Figure S1: Principal component analysis (PCA) loading plot along PC1 of shoot ionome of hemp plants grown hydroponically in four different growth conditions: control (C = 1.2 mM sulfate and 0.2 μM CuSO4); sulfate treatment (ES = 2.4 mM sulfate and 0.2 μM CuSO4); excess Cu (+Cu = 1.2 mM sulfate and 20 μM CuSO4); excess Cu and sulfate treatment (ES+Cu = 2.4 mM sulfate and 20 μM CuSO4).
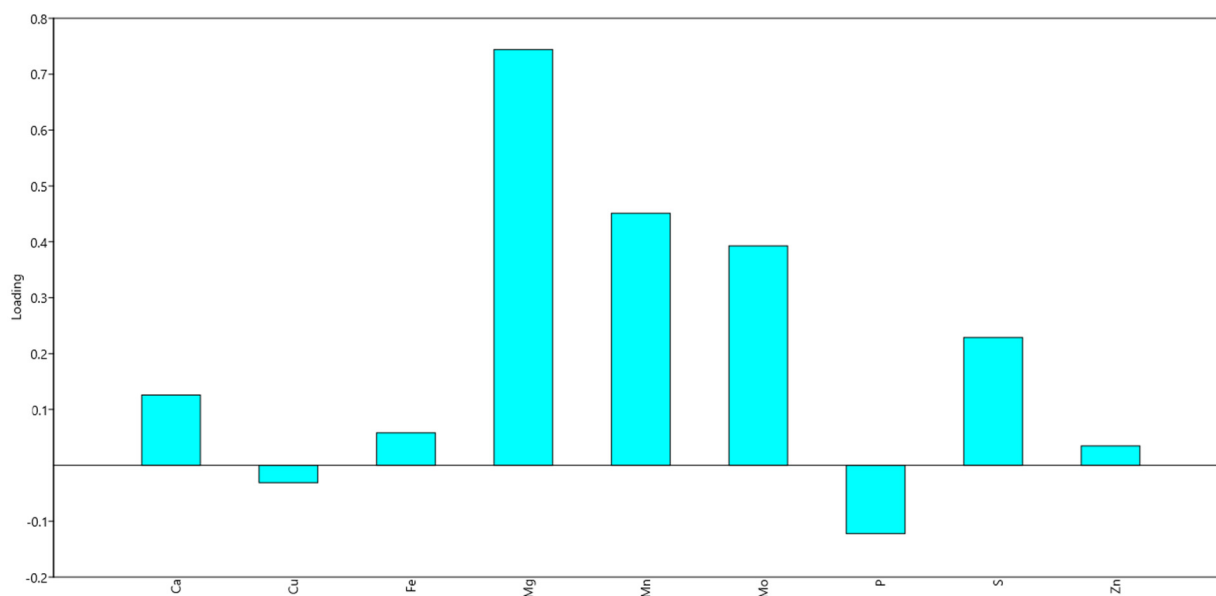
Figure S2: Principal component analysis (PCA) loading plot along PC2 of shoot ionome of hemp plants grown hydroponically in four different growth conditions: control (C = 1.2 mM sulfate and 0.2 µM CuSO₄); sulfate treatment (ES = 2.4 mM sulfate and 0.2 µM CuSO₄); excess Cu (+Cu = 1.2 mM sulfate and 20 µM CuSO₄); excess Cu and sulfate treatment (ES+Cu = 2.4 mM sulfate and 20 µM CuSO₄).
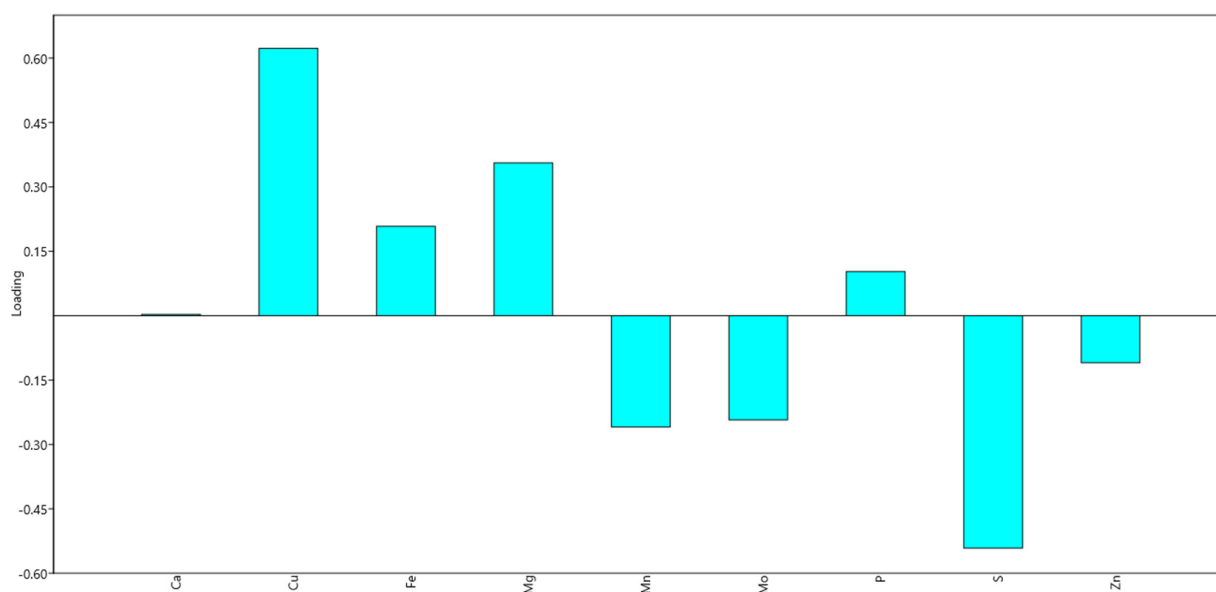
Figure S3: Principal component analysis (PCA) loading plot along PC1 of root ionome of hemp plants grown hydroponically in four different growth conditions: control (C = 1.2 mM sulfate and 0.2 μM CuSO$_4$); sulfate treatment (ES = 2.4 mM sulfate and 0.2 μM CuSO$_4$); excess Cu (+Cu = 1.2 mM sulfate and 20 μM CuSO$_4$); excess Cu and sulfate treatment (ES+Cu = 2.4 mM sulfate and 20 μM CuSO$_4$).
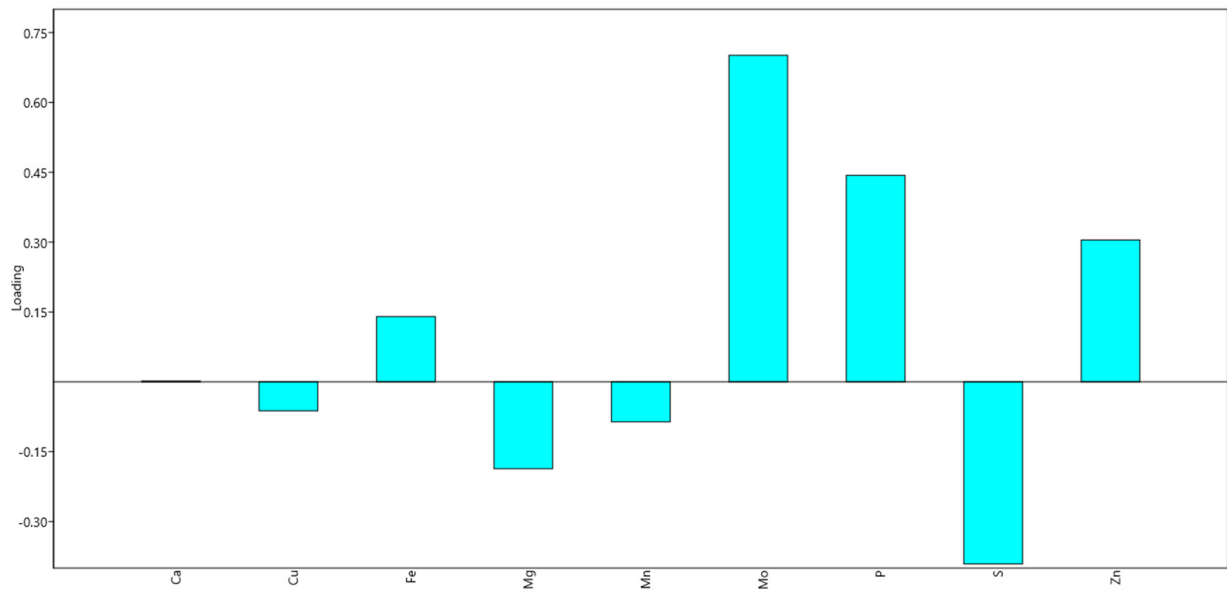
Figure S4: Principal component analysis (PCA) loading plot along PC2 of root ionome of hemp plants grown hydroponically in four different growth conditions: control (C = 1.2 mM sulfate and 0.2 μM CuSO$_4$); sulfate treatment (ES = 2.4 mM sulfate and 0.2 μM CuSO$_4$); excess Cu (+Cu = 1.2 mM sulfate and 20 μM CuSO$_4$); excess Cu and sulfate treatment (ES+Cu = 2.4 mM sulfate and 20 μM CuSO$_4$).