

Supplementary Materials

Article

Volatile Aroma Compounds of Brandy ‘Lozovača’ Produced from Muscat Table Grapevine Cultivars (*Vitis vinifera* L.)

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Supplementary Tables

Table S1. Compounds identified in grape brandies produced from Muscat table grape cultivars and their aroma descriptors

| Class | Compound | Aroma descriptor |
|-----------|--------------------------|--|
| Alcohol | 1-Hexanol | Flower [27, 29, 40], green [27, 29, 40], cut grass [29, 40], grass [27], herbaceous [23, 27] |
| | Phenyl-ethyl alcohol | Floral [27, 40], rose [27,40], honey [27] |
| | 1-Heptanol | Oily [40] |
| Acid | Octanoic acid | Rancid [23], cheese [23, 40] fatty [40], sweet [40] |
| | Hexadecanoic acid | Rancid [23], cheese [25], fatty [25], sweet [40] |
| Ester | Ethyl hexanoate | Fruity[23,25], green apple [25, 29, 40], banana [23,25], wine-like [23,25], brandy [25] |
| | Ethyl octanoate | Sweet [23, 40], floral [23], fruity [23, 40], banana [23], pear]23], brandy [23] |
| | Ethyl decanoate | Fruity, brandy, grape [37] |
| Terpenoid | α -Pinene | Pine, resinous [31] |
| | Limonene | Fruity, lemon [41] |
| | γ -terpinene | Fruity, lemon-like [31] |
| | <i>c</i> -Linalool oxide | Floral [40] |
| | <i>t</i> -Linalool oxide | Woody, floral [40] |
| | Rose oxide | Floral [24], lychee-like [24], rose [37] |
| | Linalool | Roses, anise seed, grapefruit, green lemon and citrus [15,41] |
| | Hotrienol | Fresh, floral, fruity [15,41] |
| | Citronellol | Roses, anise seed, grapefruit, green lemon and citrus [15,41] |

Supplementary Figures

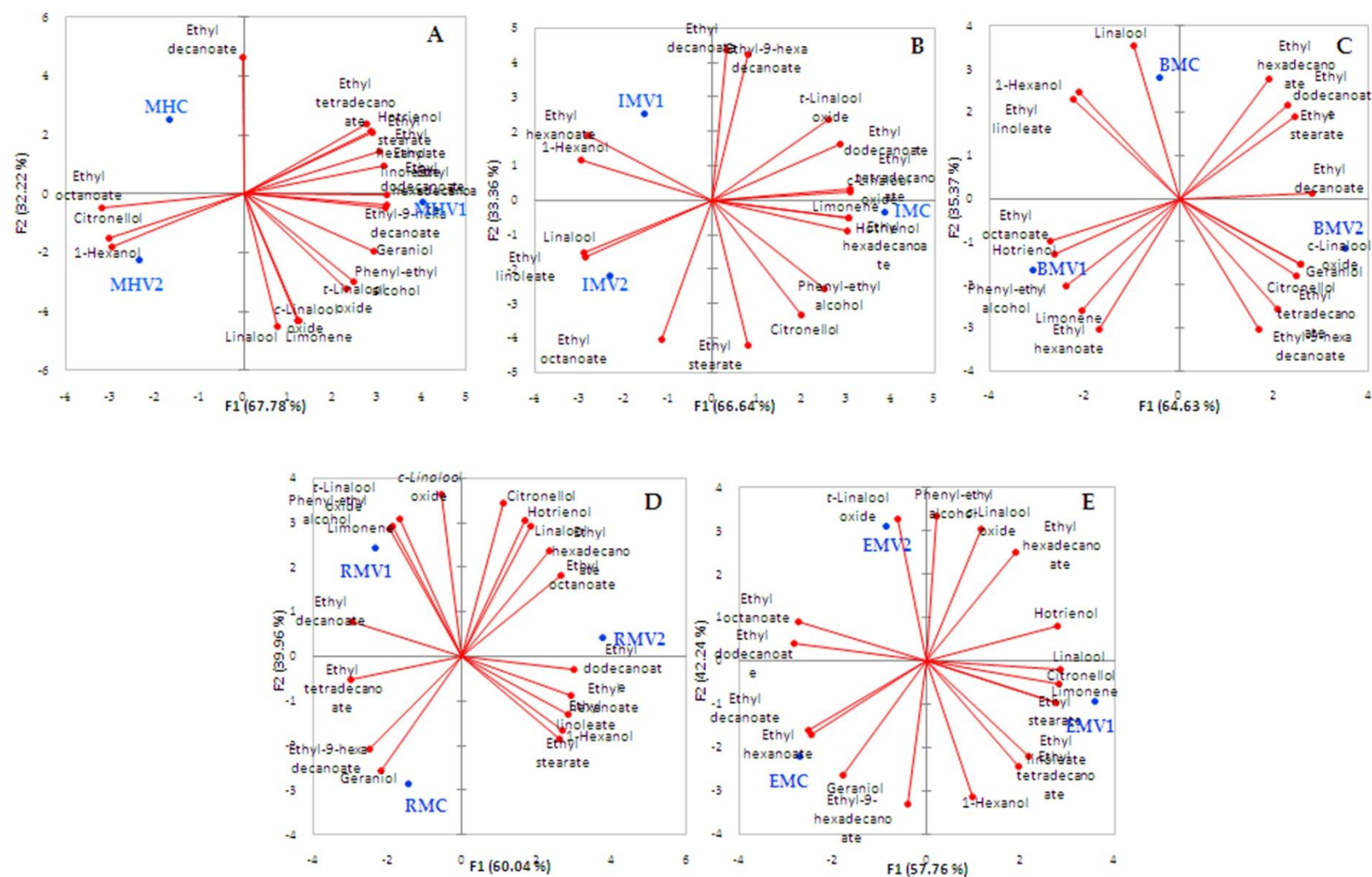


Figure S1. Biplots of the volatile aroma compounds identified in grape brandy samples of each Muscat cultivar.

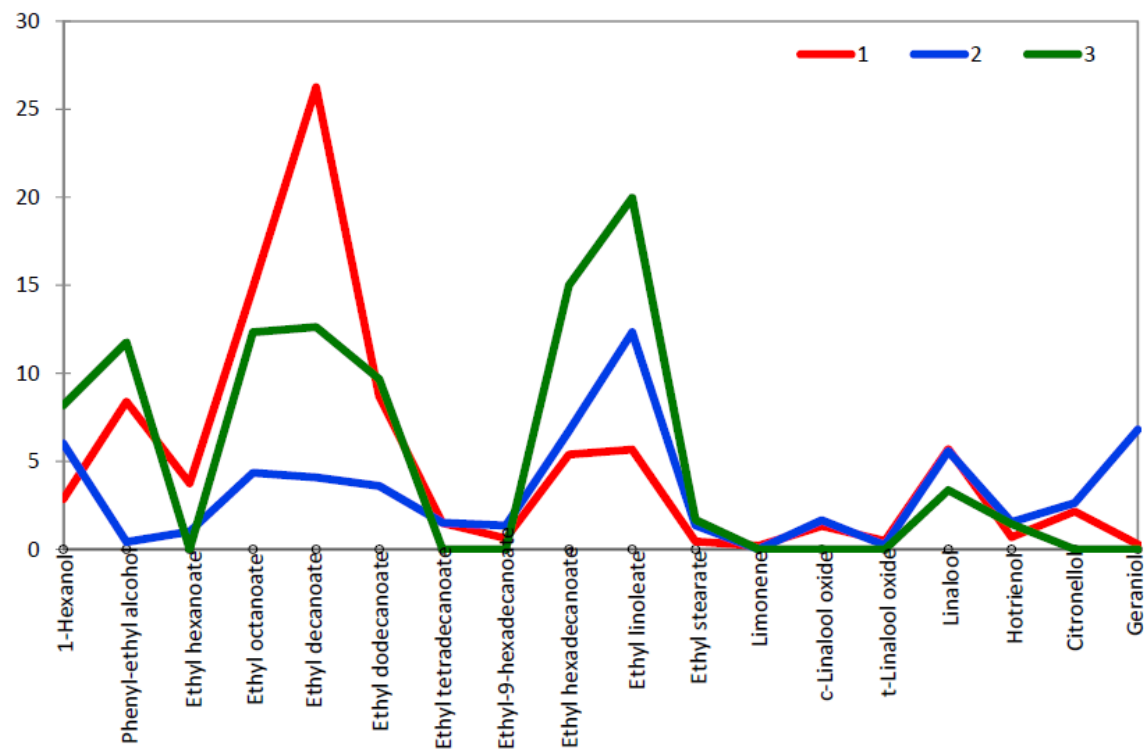


Figure S2. Profile plot showing volatile composition of clusters 1-3 obtained by agglomerative hierarchal clustering analysis of samples without enzyme treatment (control)

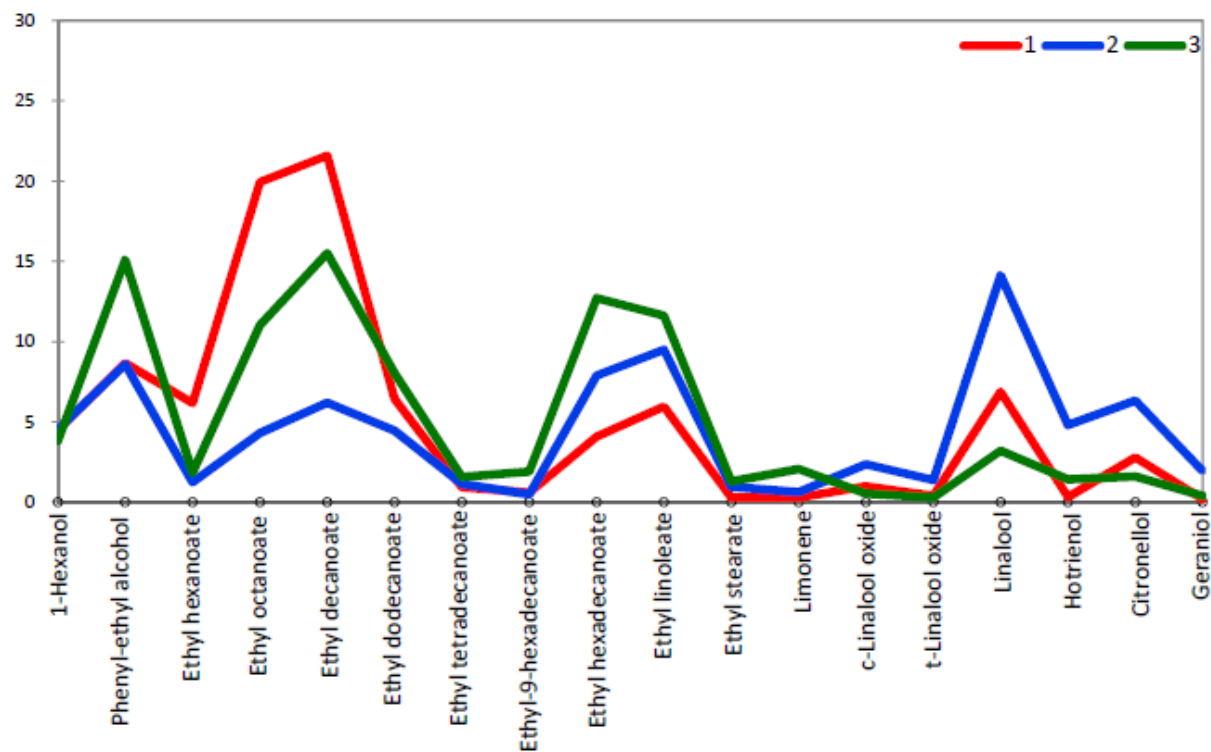


Figure S3. Profile plot showing volatile composition of clusters 1-3 obtained by agglomerative hierarchal clustering analysis of all samples with and without enzyme treatment

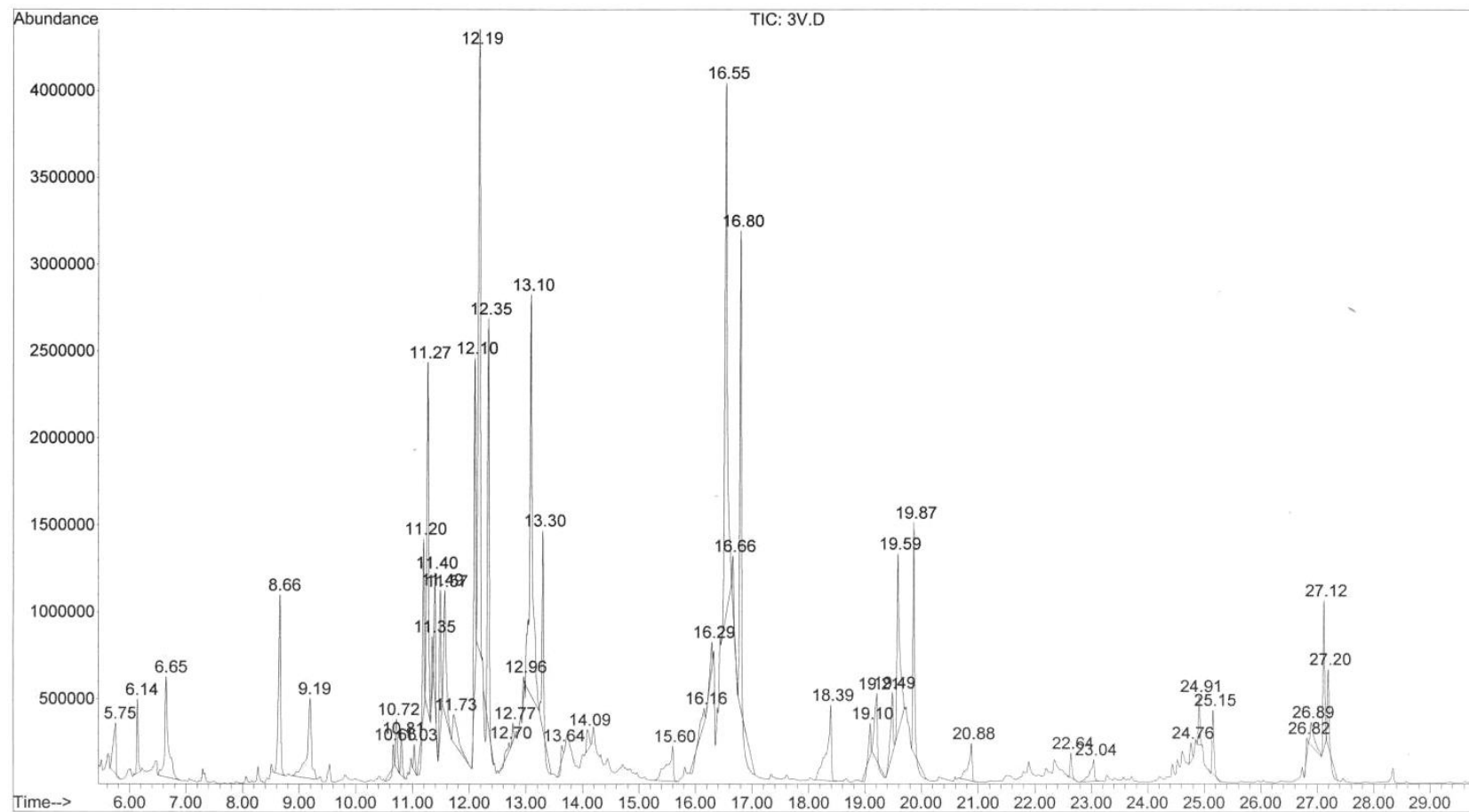


Figure S4. Chromatogram of the volatile aromatic compounds in Early Muscat grape brandy control - EMC

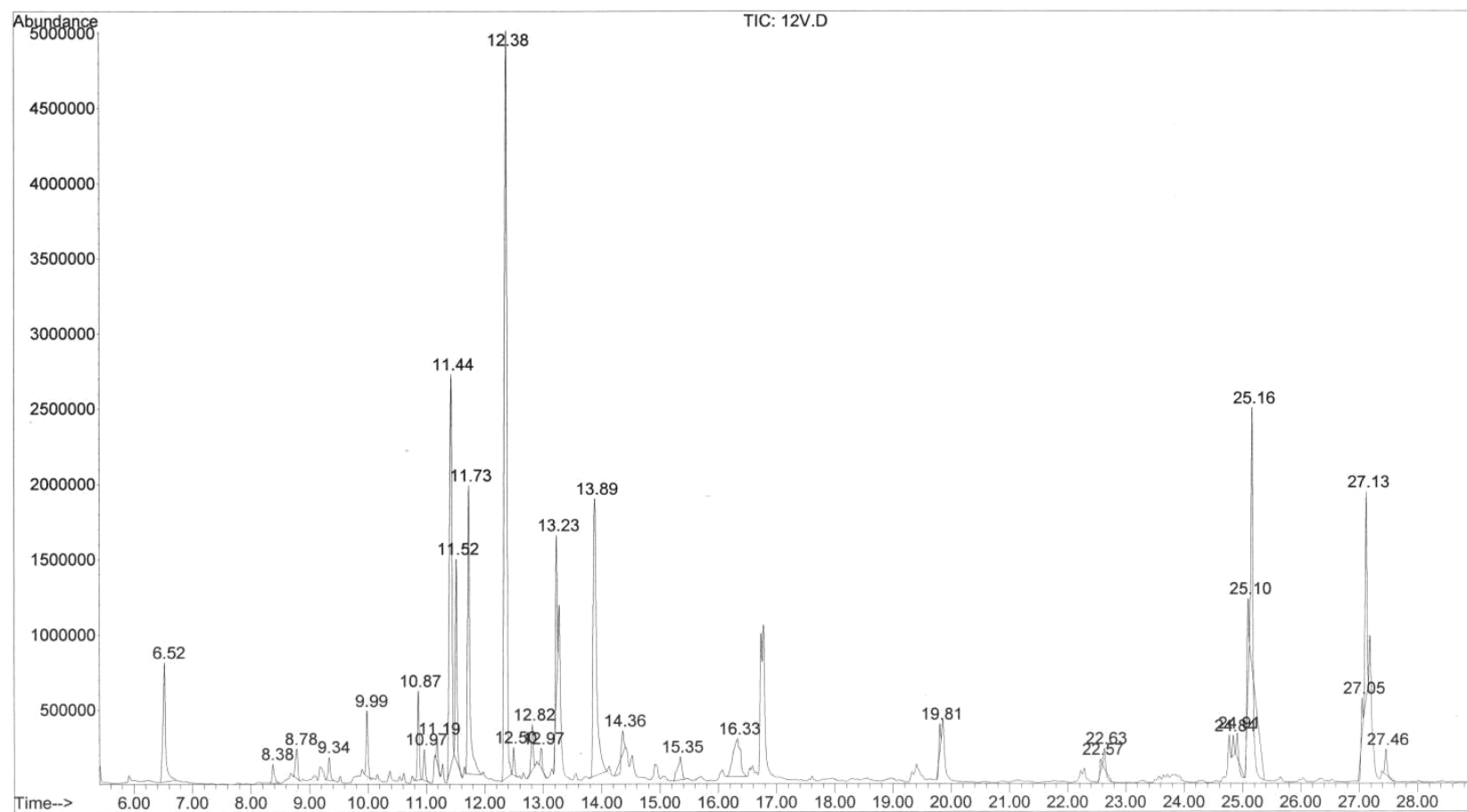


Figure S5. Chromatogram of volatile aromatic compounds in Early Muscat grape brandy with the addition of pectolytic enzyme - EMV1

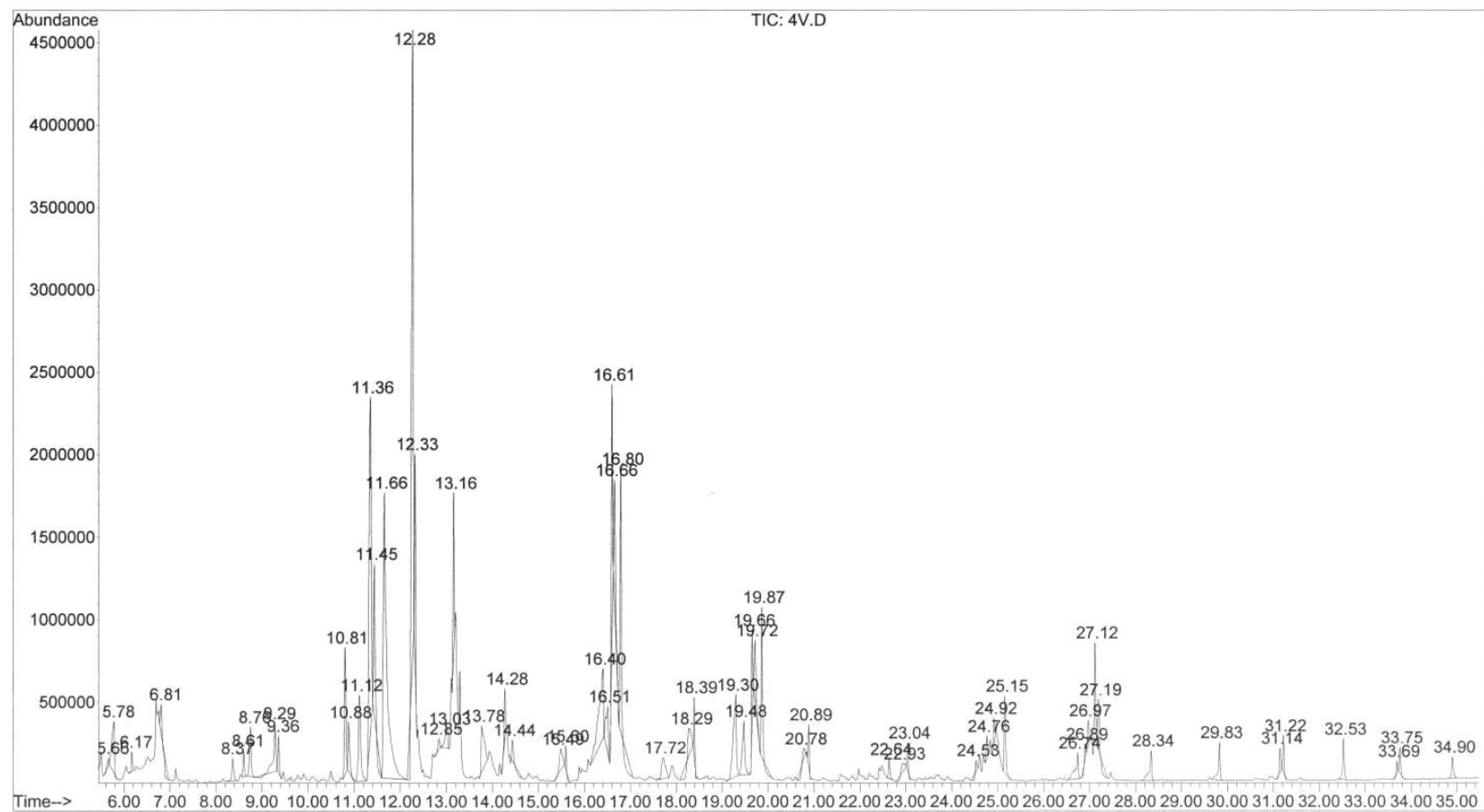


Figure S6. Chromatogram of volatile aromatic compounds in Early Muscat grape brandy with the addition of pectolytic enzyme – EMV2

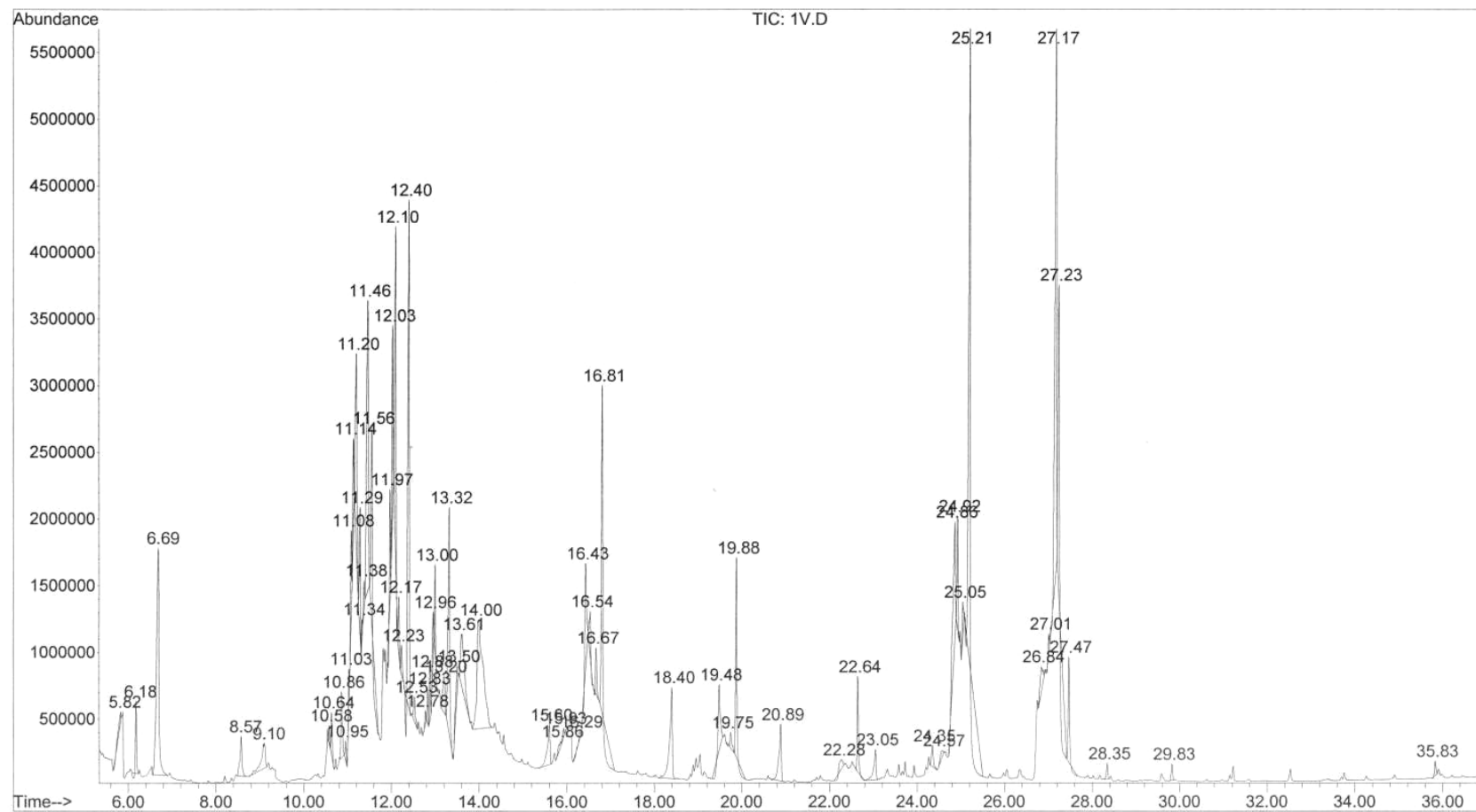


Figure S7. Chromatogram of volatile aromatic compounds in Radmilovac Muscat grape brandy control - RMC

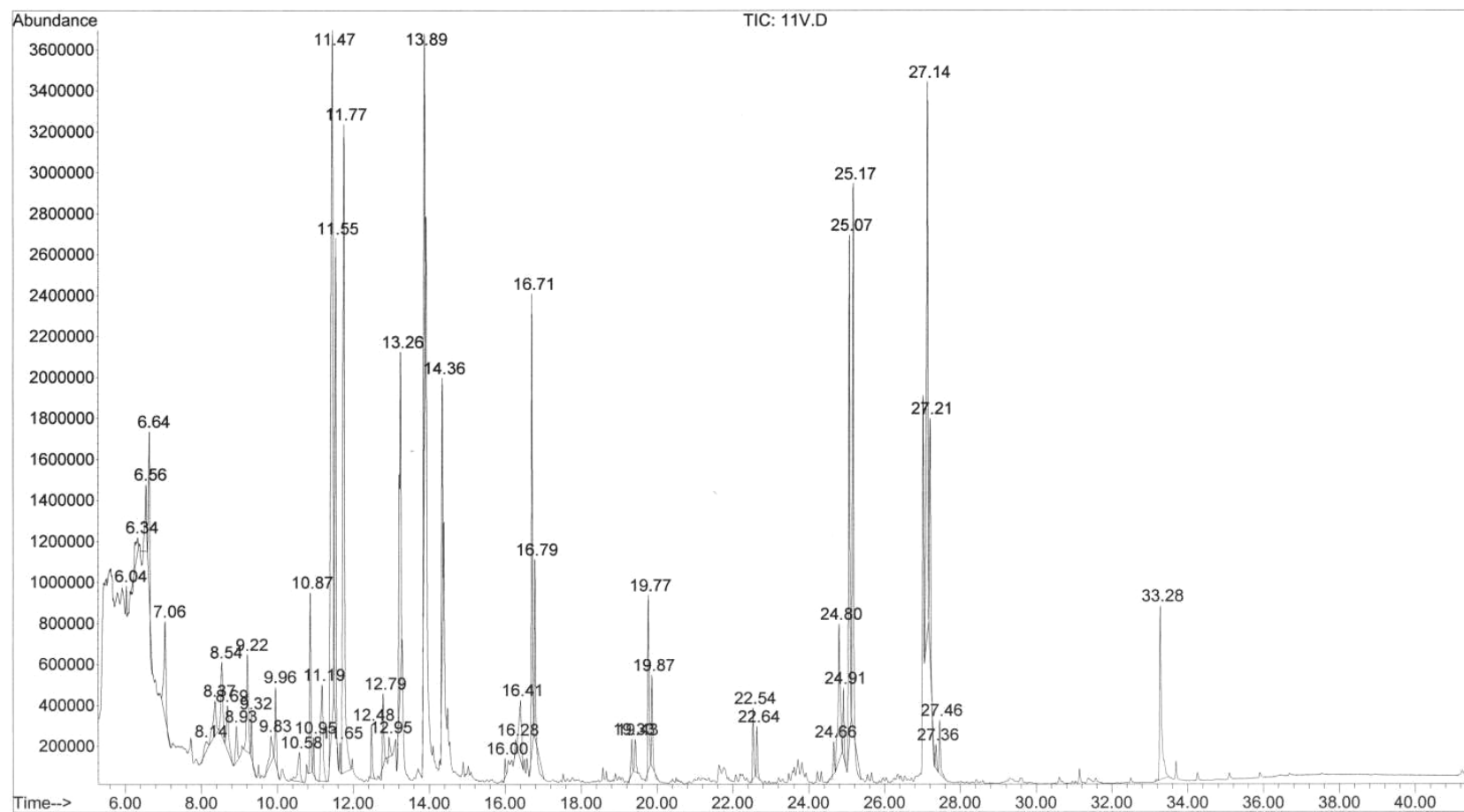


Figure S8. Chromatogram of volatile aromatic compounds in Radmilovac Muscat grape brandy with the addition of pectolytic enzyme - RMV1

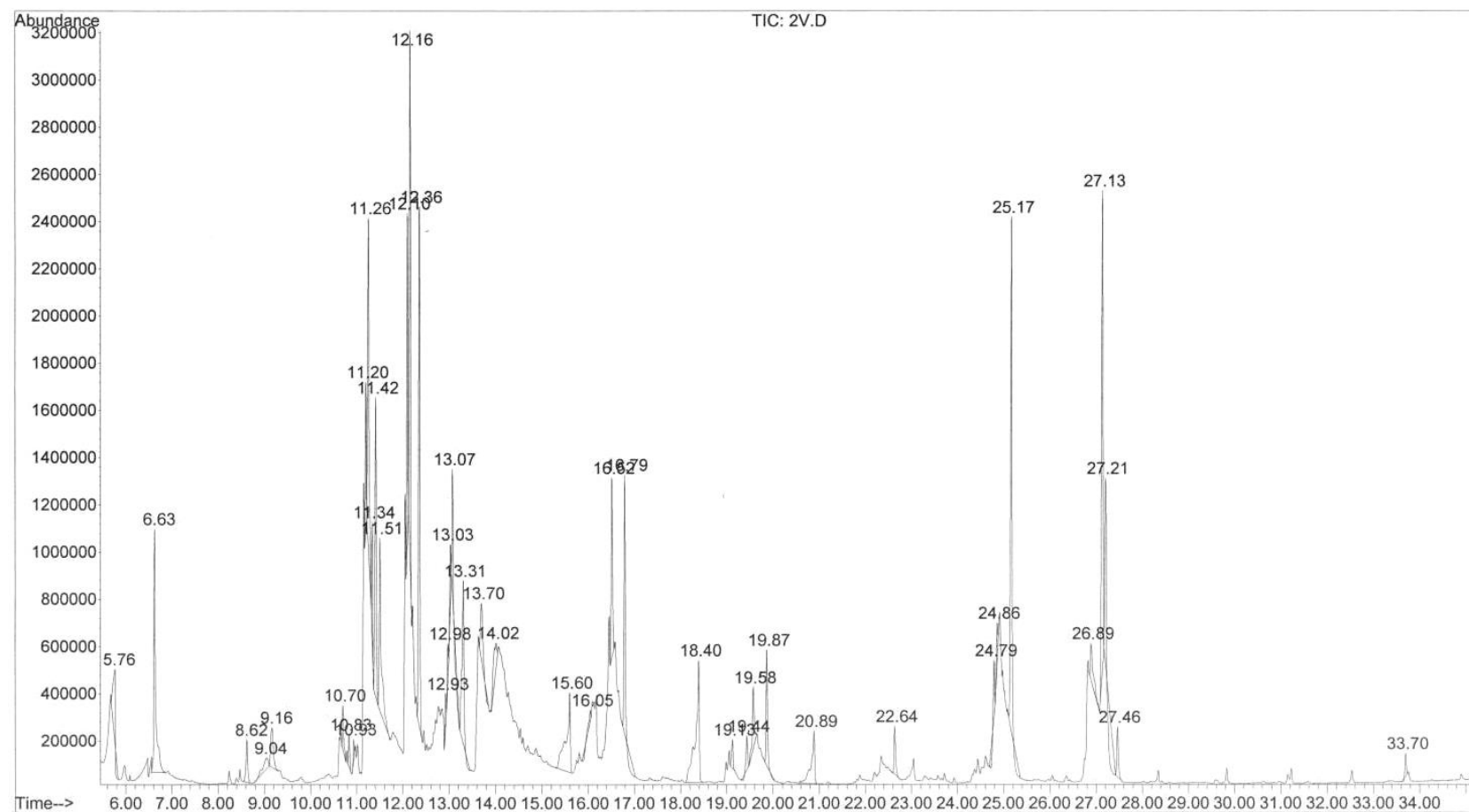


Figure S9. Chromatogram of volatile aromatic compounds in Radmilovac Muscat grape brandy with the addition of pectolytic enzyme – RMV2

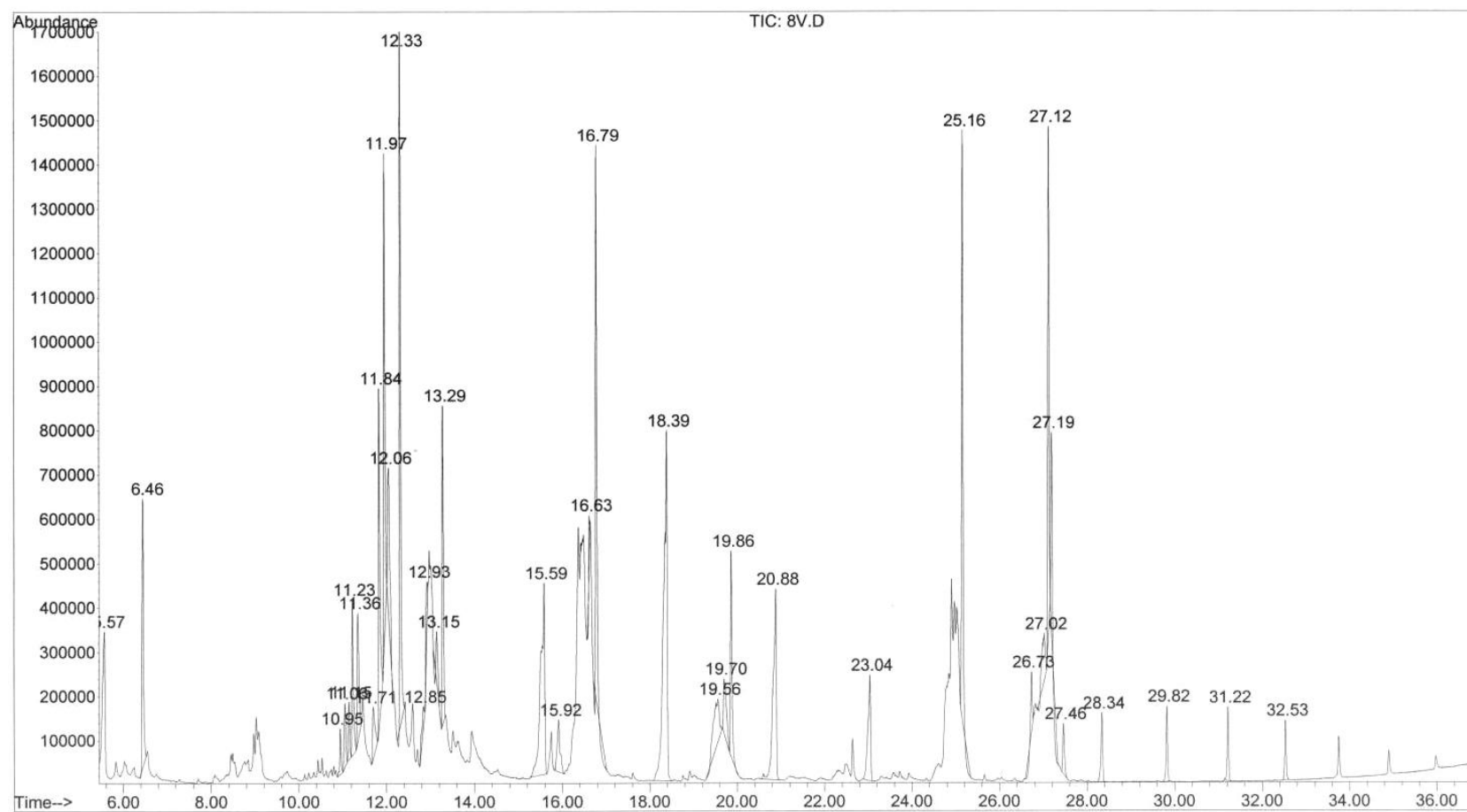


Figure S10. Chromatogram of volatile aromatic compounds in Banat Muscat grape brandy control - BMC

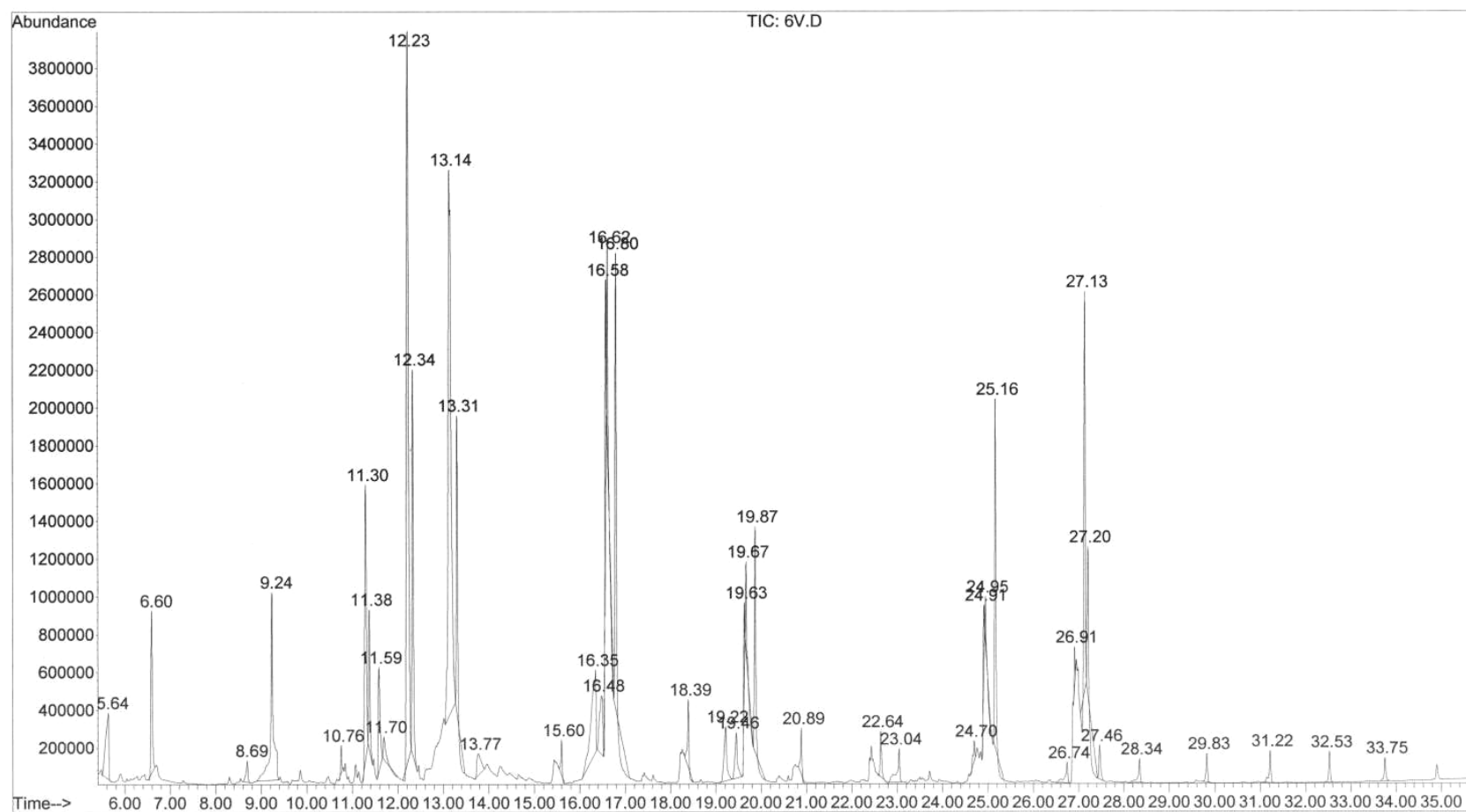


Figure S11. Chromatogram of the volatile aromatic compounds in Banat Muscat grape brandy with the addition of pectolytic enzyme - BMV1

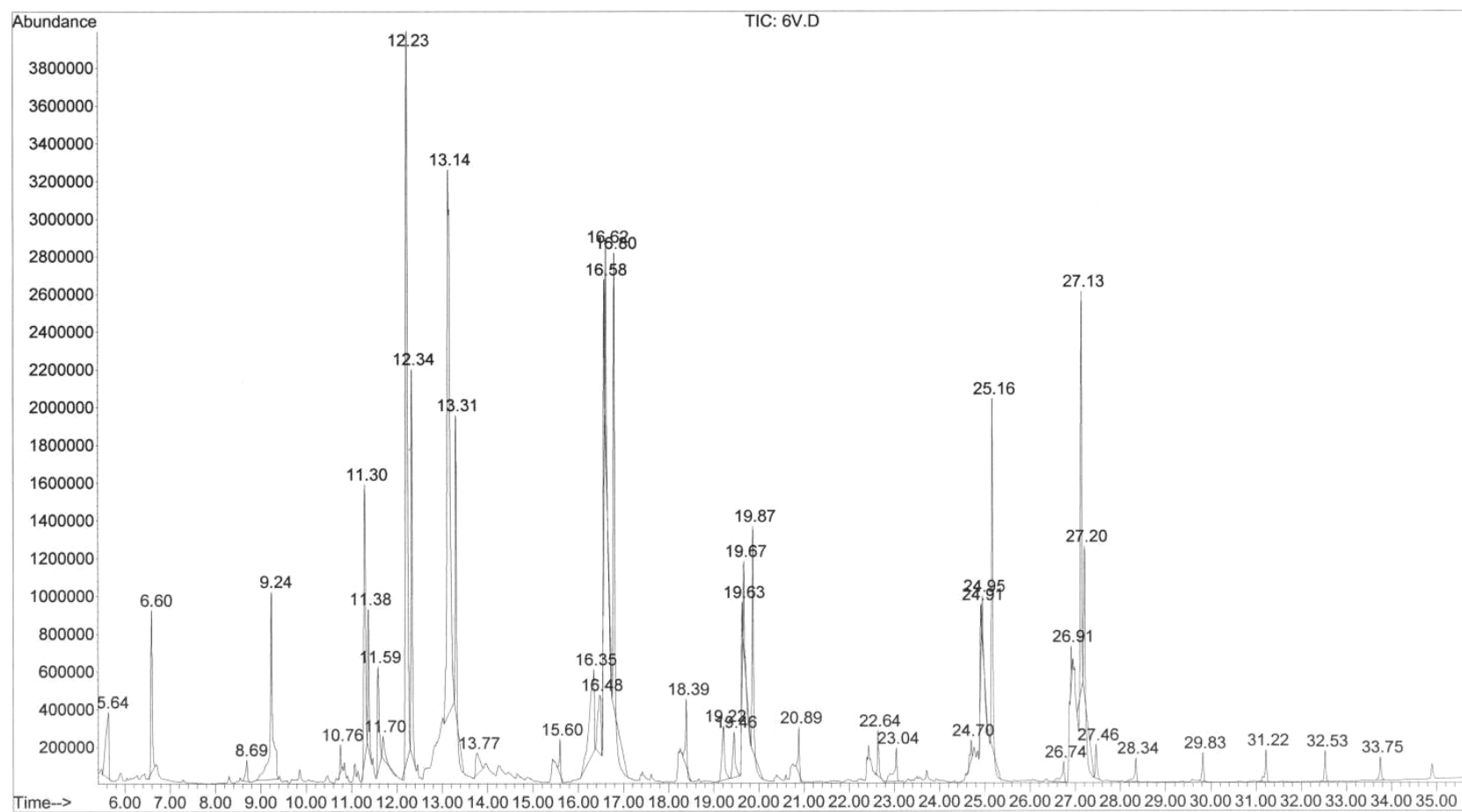


Figure S12. Chromatogram of volatile aromatic compounds in Banat Muscat grape brandy with the addition of pectolytic enzyme – BMV2

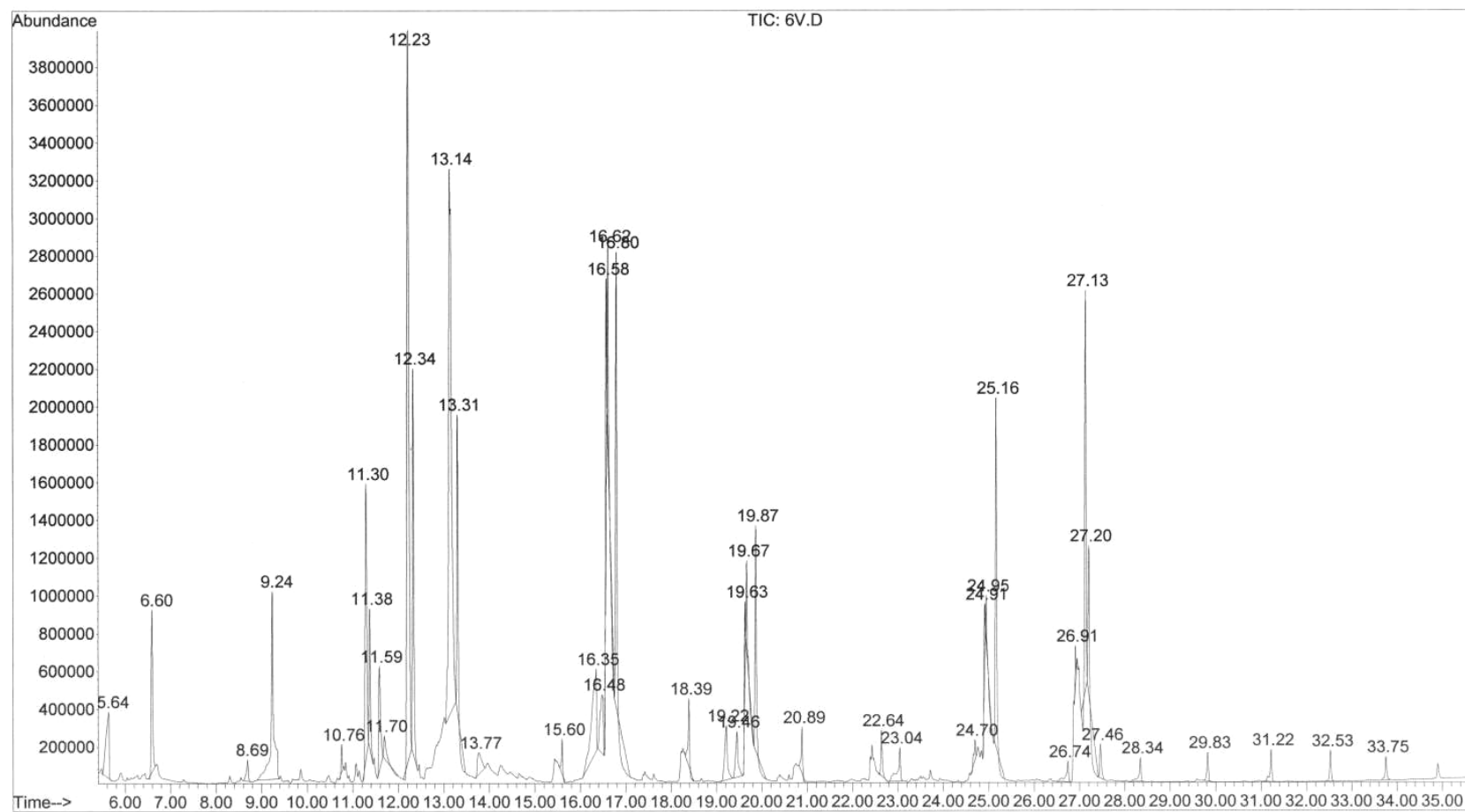


Figure S13. Chromatogram of volatile aromatic compounds in Italia Muscat grape brandy control - IMC

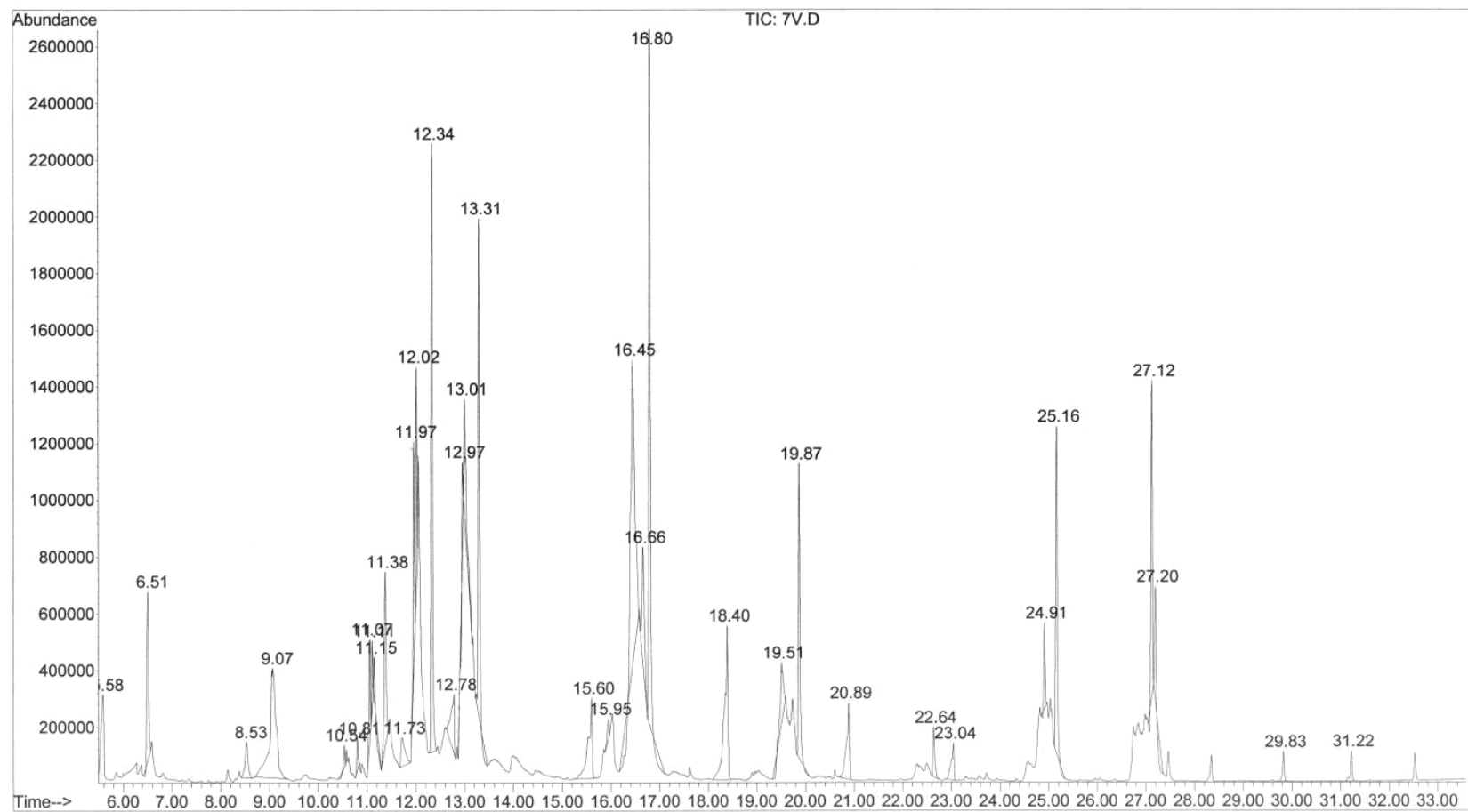


Figure S14. Chromatogram of volatile aromatic compounds in Italia Muscat grape brandy with the addition of pectolytic enzyme – IMV1

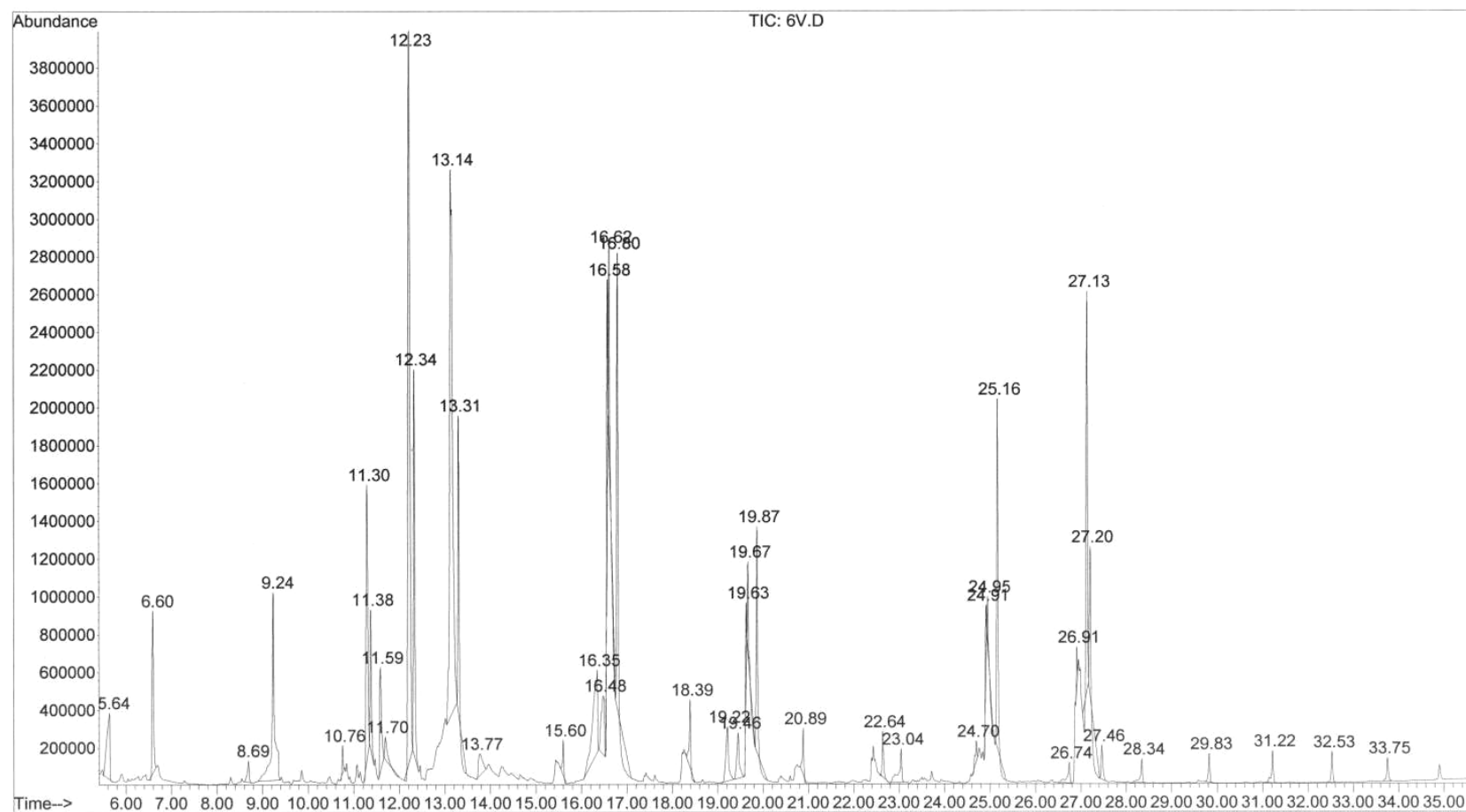


Figure S15. Chromatogram of volatile aromatic compounds in Italia Muscat grape brandy with the addition of pectolytic enzyme – IMV2

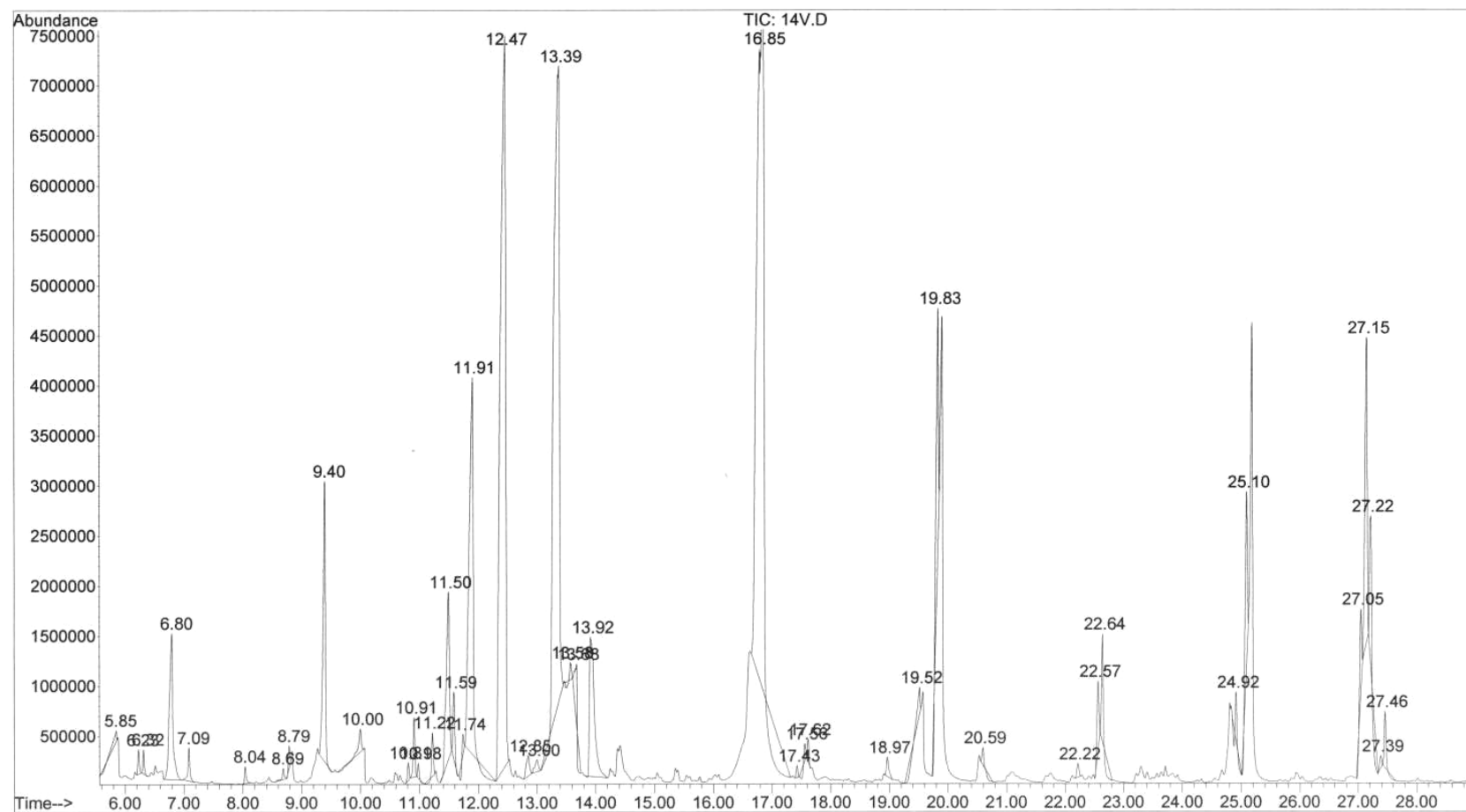


Figure S16. Chromatogram of volatile aromatic compounds in Muscat Hamburg grape brandy control – MHC

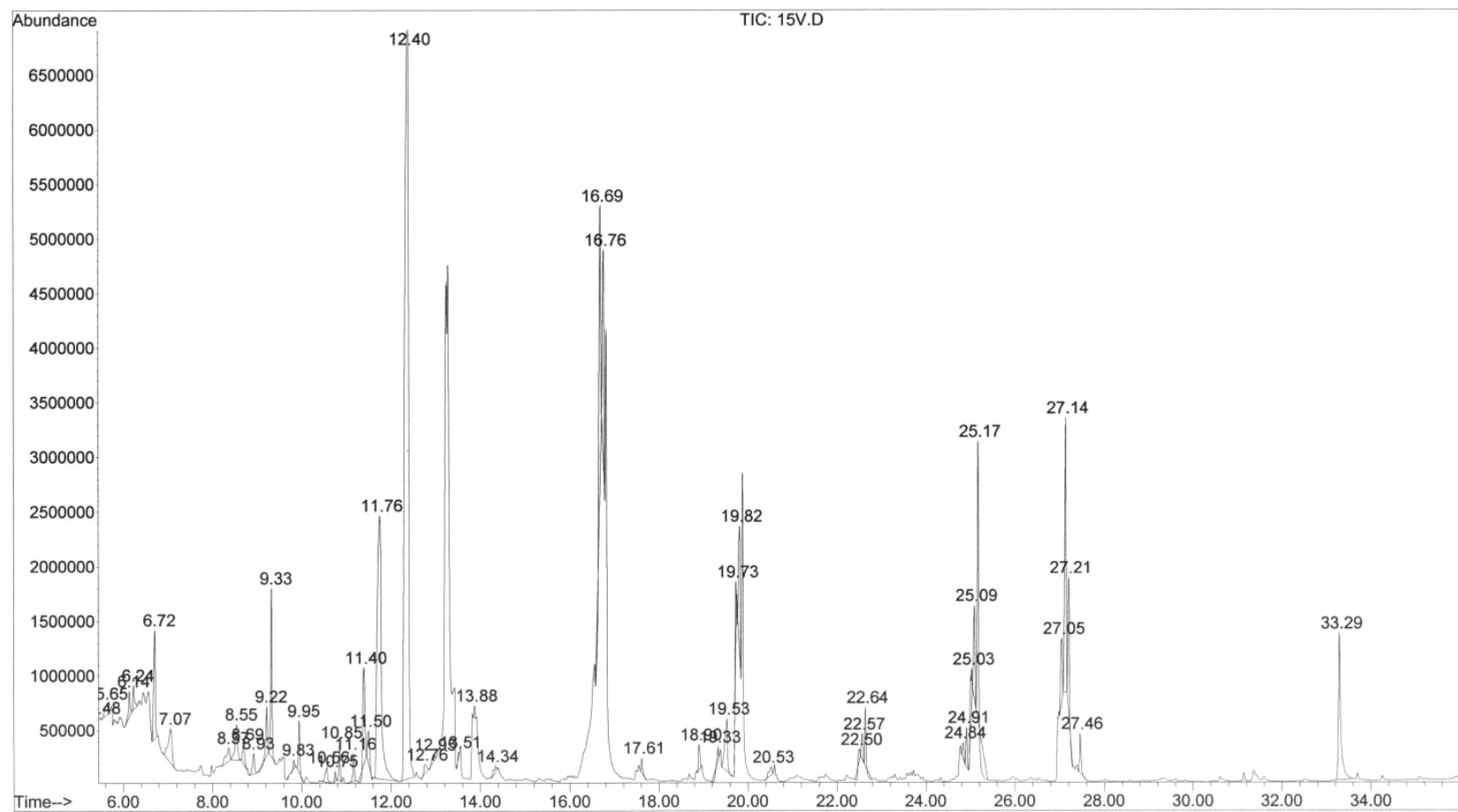


Figure S17. Chromatogram of volatile aromatic compounds in Muscat Hamburg grape brandy with the addition of pectolytic enzyme – MHV1

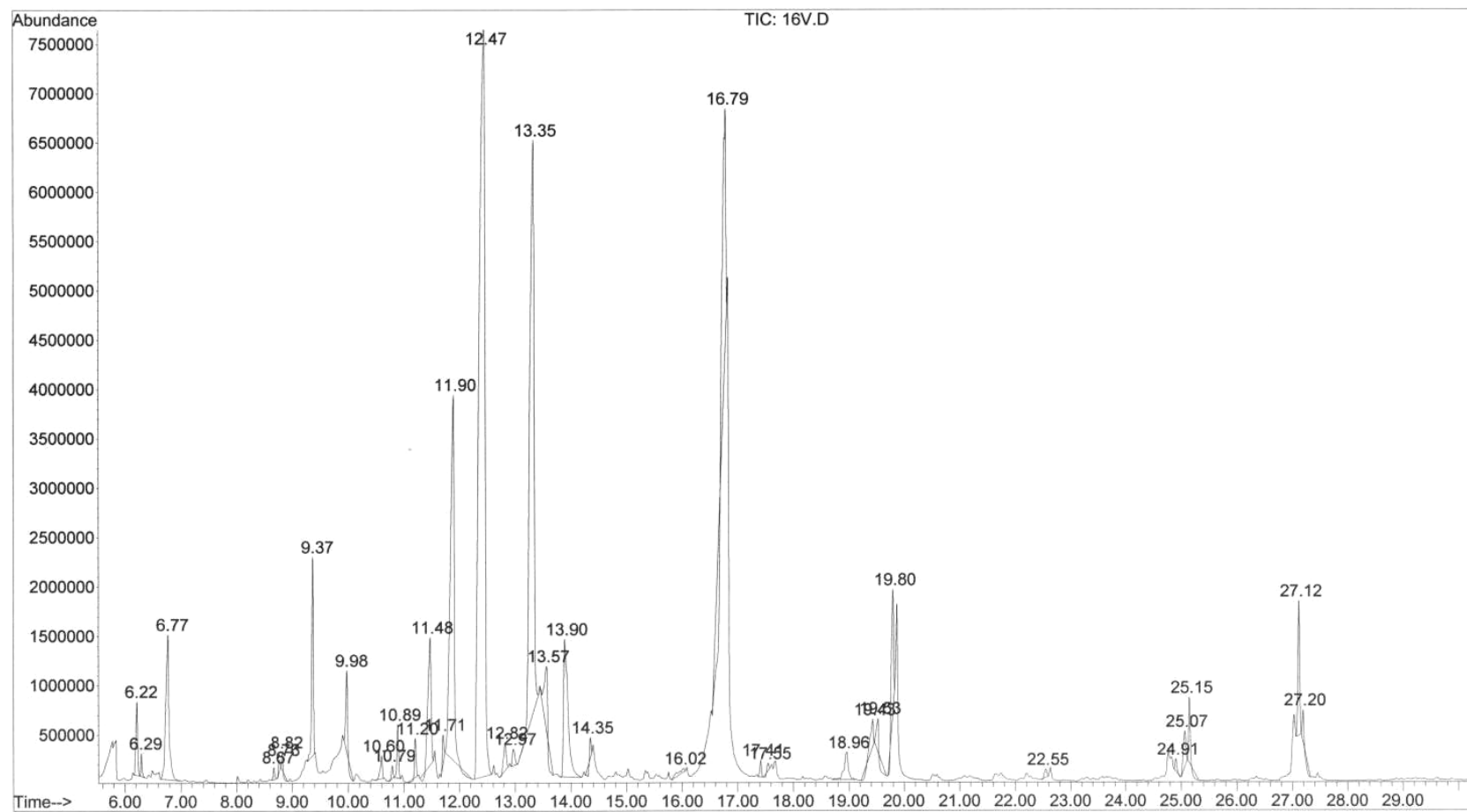


Figure S18. Chromatogram of volatile aromatic compounds in Muscat Hamburg grape brandy with the addition of pectolytic enzyme – MHV2

References

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