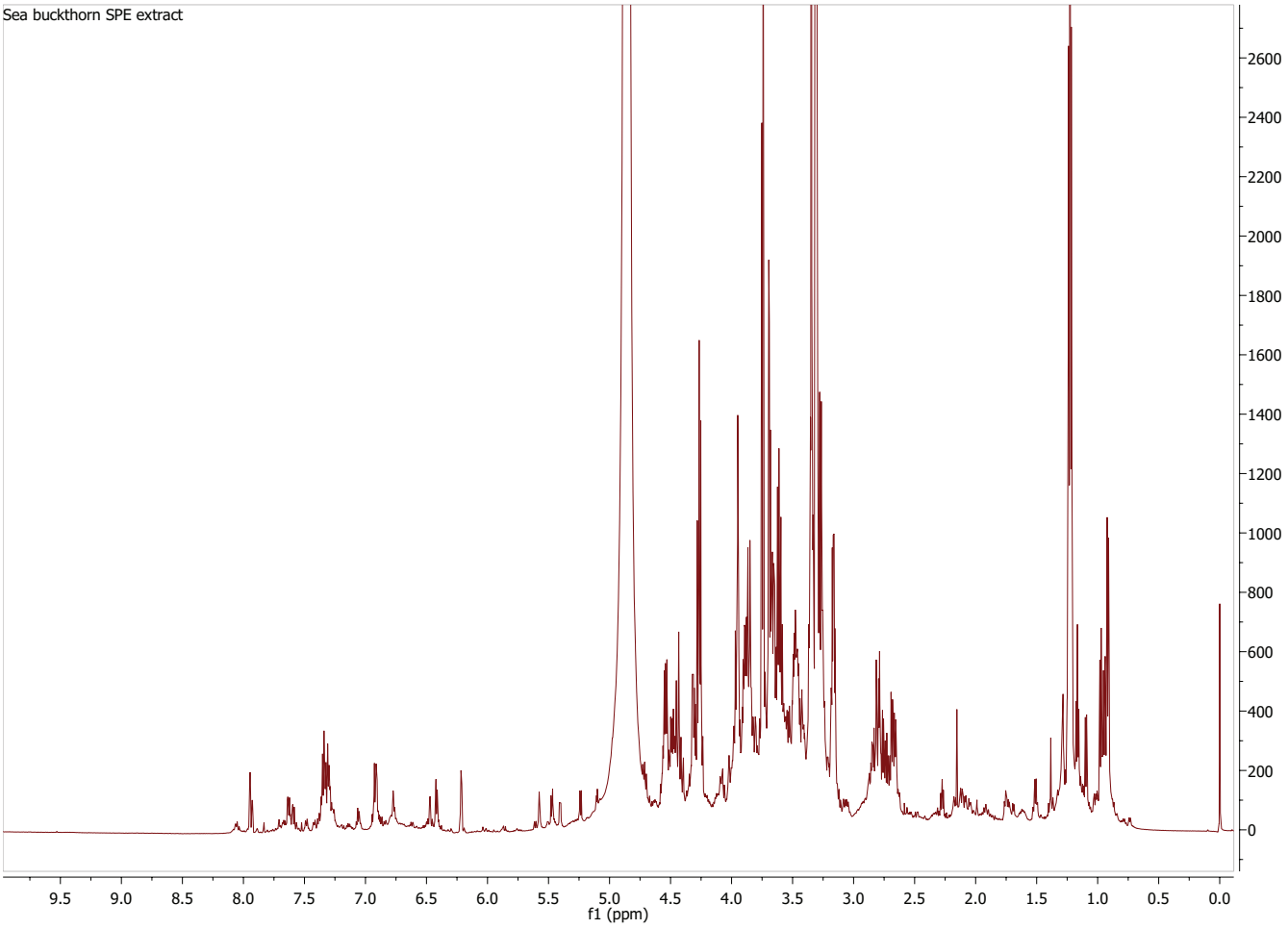
S12.



S13.


Rowanberry SPE extract
4500
4000
3500
3000
2500
2000
1500
1000
500
0
9.0 8.5 8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0
f1 (ppm)

S14.


Sea buckthorn SPE extract
2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
9.5 9.0 8.5 8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0
f1 (ppm)