

# Effect of Different Enological Tannins on Oxygen Consumption, Phenolic Compounds, Color and Astringency Evolution of Aglianico Wine

Luigi Picariello <sup>1</sup>, Alessandra Rinaldi <sup>1,2</sup>, Martino Forino <sup>1</sup>, Francesco Errichiello <sup>1</sup>, Luigi Moio <sup>1</sup> and Angelita Gambuti <sup>1,\*</sup>

<sup>1</sup> Department of Agricultural Sciences, Grape and Wine Science Division, University of Naples "Federico II", Viale Italia (Angolo Via Perrottelli), 83100 Avellino, Italy; luigi.picariello@unina.it (L.P.); alessandra.rinaldi@unina.it (A.R.); forino@unina.it (M.F.); francescoerrichiellojr@gmail.com (F.E.); luigi.moio@unina.it (L.M.)

<sup>2</sup> Biolaffort, 126 Quai de la Souys, 33100 Bordeaux, France

\* Correspondence: angelita.gambuti@unina.it; Tel.: +39-081-2532605:

**Figure S1:** <sup>1</sup>H-NMR spectrum in CD<sub>3</sub>OD of the TT mixture. Resonances marked with red asterisks are relative to Epigallocatechin-3-*O*-gallate and resonances marked with green asterisks are relative to Epigallocatechin

**Figure S2:** Enlargements of the HR-ESIMS spectrum of the TT mixture acquired in the negative ione mode

**Figure S3:** <sup>1</sup>H-NMR spectrum in CD<sub>3</sub>OD of the CT mixture

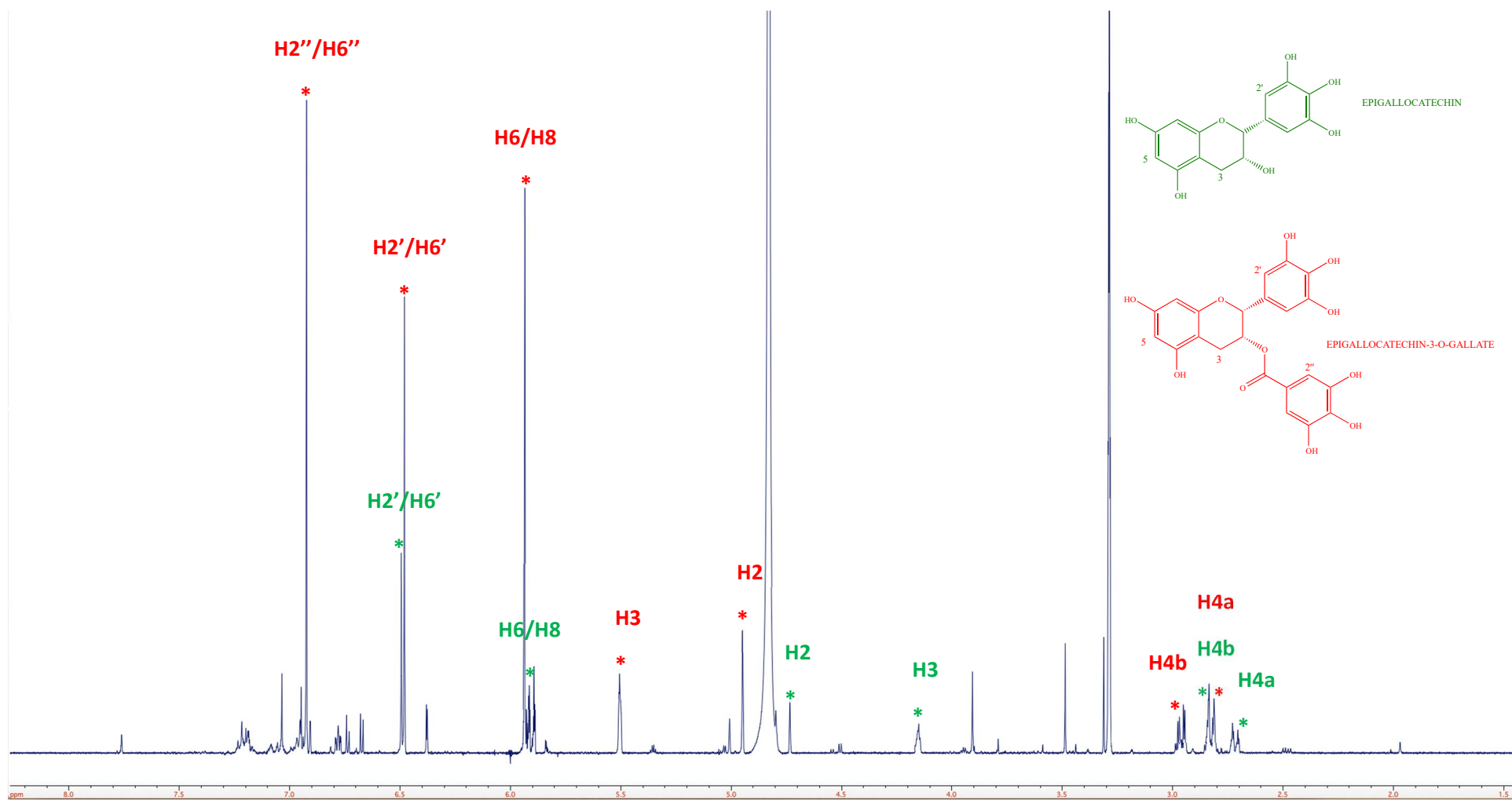
**Figure S4:** Enlargements of the HR-ESIMS spectrum of the CT mixture acquired in the negative ione mode

**Figure S5:** <sup>1</sup>H-NMR spectrum in CD<sub>3</sub>OD of the ET mixture

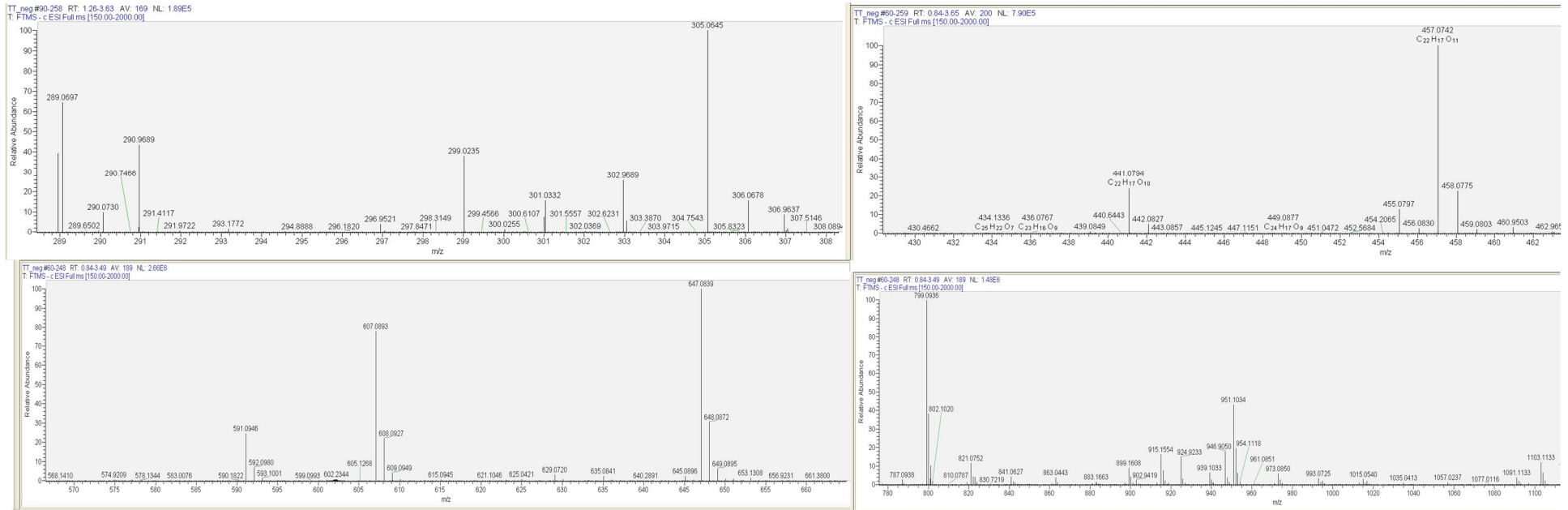
**Figure S6:** Enlargements of the HR-ESIMS spectrum of the ET mixture acquired in the negative ione mode

**Figure S7:** <sup>1</sup>H-NMR spectrum in CD<sub>3</sub>OD of the GT mixture

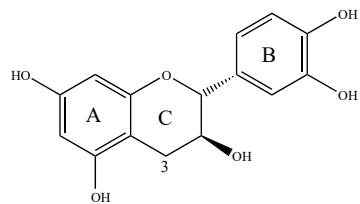
**Figure S8:** HR-ESIMS spectrum of the GT mixture acquired in the negative ione mode



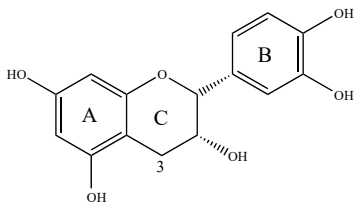
**Figure 1 in supplementary material:**  $^1\text{H-NMR}$  spectrum in  $\text{CD}_3\text{OD}$  of the TT mixture. Resonances marked with red asterisks are relative to Epigallocatechin-3-*O*-gallate and resonances marked with green asterisks are relative to Epigallocatechin.



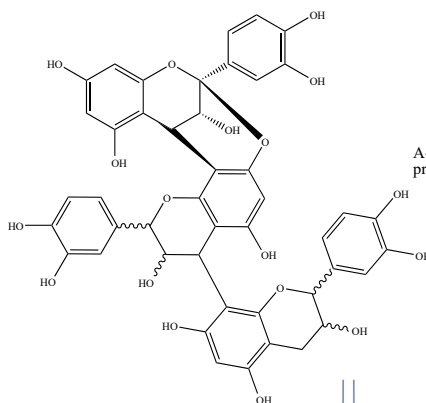
**Figure 2 in supplementary material:** Enlargements of the HR-ESIMS spectrum of the TT mixture acquired in the negative ion mode



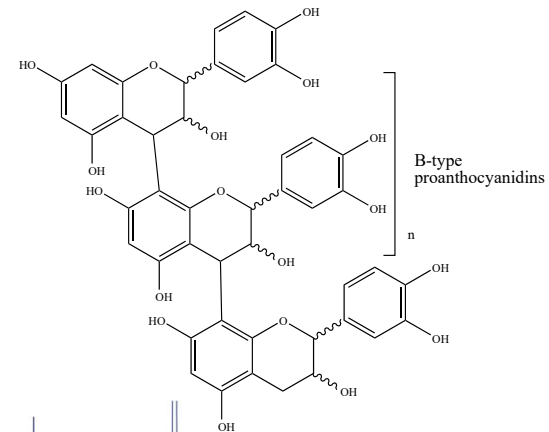
CATECHIN



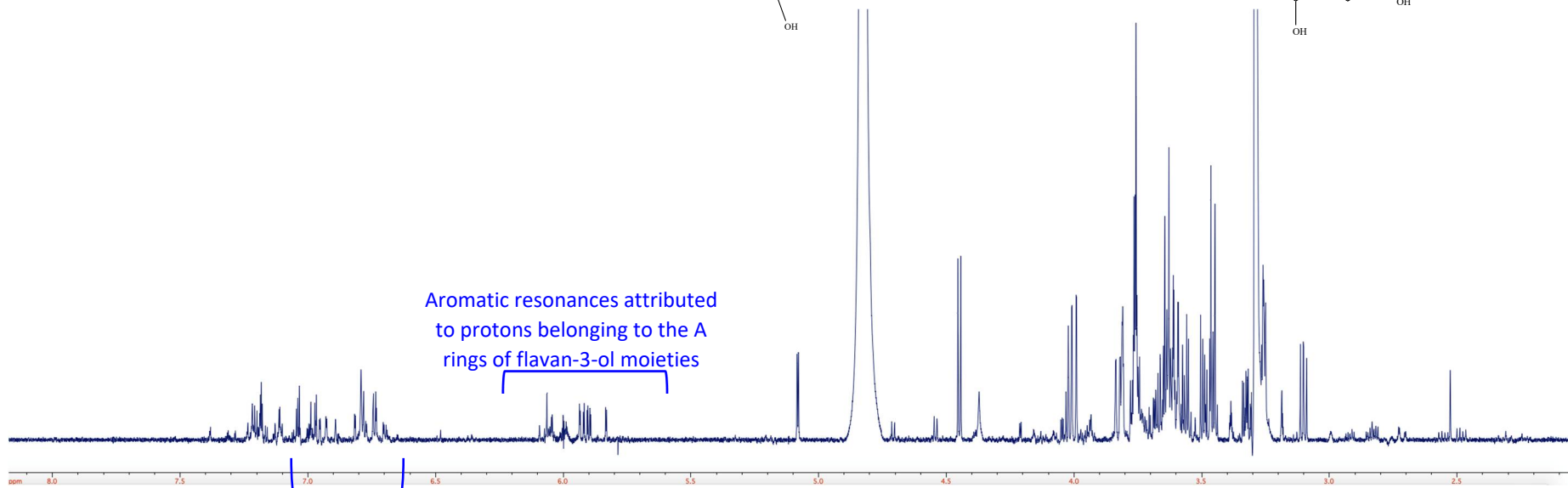
EPICATECHIN



A-type proanthocyanidins



B-type proanthocyanidins



Aromatic resonances attributed to protons belonging to the A rings of flavan-3-ol moieties

Aromatic resonances attributed to protons belonging to the B rings of flavan-3-ol moieties

Resonances attributed to carbohydrates, mainly glucose and fructose

Resonances attributed to aliphatic protons belonging to the C ring of flavan-3-ol moieties. Some resonances in the range 3.8 - 4.9 ppm are also relative to protons of the C ring of flavan-3-ol moieties.

Figure 3 in supplementary material:  $^1\text{H-NMR}$  spectrum in  $\text{CD}_3\text{OD}$  of the CT mixture

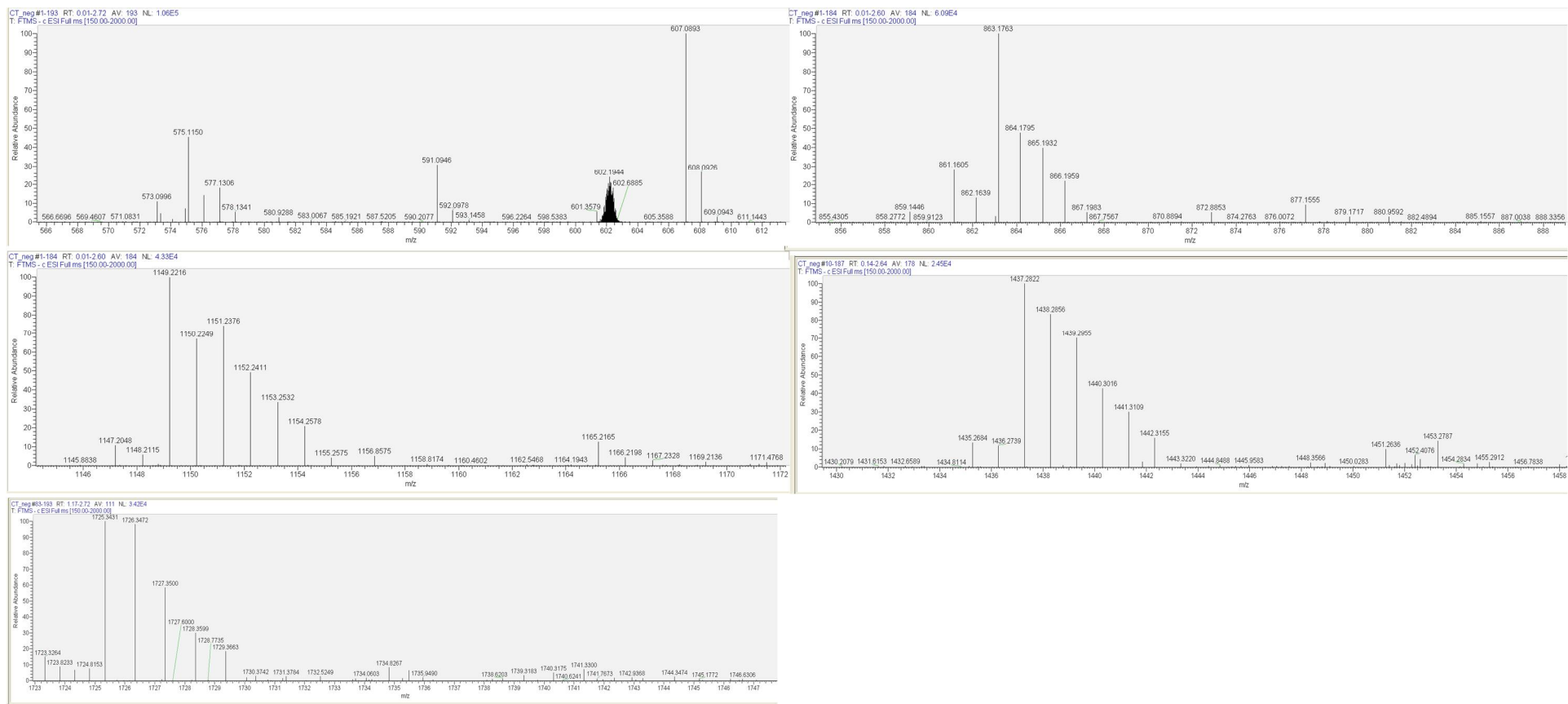


Figure 4 in supplementary material: Enlargements of the HR-ESIMS spectrum of the CT mixture acquired in the negative ion mode

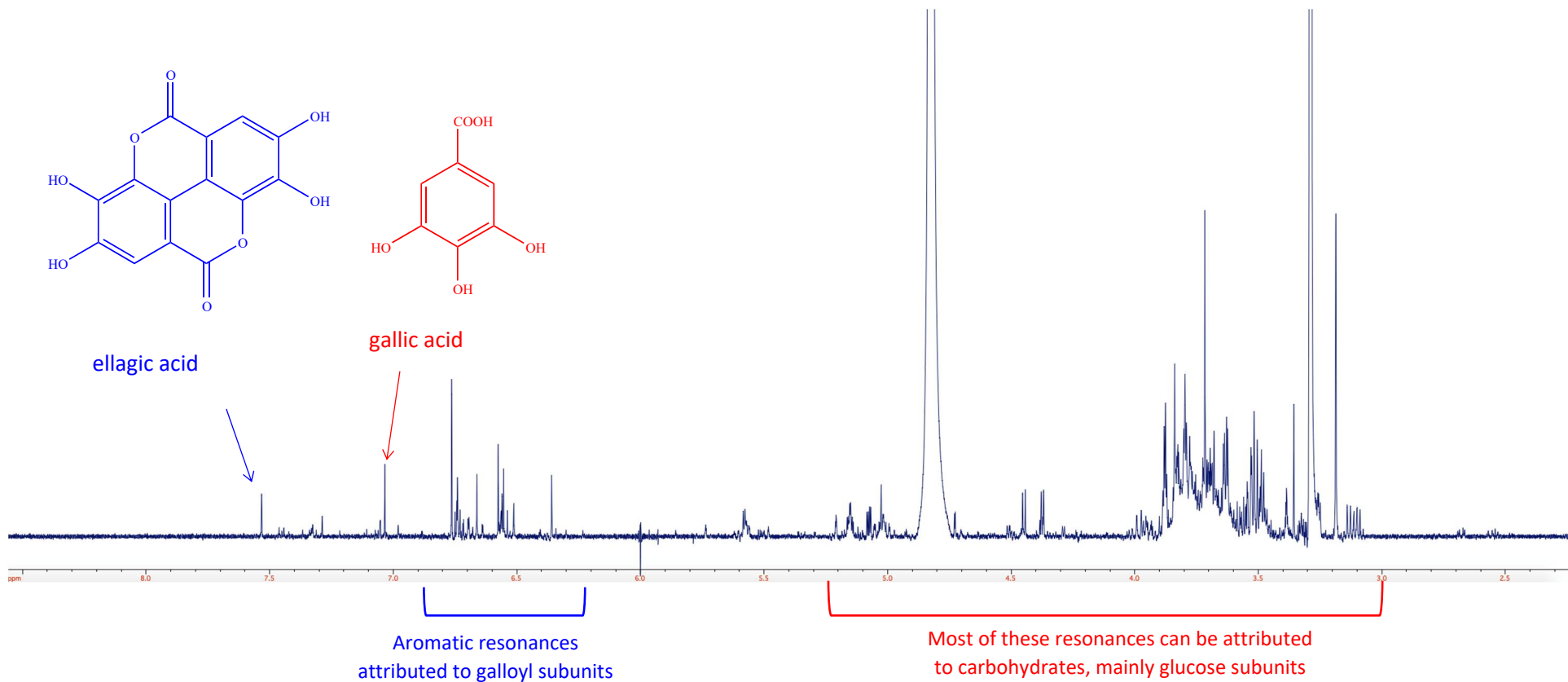
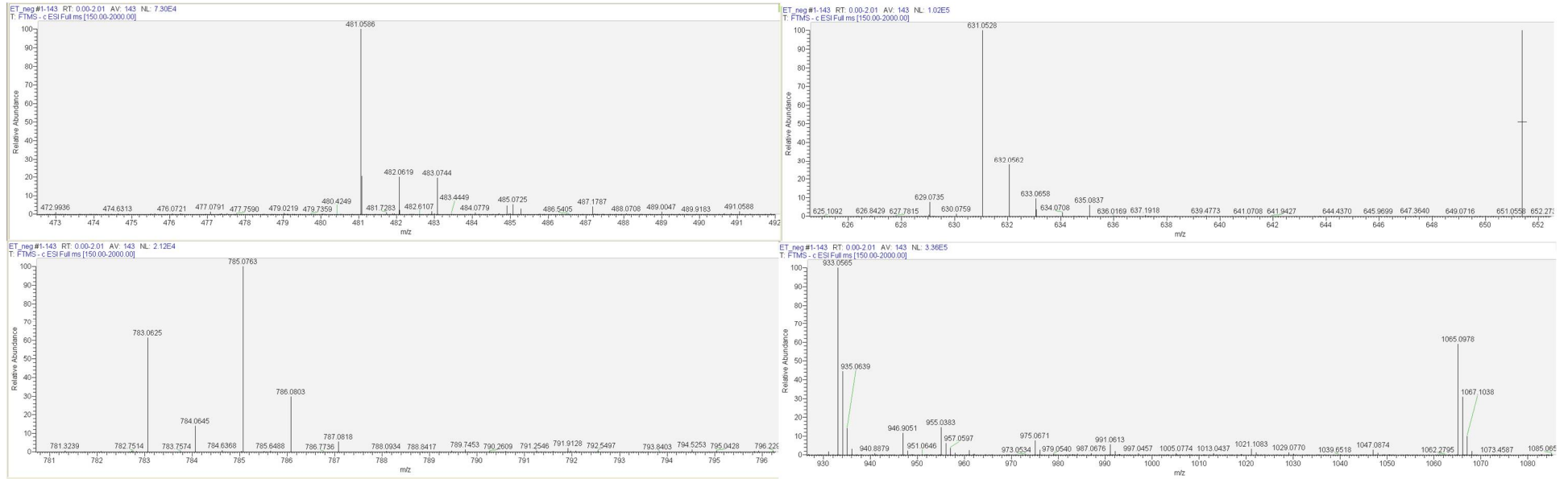


Figure 5 in supplementary material: <sup>1</sup>H-NMR spectrum in CD<sub>3</sub>OD of the ET mixture.



**Figure 6 in supplementary material:** Enlargements of the HR-ESIMS spectrum of the ET mixture acquired in the negative ion mode

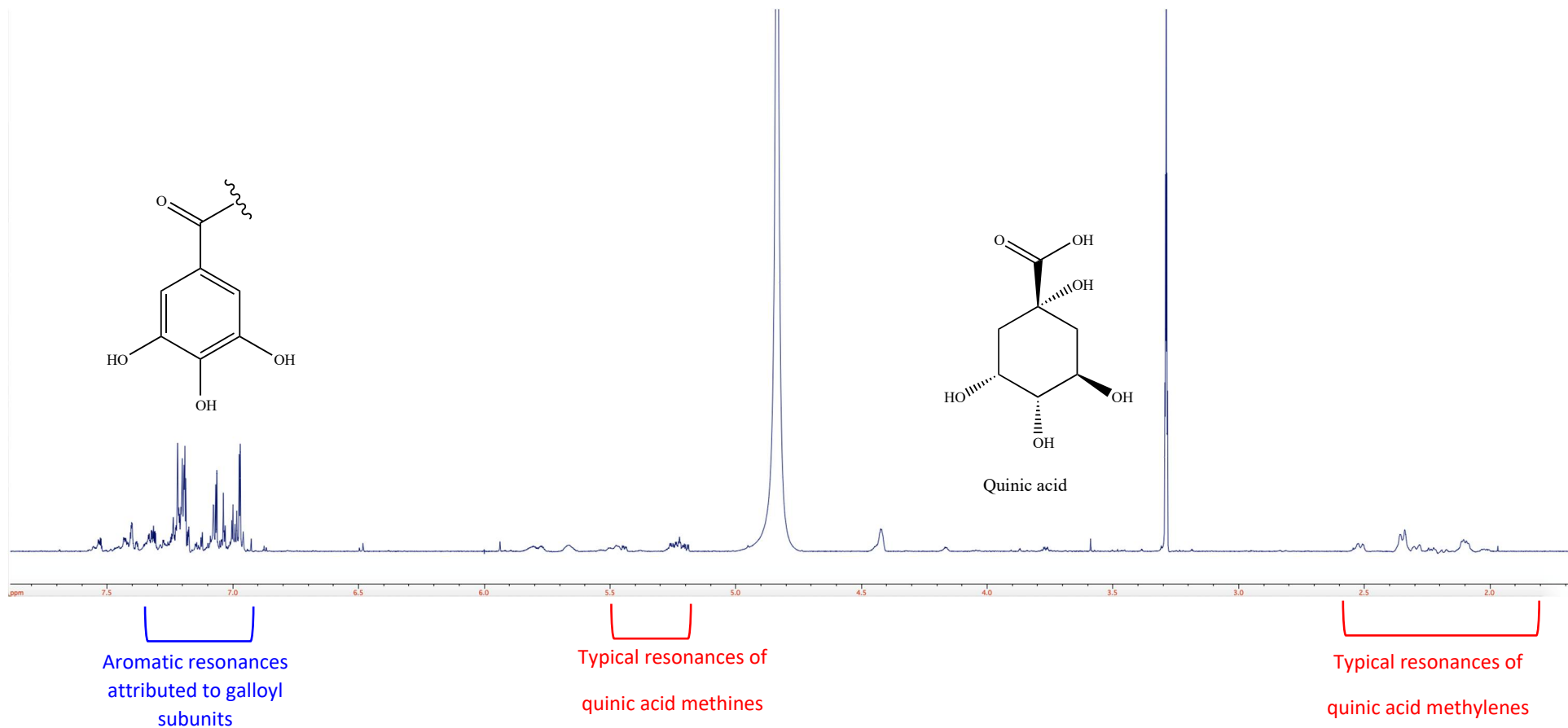
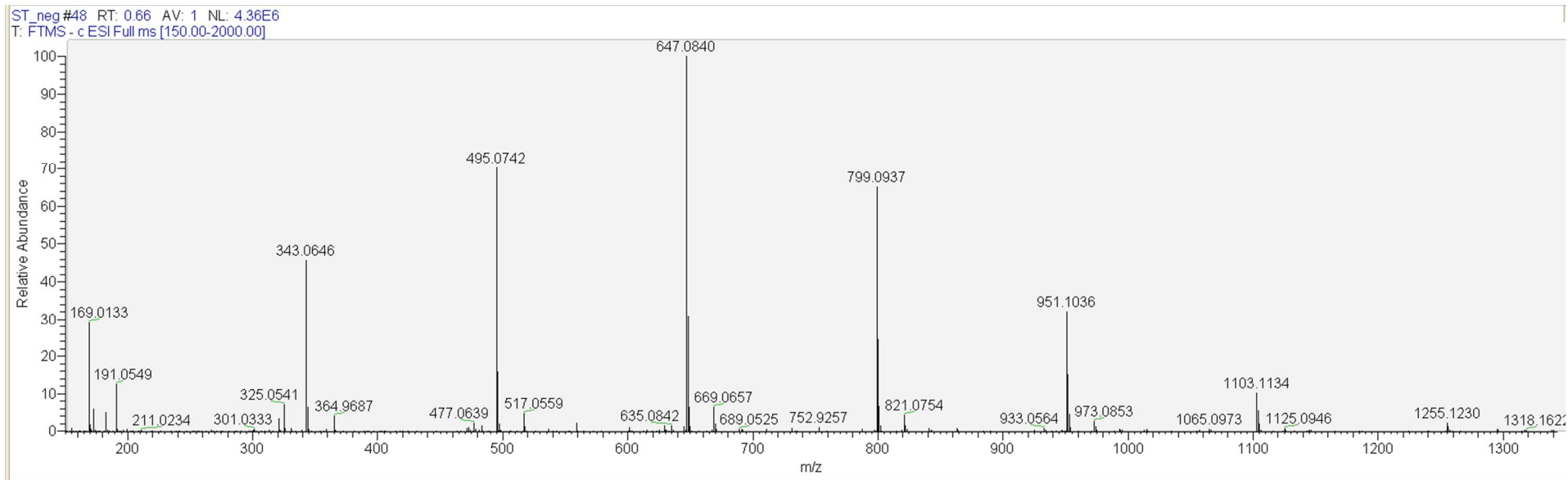


Figure 7 in supplementary material:  $^1\text{H-NMR}$  spectrum in  $\text{CD}_3\text{OD}$  of the GT mixture.





**Figure 8 in supplementary material:** HR-ESIMS spectrum of the GT mixture acquired in the negative ion mode