**Metabolite changes in *Vitis vinifera* (L.) cv Garganega leaves and berries after 501 biodynamic treatment**

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**Supplementary data**



**Figure A1**. PCA analysis of the dataset related to Paiele leaves samples. P- Paiele; Pool- created mixing equal aliquots of all the samples. C- control; T- treated with 501; 1- sampling date May 10; 2- sampling date May 21.



**Figure A2**. PCA analysis of the dataset related to Roncaje leaves samples. R- Roncaie Pool- created mixing equal aliquots of all the samples. C- control; T- treated with 501; 1- sampling date May 10; 2- sampling date May 21.

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**Figure A3**. PCA of 501-treated leaves compared to control in Paiele vineyard. P- Paiele; C- control; T- treated with 501; 1- sampling date May 10; 2- sampling date May 21. Red ellipsoid groups samples at sampling time 1 and blue ellipsoid samples at sampling time 2.

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##### Figure A4. PCA of 501-treated leaves compared to control in Roncaie vineyard. P- Paiele; C- control; T- treated with 501; 1- sampling date May 10; 2- sampling date May 21. Red ellipsoid groups samples at time sampling 1 and blue ellipsoid samples at time sampling 2.

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##### Figure A5. PCA analysis  of the whole dataset related to Roncaie berries. C- Control; T- treated with 501.

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**Figure A6**. PCA analysis  of the whole dataset related to Paiele berries. C- Control; T- treated with 501.

##### Table A1. Main physical and chemical characteristics of the soil (0–30cm) at the two sites. Data are reported on a dry weight basis.

|  |  |  |
| --- | --- | --- |
|  | Paiele (P) | Roncaie (R)  |
| Clay % | 21.8 | 35.8 |
| Silt % | 16 | 24 |
| Sand % | 62.2 | 40.2 |
| pH | 8.04 | 8.16 |
| Total nitrogen %  | 0.20 | 0.16 |
| Total carbon % | 1.93 | 2.62 |
| Organic carbon % | 1.87 | 1.68 |
| Ca (mg kg-1)  | 8984.23 | 9715.03 |
| K (mg kg-1)  | 735.17 | 466.64 |
| Mg (mg kg-1)  | 2346.81 | 1800.29 |
| Na (mg kg-1)  | 15.74 | 18.78 |

##### Table A2. Sulfur (S), Carbon (C) and Nitrogen (N) content in berries. P- Paiele; R- Roncaie; C- control; T- treated with 501. Data in percent dry weight. Means of n=6 ± st dev.

|  |  |  |  |
| --- | --- | --- | --- |
| sample | S% | C% | N% |
| PCh | 0.189±0.081 | 40.148±0.227 | 0.357±0.066 |
| PTh | 0.203±0.079 | 39.836±0.593 | 0.414±0.175 |
| RCh | 0.141±0.065 | 40.529±0.427 | 0.443±0.083 |
| RTh | 0.163±0.046 | 40.154±0.567 | 0.485±0.059 |