

Supplementary data for article:

Milićević, T.; Relić, D.; Škrivanj, S. B.; Tešić, Ž. L.; Popović, A. R. Assessment of Major and Trace Element Bioavailability in Vineyard Soil Applying Different Single Extraction Procedures and Pseudo-Total Digestion. *Chemosphere* **2017**, *171*, 284–293.

<https://doi.org/10.1016/j.chemosphere.2016.12.090>

Figure S1. The overview of extracted major and trace elements according to pseudo-total digestion

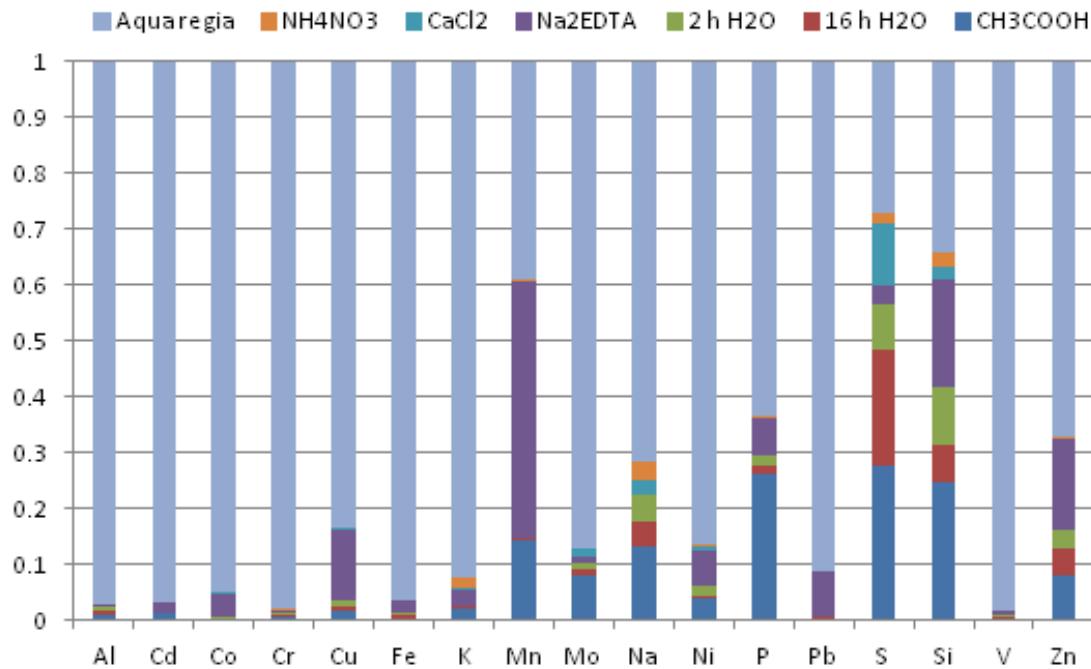


Table S1. Contamination factor and pollution load index of elements in the soil samples

| Soil samples | CF Cd | CF Co | CF Cr | CF Cu | CF Fe | CF Mo | CF Ni | CF Pb | CF V | CF Zn | PLI |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|------|
| T1 | 0.96 | 1.02 | 0.89 | 0.98 | 1.06 | 0.83 | 0.77 | 0.64 | 0.94 | 1.06 | 0.90 |
| T2 | 1.03 | 1.05 | 0.94 | 1.06 | 1.13 | 0.86 | 0.57 | 0.28 | 0.99 | 0.97 | 0.83 |
| T3 | 0.91 | 0.93 | 0.89 | 0.92 | 0.81 | 0.85 | 0.38 | 0.10 | 0.89 | 0.82 | 0.65 |
| T4 | 0.97 | 0.96 | 0.92 | 1.00 | 0.80 | 0.92 | 0.46 | 0.23 | 0.95 | 1.22 | 0.77 |
| T5 | 0.99 | 0.99 | 1.06 | 1.01 | 0.80 | 0.96 | 0.60 | 0.56 | 0.97 | 1.30 | 0.90 |
| T6 | 0.83 | 0.88 | 0.80 | 0.83 | 0.69 | 0.72 | 0.94 | 27.3 | 0.82 | 0.89 | 1.16 |
| T10 | 0.94 | 0.96 | 0.93 | 0.93 | 0.74 | 0.81 | 0.98 | 0.96 | 0.91 | 1.07 | 0.92 |
| P | 0.89 | 0.87 | 0.92 | 0.87 | 0.77 | 0.92 | 0.94 | 0.43 | 0.91 | 0.81 | 0.82 |

Table S2. Geo-accumulation index (I_{geo}) and enrichment factor (EF) of elements in the soil samples

| | I_{geo} | | | | | | | | | |
|-----|------------------|------|------|------|------|------|------------|------------|------|------------|
| | Cd | Co | Cr | Cu | Fe | Mo | Ni | Pb | V | Zn |
| T1 | -0.6 | -0.6 | -0.7 | -0.6 | -0.5 | -0.9 | -1.0 | -1.2 | -0.7 | -0.5 |
| T2 | -0.5 | -0.5 | -0.7 | -0.5 | -0.4 | -0.8 | -1.4 | -2.4 | -0.6 | -0.6 |
| T3 | -0.7 | -0.7 | -0.7 | -0.7 | -0.9 | -0.8 | -2.0 | -3.9 | -0.8 | -0.9 |
| T4 | -0.6 | -0.7 | -0.7 | -0.6 | -0.9 | -0.7 | -1.7 | -2.7 | -0.7 | -0.3 |
| T5 | -0.6 | -0.6 | -0.5 | -0.6 | -0.9 | -0.6 | -1.3 | -1.4 | -0.6 | -0.2 |
| T6 | -0.9 | -0.8 | -0.9 | -0.8 | -1.1 | -1.0 | -0.7 | 4.2 | -0.9 | -0.8 |
| T10 | -0.7 | -0.6 | -0.7 | -0.7 | -1.0 | -0.9 | -0.6 | -0.7 | -0.7 | -0.5 |
| P | -0.8 | -0.8 | -0.7 | -0.8 | -1.0 | -0.7 | -0.7 | -1.8 | -0.7 | -0.9 |
| | EF _{Al} | | | | | | | | | |
| | Cd | Co | Cr | Cu | Fe | Mo | Ni | Pb | V | Zn |
| T1 | 1.0 | 1.1 | 0.9 | 1.0 | 1.1 | 0.9 | 0.8 | 0.7 | 1.0 | 1.1 |
| T2 | 1.0 | 1.0 | 0.9 | 1.0 | 1.1 | 0.8 | 0.6 | 0.3 | 1.0 | 1.0 |
| T3 | 1.1 | 1.2 | 1.1 | 1.2 | 1.0 | 1.1 | 0.5 | 0.1 | 1.1 | 1.0 |
| T4 | 1.3 | 1.3 | 1.2 | 1.3 | 1.1 | 1.2 | 0.6 | 0.3 | 1.3 | 1.6 |
| T5 | 1.1 | 1.1 | 1.1 | 1.1 | 0.9 | 1.0 | 0.7 | 0.6 | 1.1 | 1.4 |
| T6 | 1.3 | 1.4 | 1.3 | 1.3 | 1.1 | 1.2 | 1.5 | 44 | 1.3 | 1.4 |
| T10 | 1.3 | 1.3 | 1.2 | 1.3 | 1.0 | 1.1 | 1.3 | 1.3 | 1.2 | 1.4 |
| P | 1.2 | 1.1 | 1.2 | 1.1 | 1.0 | 1.2 | 1.2 | 0.6 | 1.2 | 1.1 |

Table S3. Bioaccumulation factor of Cu, Ni and Zn in different grapevine parts and species from soil samples

| Grapevine species and parts samples/soil | Cu | Ni | Zn |
|--|-------------|-------------|-------------|
| BF factor grapevine parts/T2 | | | |
| Riesling Rain seed (*RRSE)/soil | * | * | * |
| Burgundac seed (*BSE)/soil | * | * | * |
| Burgundac pulp (*BP)/soil | * | * | * |
| Riesling Rain skin (*RRS)/soil | * | * | * |
| Burgundac skin (*BS)/soil | * | * | * |
| Riesling Rain leaf (*RRL)/soil | 1.19 | * | 1.77 |
| Burgundac leaf (*BL)/soil | 1.02 | * | * |
| BF factor grapevine parts/T3 | | | |
| Cabernet Sauvignon seed (*CSSE)/soil | * | * | * |
| Cabernet Sauvignon pulp (*CSP)/soil | * | * | * |
| Cabernet Sauvignon skin (*CSS)/soil | * | * | * |
| Cabernet Sauvignon leaf (*CSL)/soil | * | * | 1.36 |
| Riesling Italian leaf (*RIL)/soil | 1.66 | * | 1.66 |
| BF factor grapevine parts/T4 | | | |
| Prokupac seed (*PSE)/soil | * | * | * |
| Cabernet Sauvignon seed (*CSSE)/soil | * | * | * |
| Cabernet Sauvignon pulp (*CSP)/soil | * | * | * |
| Prokupac skin (*PS)/soil | * | 4.89 | * |
| Cabernet Sauvignon skin (*CSS)/soil | * | * | * |
| Prokupac leaf (*PL)/soil | * | * | * |
| Cabernet Sauvignon leaf (*CSL)/soil | * | * | * |
| BF factor grapevine parts/T6 | | | |
| Cabernet Franc seed (*CSSE)/soil | * | * | * |
| Cabernet Franc skin (*CFS)/soil | * | * | * |
| Cabernet Franc leaf (*CFL)/soil | * | * | 1.66 |
| BF factor grapevine parts/T10 | | | |
| Cabernet Franc seed (*CSSE)/soil | * | * | * |
| Merlot seed (*MSE)/soil | * | * | * |
| Cabernet Franc skin (*CFS)/soil | * | * | * |
| Merlot skin (*MS)/soil | * | * | * |
| Cabernet Franc leaf (*CFL)/soil | * | * | 1.38 |
| Merlot leaf (*ML)/soil | * | * | * |
| BF factor grapevine parts/P | | | |
| Cabernet Franc seed (*CSSE)/soil | * | * | * |
| Cabernet Franc skin (*CFS)/soil | * | * | * |
| Cabernet Franc leaf (*CFL)/soil | * | * | 1.82 |

*calculated values lower than 1