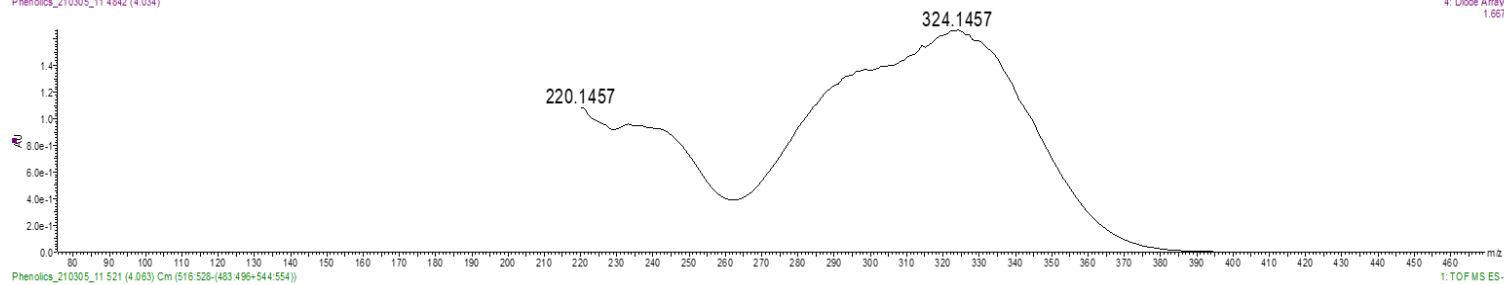
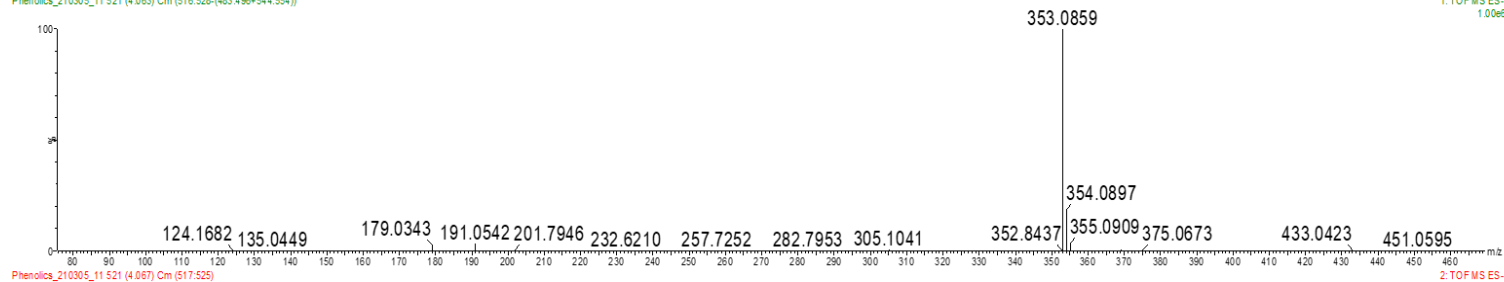


DS_TUT_SP_1

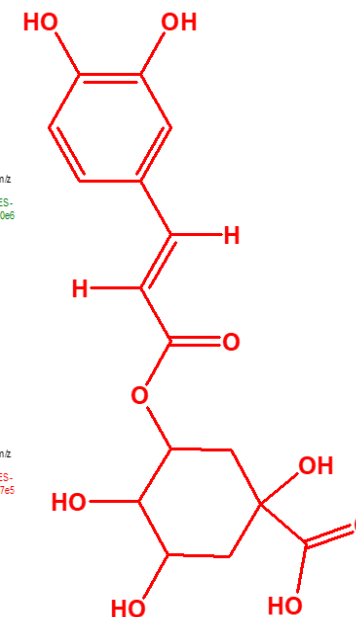
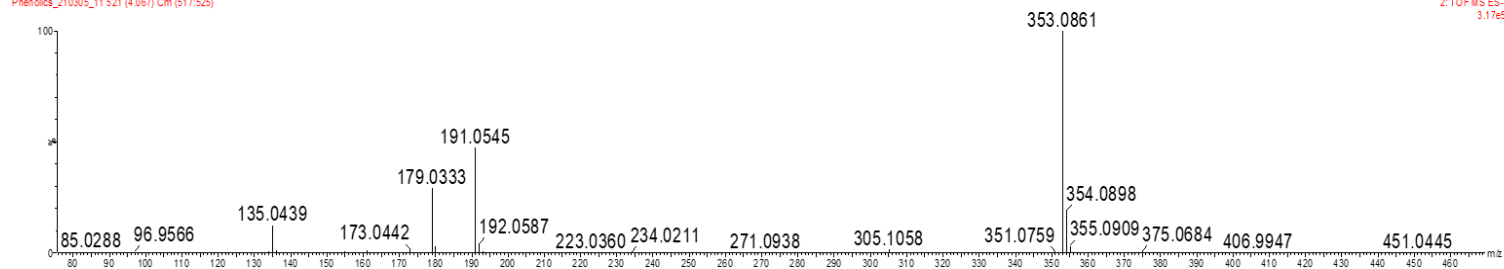
Phenolics_210305_11 4842 (4.034)



Phenolics_210305_11 521 (4.063) Cm (516.528-(483.496+544.554))



Phenolics_210305_11 521 (4.067) Cm (517.525)

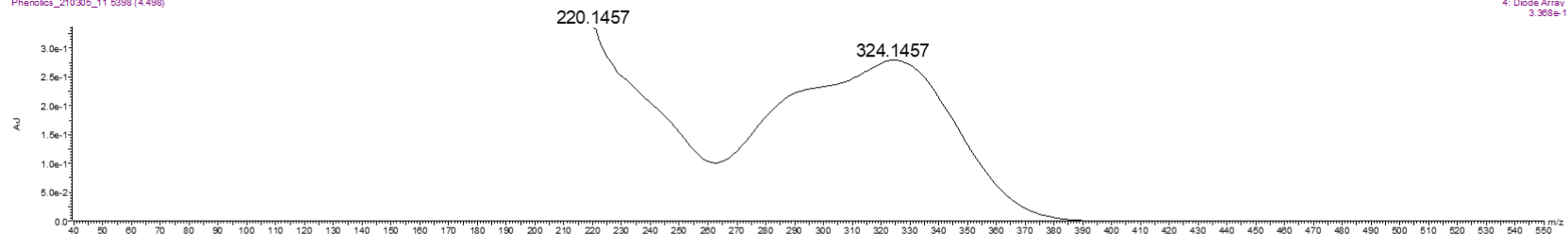


Supplementary (S) Figure 1A: UV absorption spectrum of neochlorogenic acid overlaid on the MS and MS/MS spectrum adjacent to the chemical structure (in red)

DS_TUT_SP_1

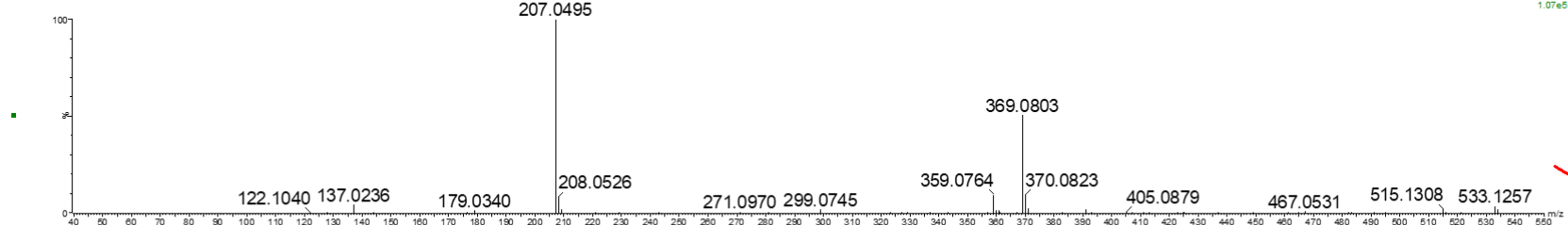
Phenolics_210305_11 5388 (4.488)

4: Diode Array
3.368e-1



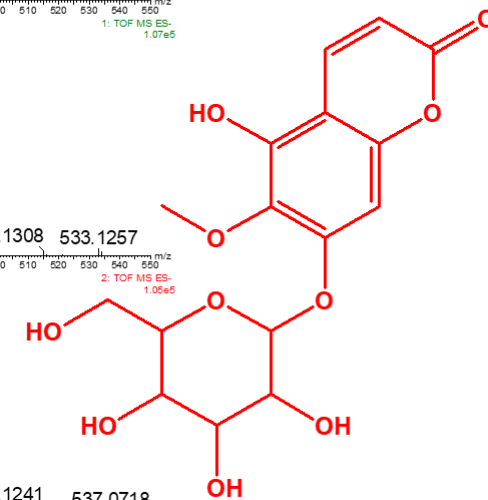
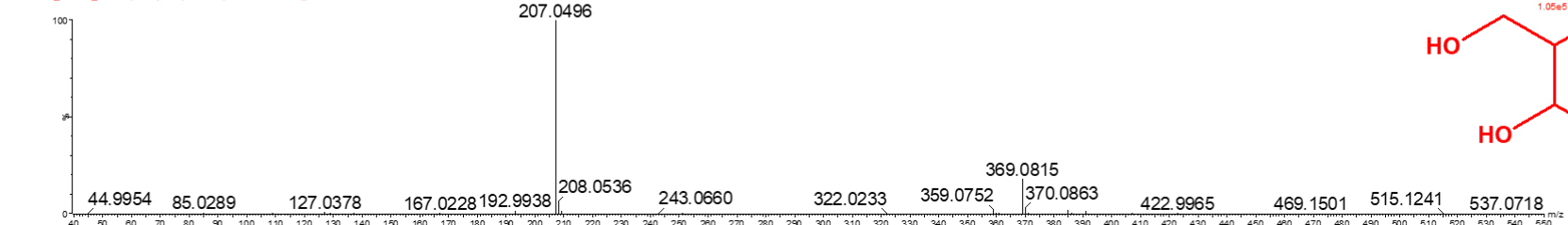
Phenolics_210305_11 583 (4.548) Cm (577.583-(552.559+599.600))

1: TOF MS ES-
1.07e5



Phenolics_210305_11 582 (4.542) Cm (577.583-(564.571+594.598))

2: TOF MS ES-
1.02e5

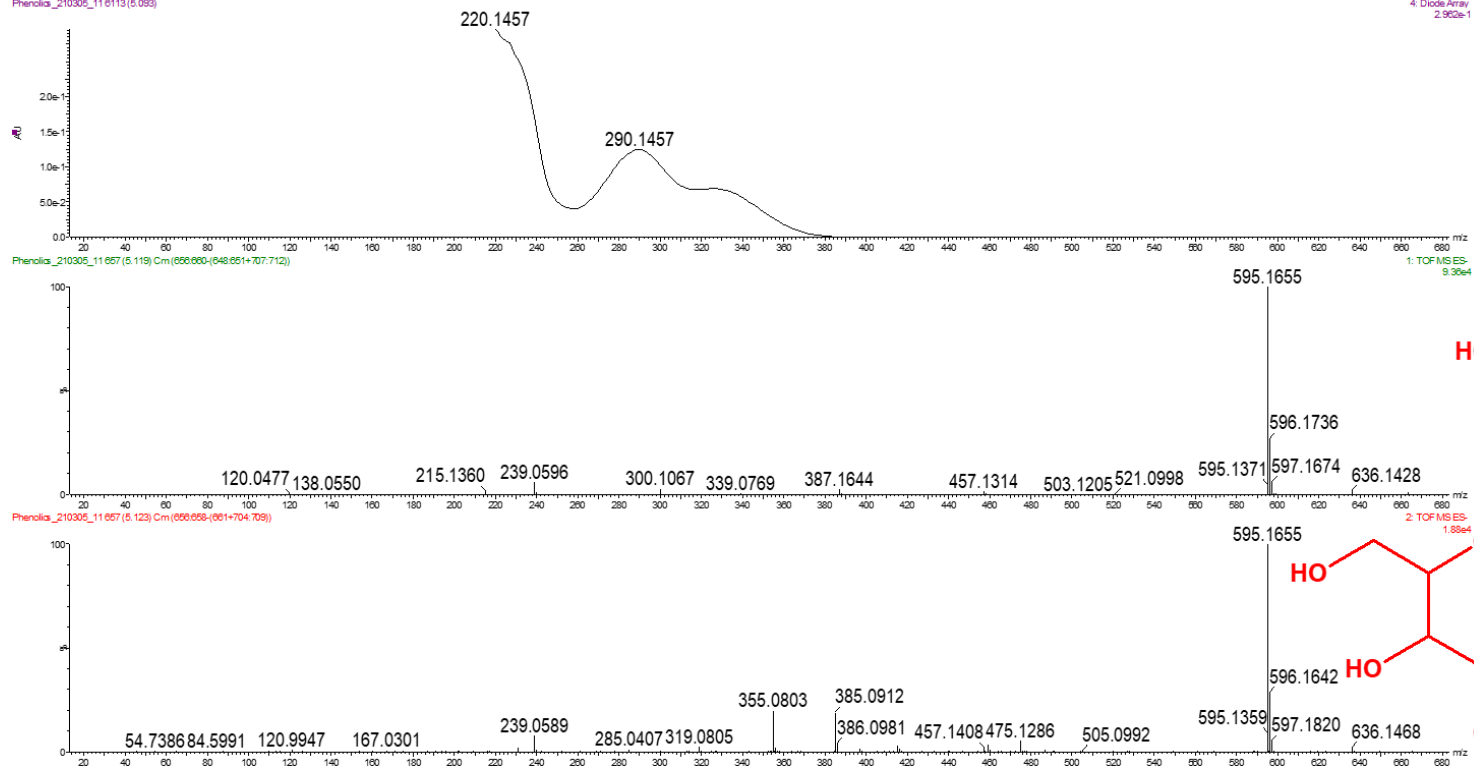


S Figure 1B: UV absorption spectrum of 5 hydroxy-6 methoxycoumarin 7 glucoside overlaid on its MS and MS/MS spectrum adjacent to its chemical structure(in red)

DS TUT SP 1

Phenolics_210305_11 0113 (5.089)

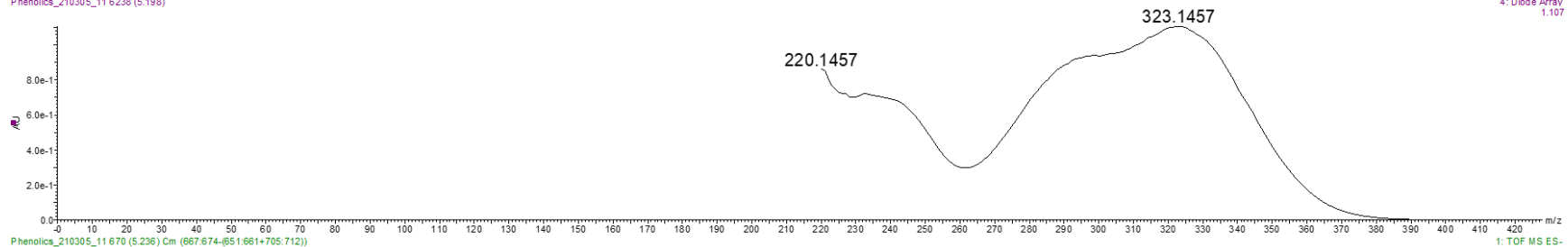
4: Diode Array
2.952e-1



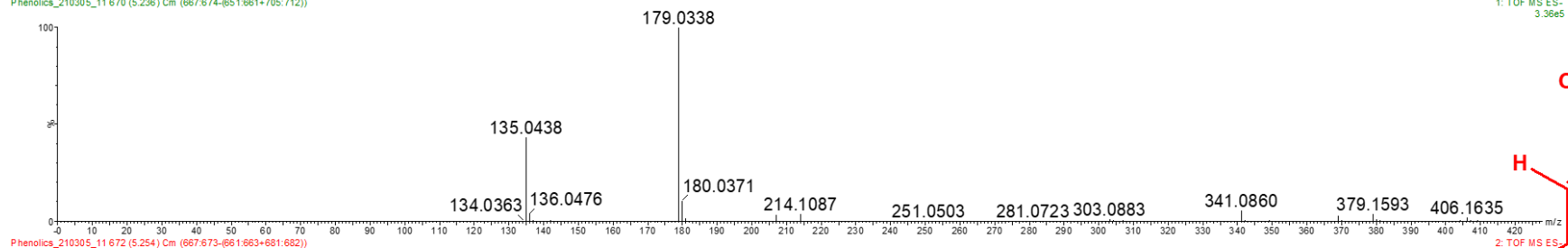
S Figure 1C: UV absorption spectrum of Eriodictyol 7-O-neohesperidoside overlaid on its MS and MS/MS spectrum adjacent to its chemical structure (in red).

DS_TUT_SP_1

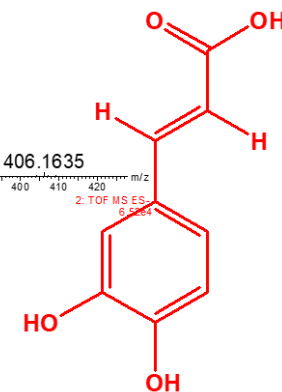
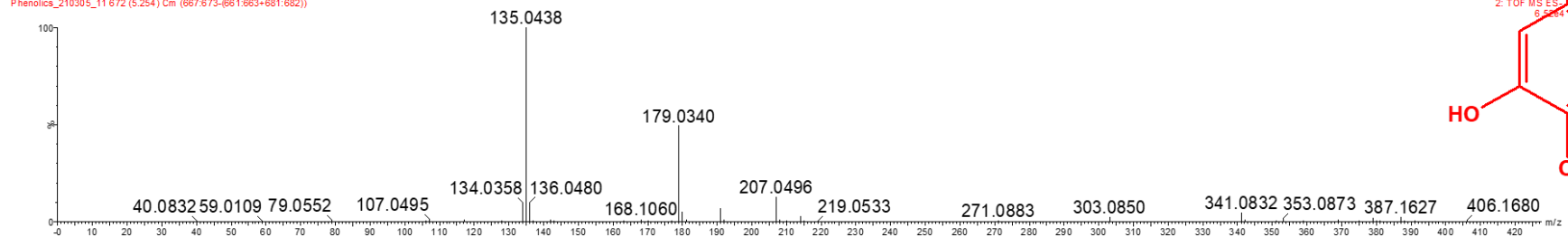
Phenolics_210305_11 6238 (5.198)



Phenolics_210305_11 670 (5.236) Cm (667.674-651.661+705.712))



Phenolics_210305_11 672 (5.254) Cm (667.673-661.663+681.682))

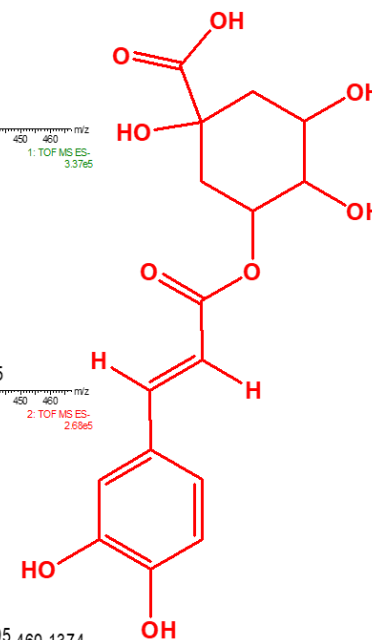
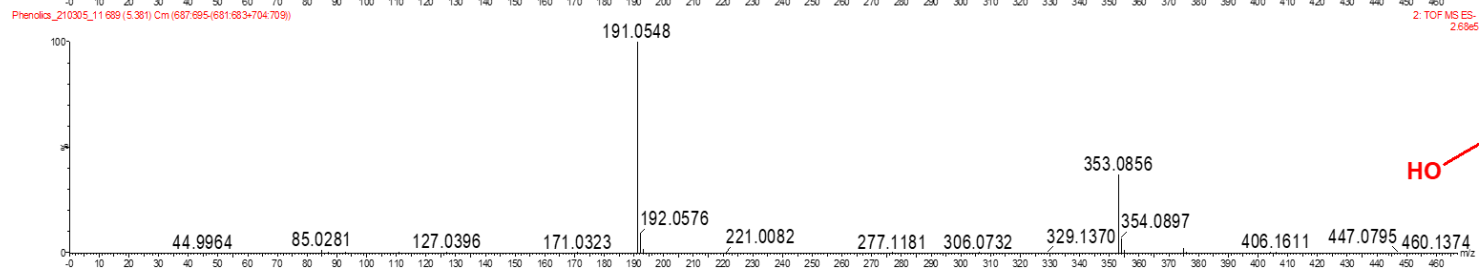
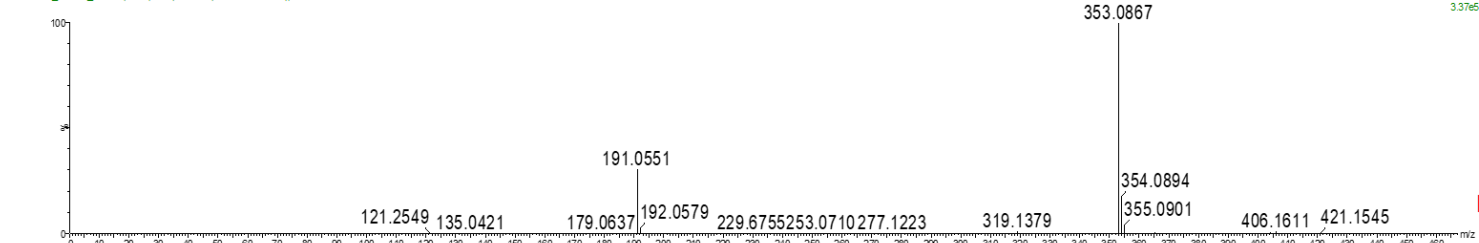
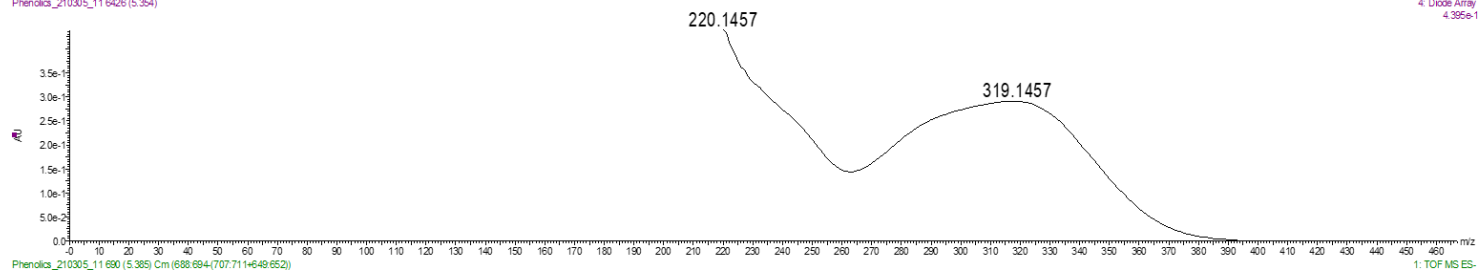


S Figure 1D: UV absorption spectrum of caffeic acid overlaid on its MS and MS/MS spectrum adjacent to its chemical structure (in red)

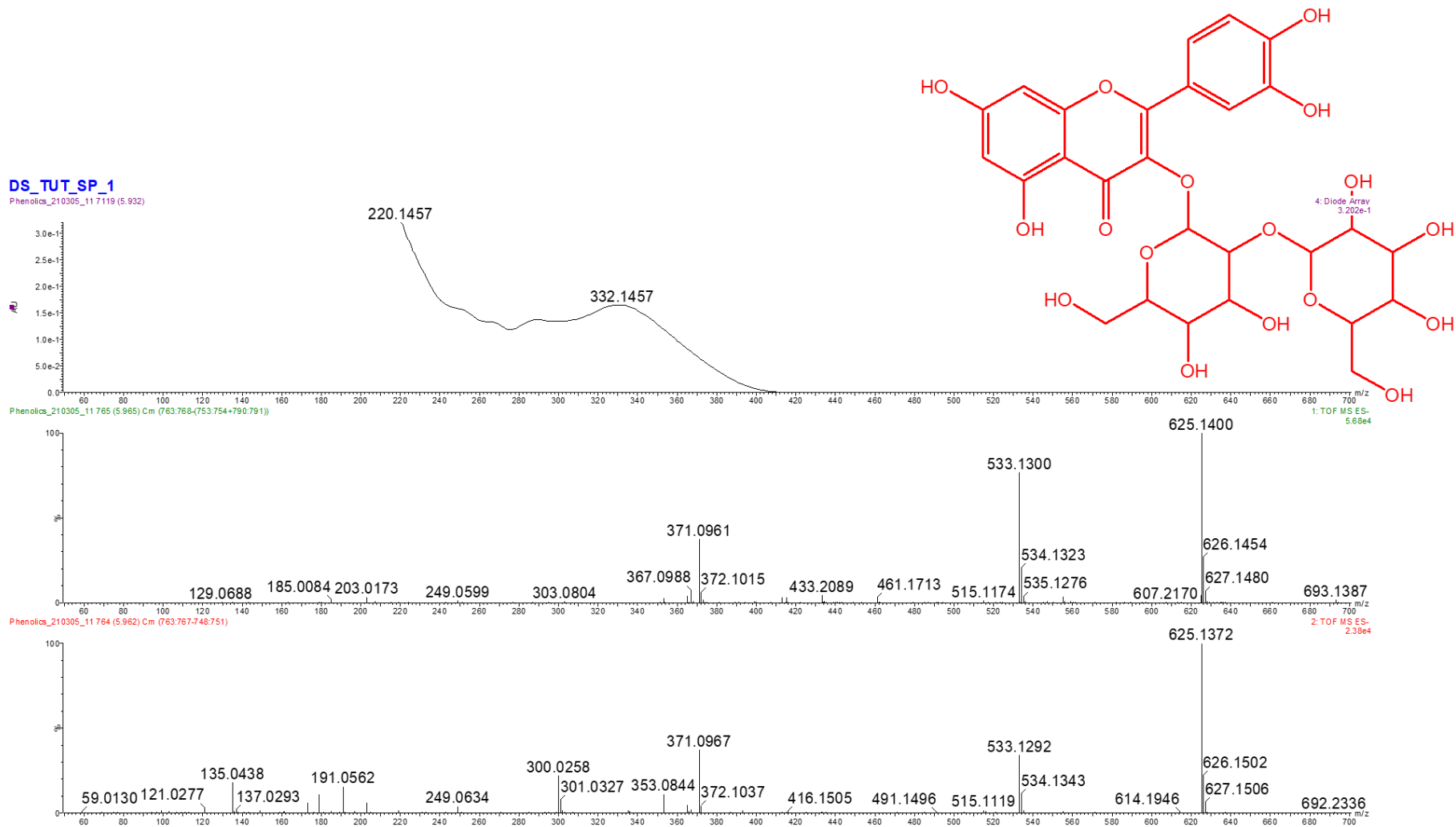
DS_TUT_SP_1

Phenolics_210305_11 6426 (5.354)

4 Diode Array
4.395e-1



S Figure 1E: UV absorption spectrum of chlorogenic acid overlaid on its MS and MS/MS spectrum adjacent to its chemical structure (in red)

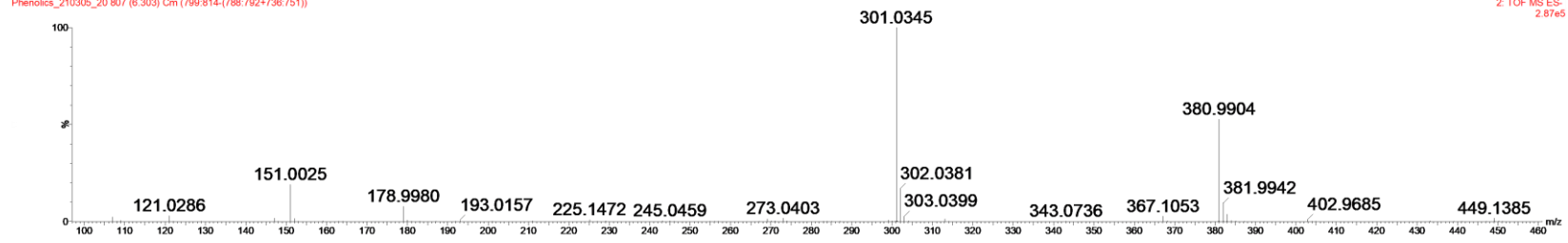
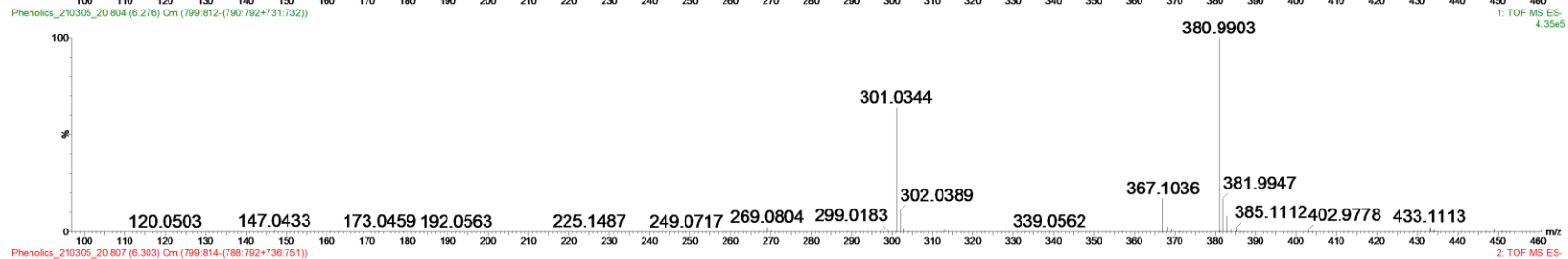
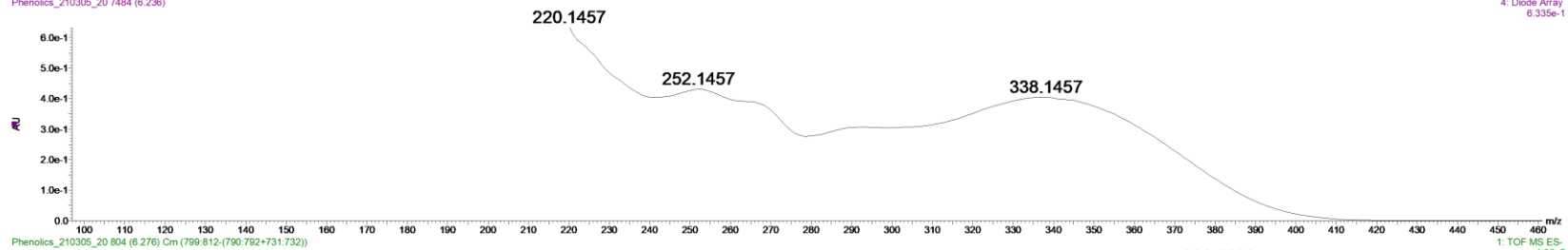


S Figure 1F: UV spectrum of quercetin 3-glucosyl-(1->2)-galactoside overlaid on its MS and MS/MS and its chemical structure is shown (in red)

DS_TUT_SP_10

Phenolics_210305_20 7484 (6.236)

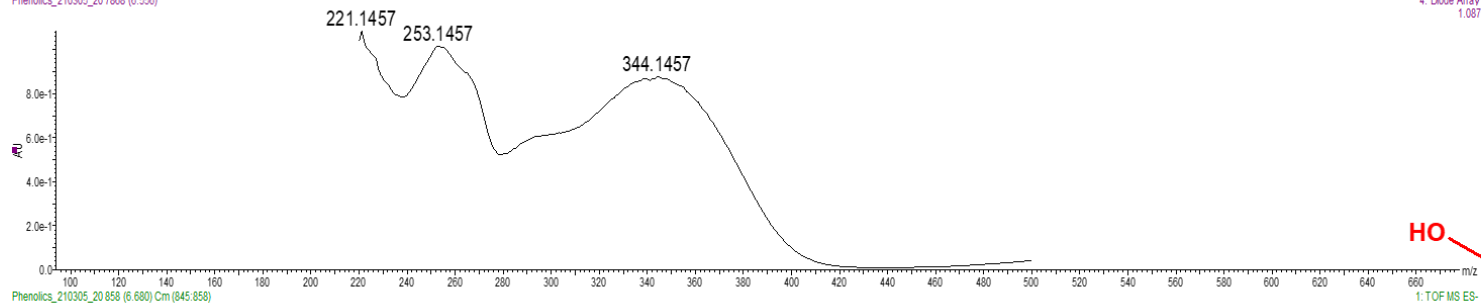
4: Diode Array
6.335e-1



S Figure 1G: UV spectrum of a quercetin derivative overlaid on its MS and MS/MS spectrum

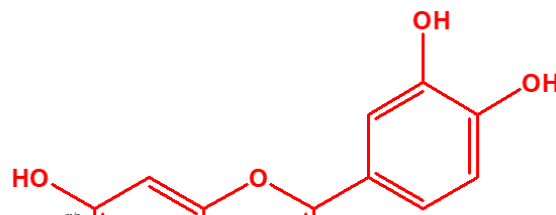
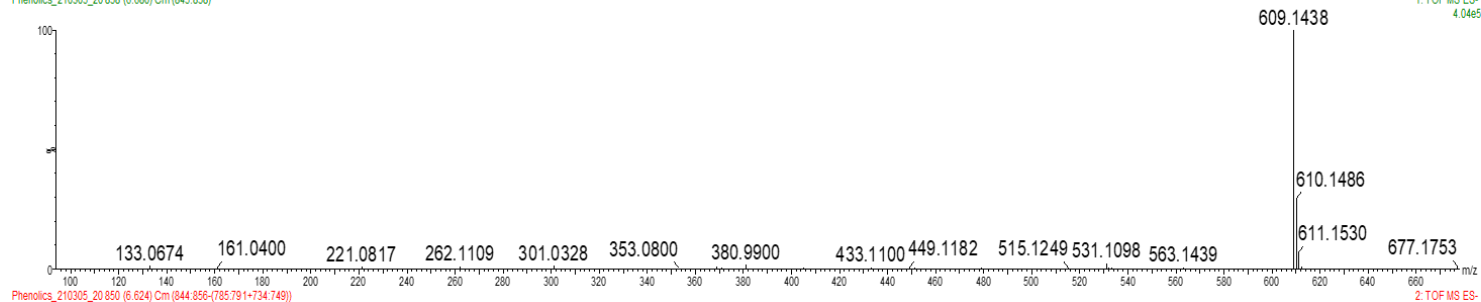
DS TUT SP 10

Phenolics_210305_20 7868 (6.556)



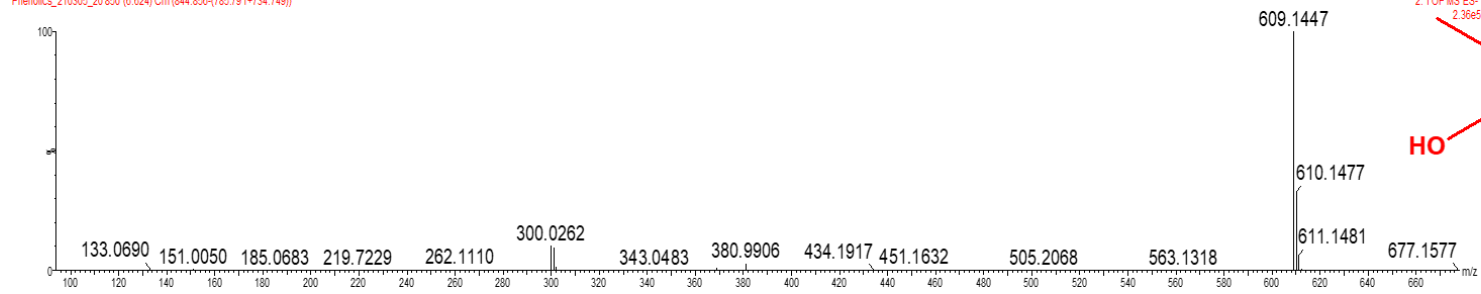
4: Diode Array
1.087

Phenolics_210305_20 850 (6.680) Cm (845.858)

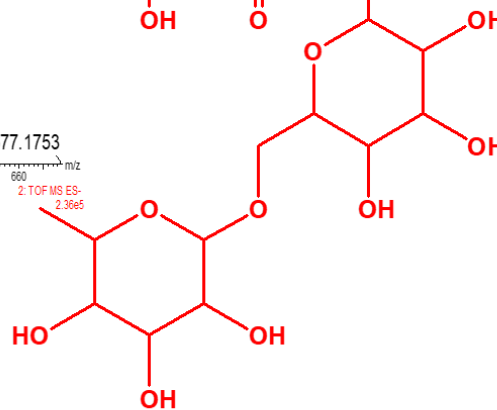


1: TOF MS ES-
4.04e5

Phenolics_210305_20 850 (6.624) Cm (844.856-785.791+734.749)



2: TOF MS ES-
2.36e5

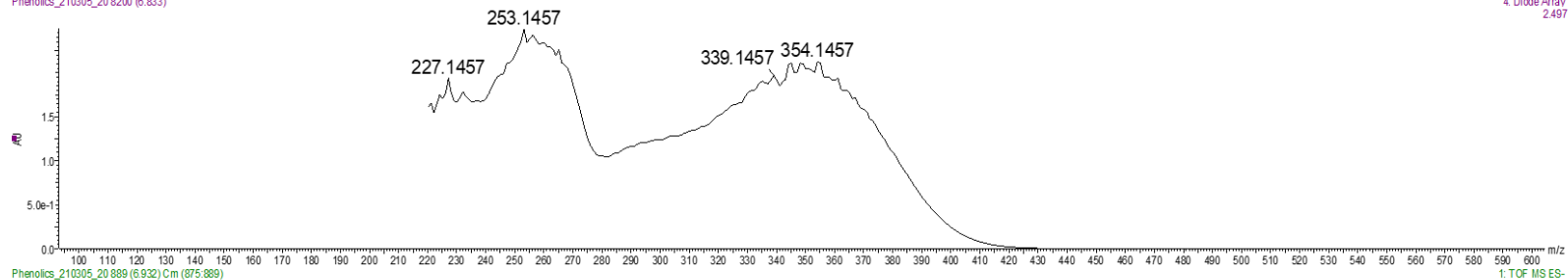


S Figure 1H: UV absorption spectrum of rutin overlaid on its MS and MS/MS spectrum adjacent to its chemical structure

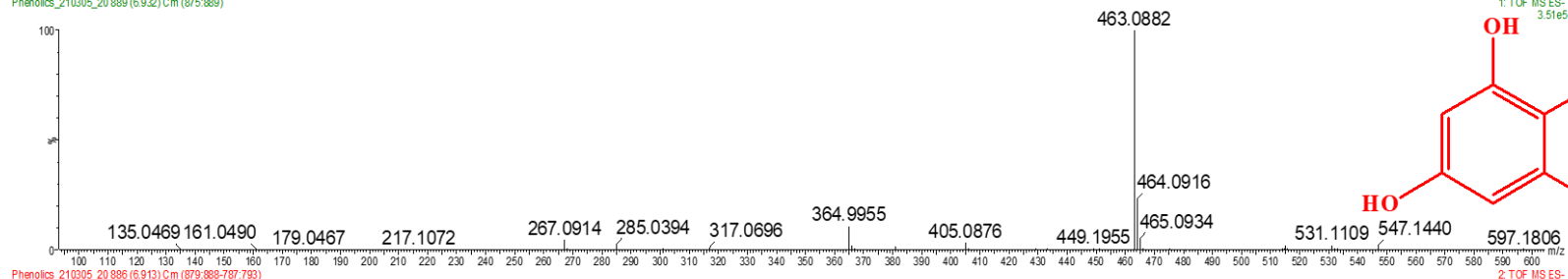
DS_TUT_SP_10

Phenolics_210305_20 8200 (6.833)

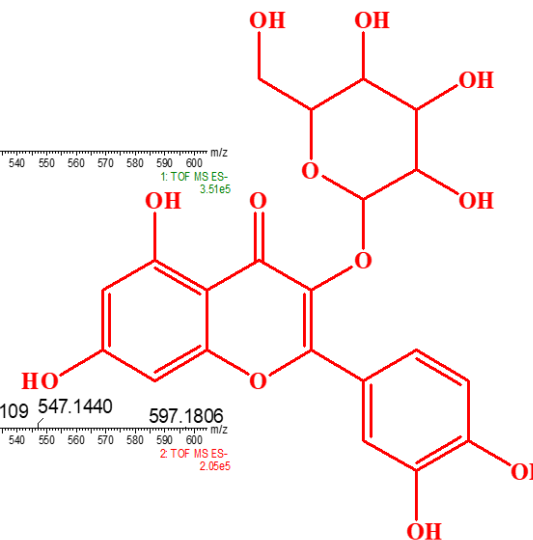
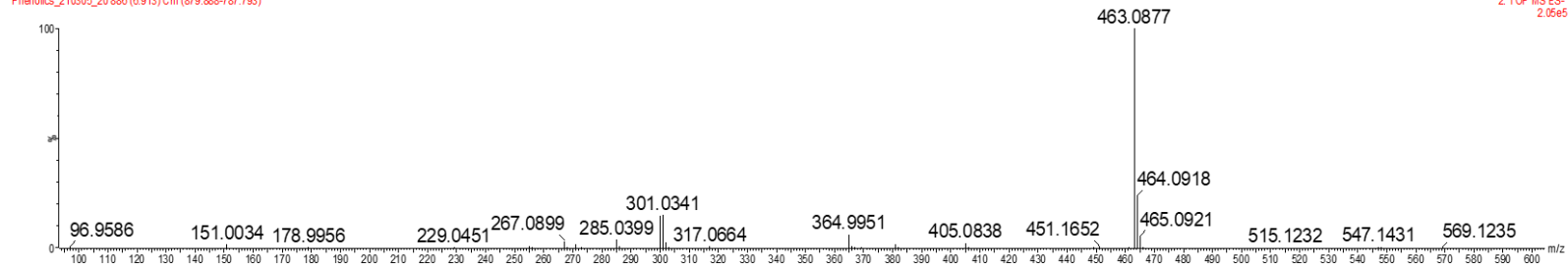
4: Diode Array
2.497



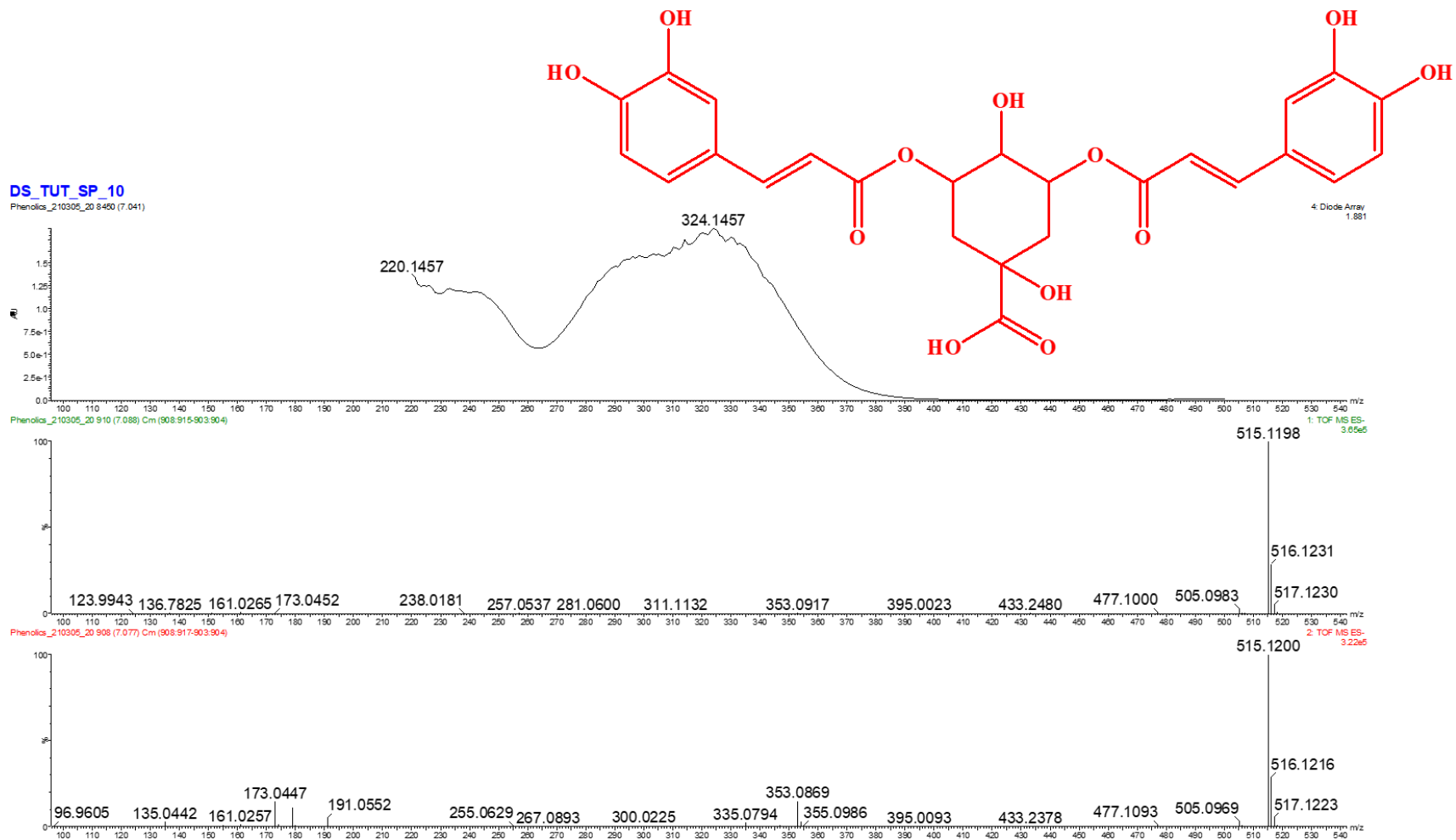
Phenolics_210305_20 889 (6.932) Cm (875.889)



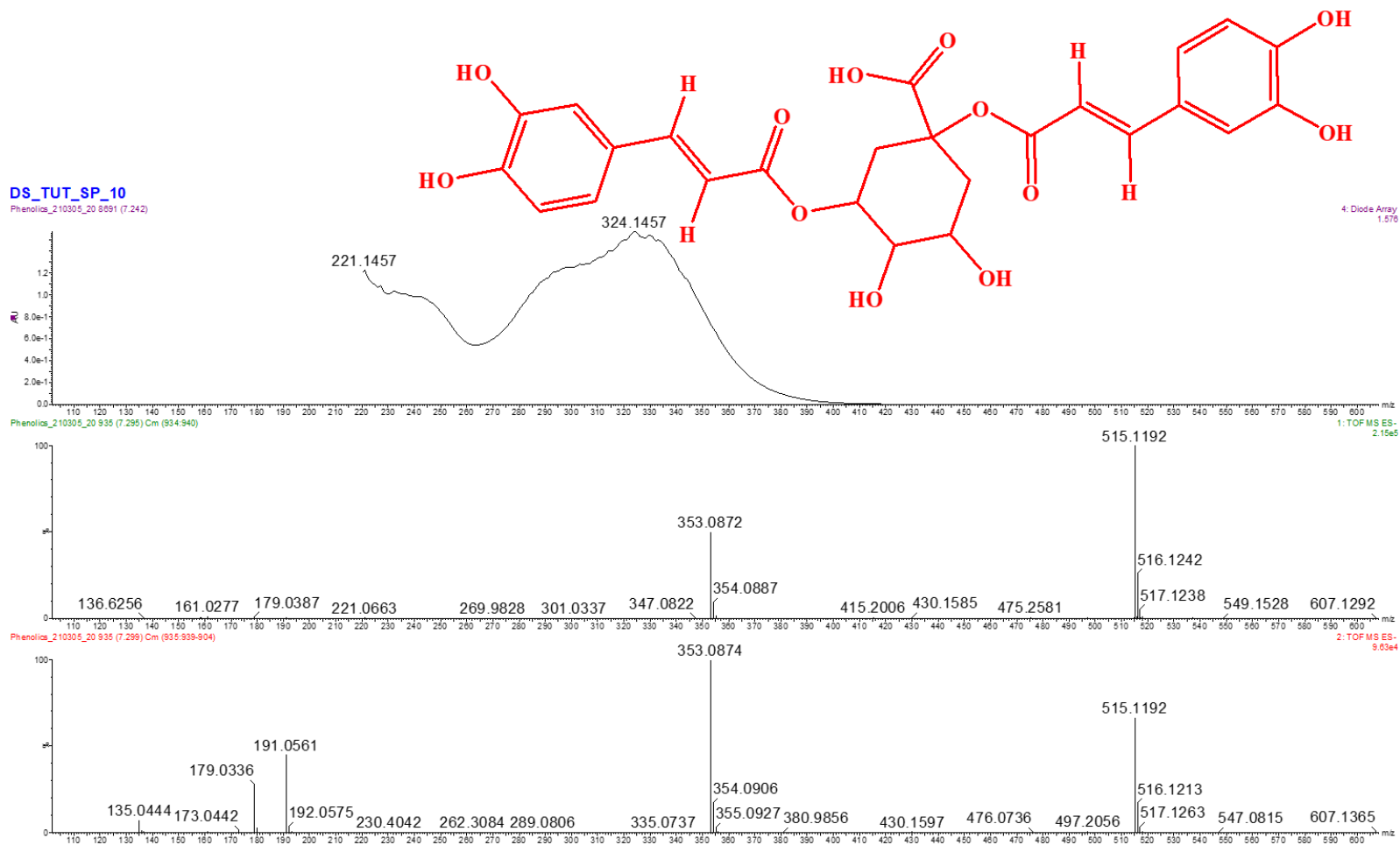
Phenolics_210305_20 886 (6.913) Cm (879.889-787.783)



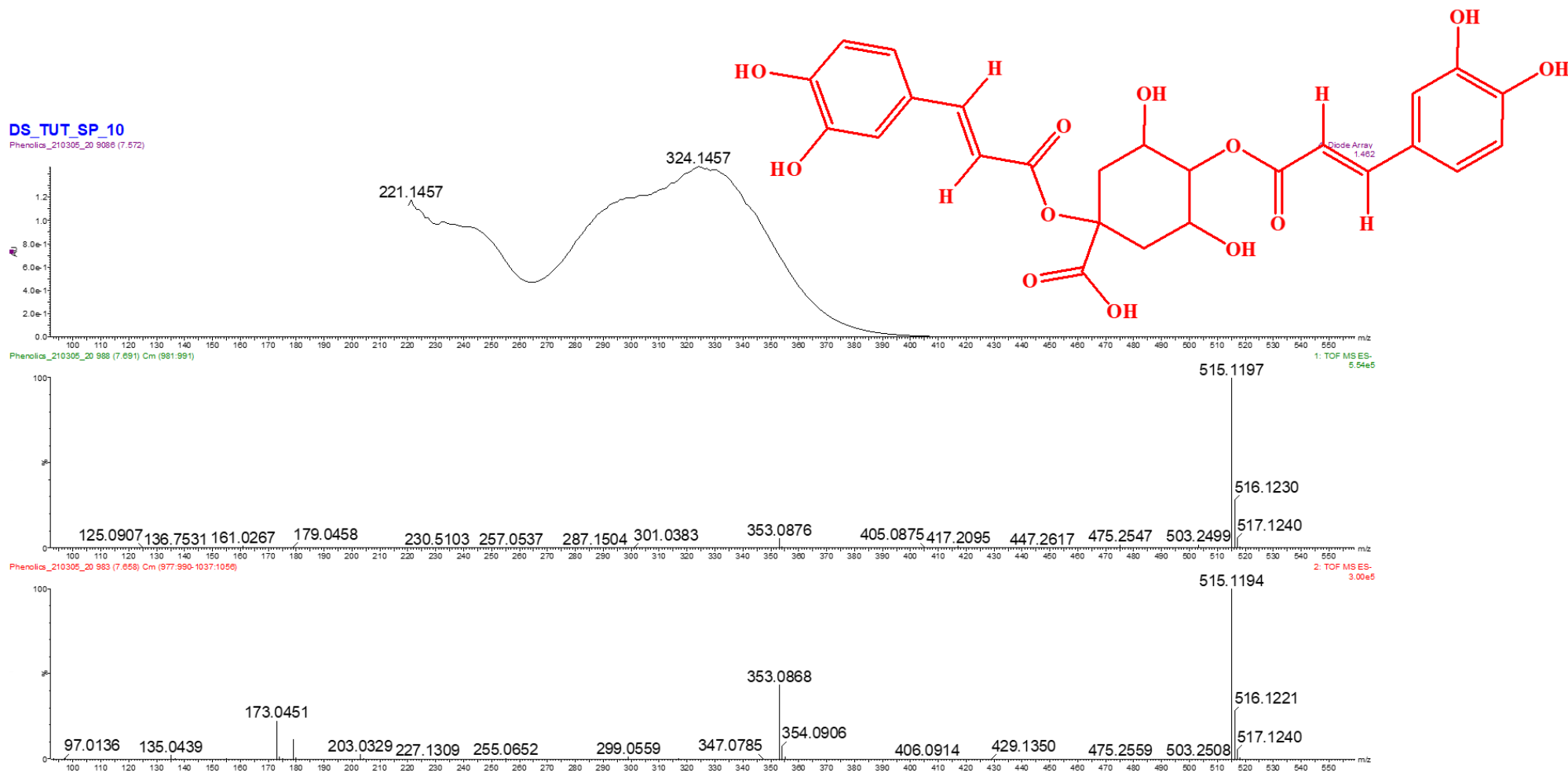
S Figure 1J: UV absorption spectrum of quercetin 3 galactoside overlaid on its MS and MS/MS spectrum adjacent to its chemical structure



S Figure 1K: UV absorption spectrum of 3,5 dicaffeoylquinic acid overlaid on its MS and MS/MS spectra and its chemical structure is shown (in red)

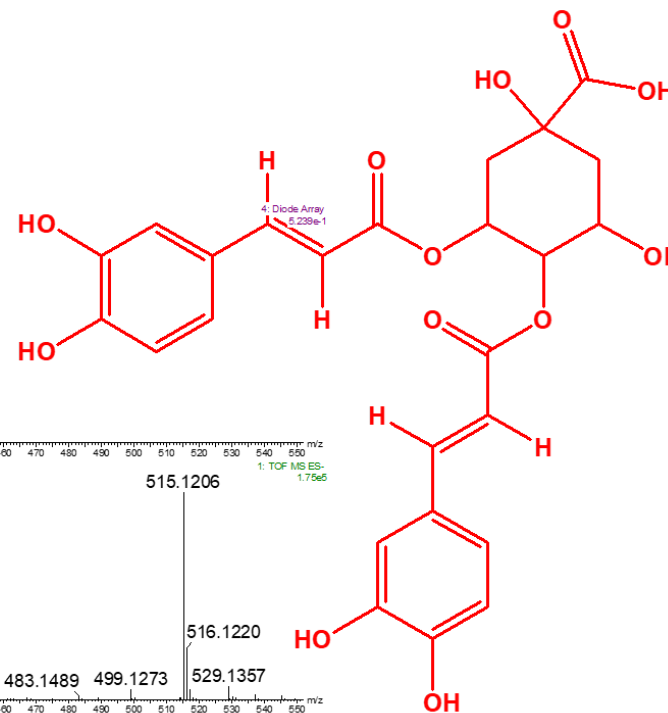
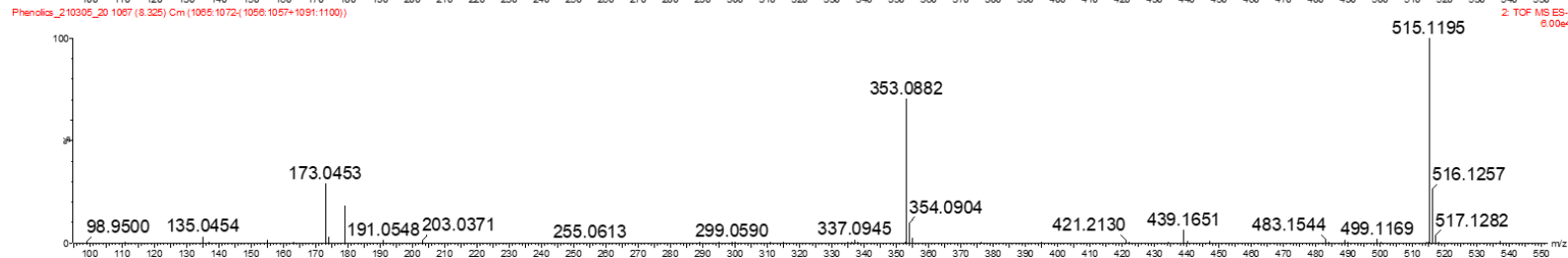
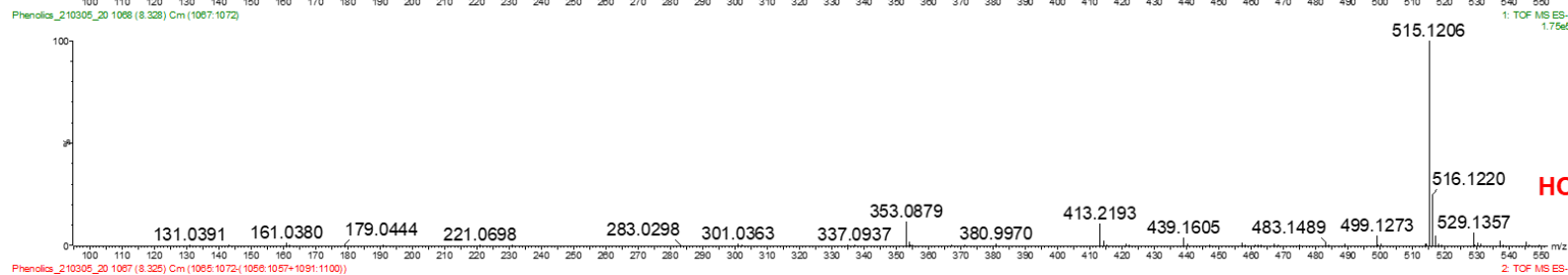
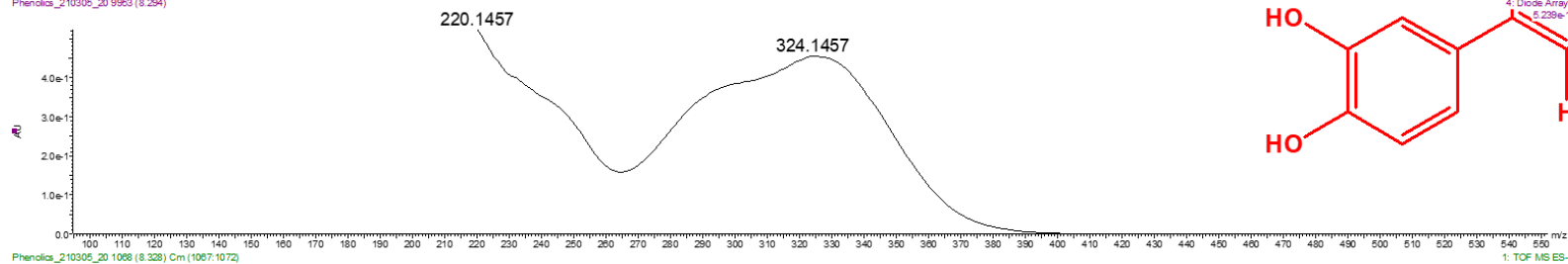


S Figure 1L: UV spectrum of 1,3 dicafeoylquinic acid overlaid on its MS/MS spectrum



S Figure 2 : UV spectrum of 1,4 dicaffeoylquinic acid overlaid on its MS and MS/.MS spectrum and its chemical structure (in red)

DS_TUT_SP_10
Phenolics_210305_20_9863 (8.294)



S Figure 1N: UV spectrum of 4,5 dicaffeoylquinic acid overlaid on its MS and MS/MS spectrum adjacent to its chemical structure (in red)