

Figure S1. (a) Pre-sowing concentration of soluble Ni ($\mu\text{g L}^{-1}$) in lime within boxes 1-4; (b) Pre-sowing concentration of bioavailable Ni ($\mu\text{g Kg}^{-1}$) in lime within boxes 1-4. Number in the x-axis refer to the four boxes. Dunn's Kruskal-Wallis multiple comparisons (Benjamini-Hochberg p-value adjustment, α -level=0.05).

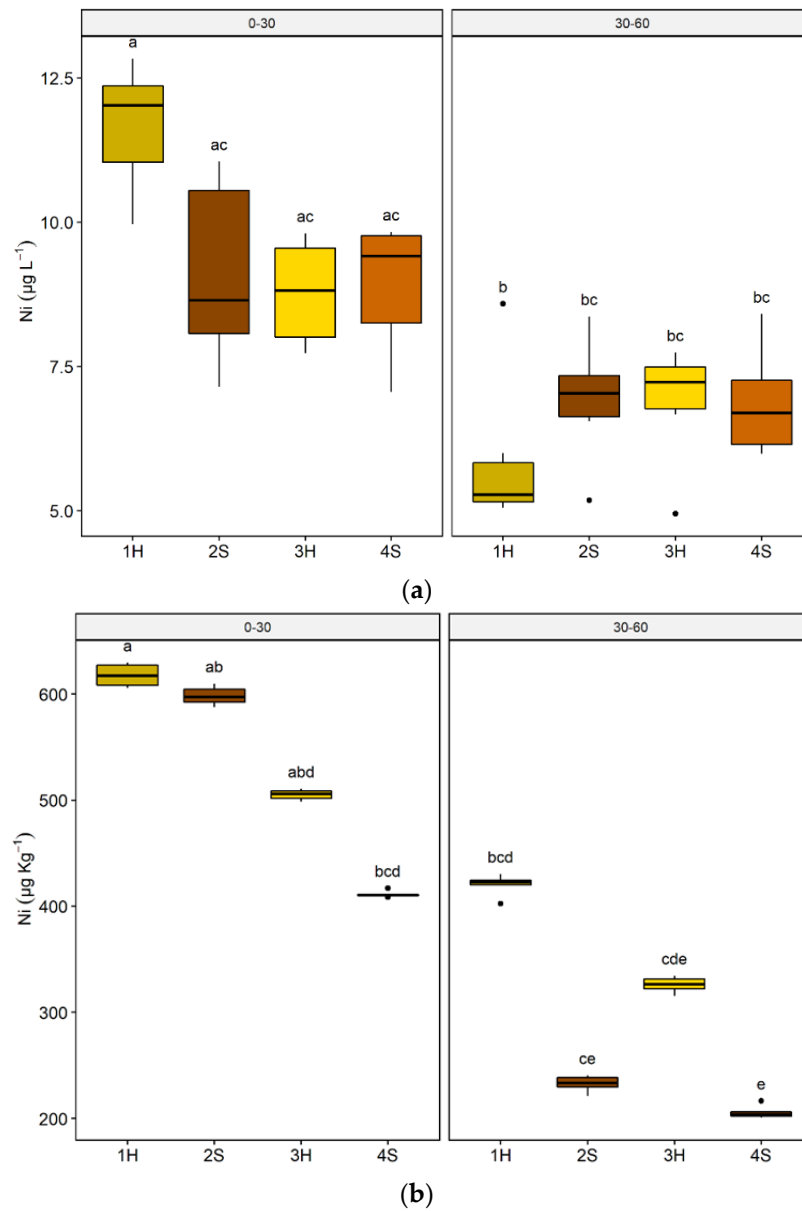


Figure S2. (a) Post-harvest concentration of soluble Ni ($\mu\text{g L}^{-1}$) in lime within boxes 1-4. (b) Post-harvest concentration of bioavailable Ni ($\mu\text{g Kg}^{-1}$) in lime within boxes 1-4. Box 1 and 3 after *Helianthus annuus* (1H, 3H); box 2 and 4 after *Sorghum vulgare* (2S, 4S). Ni concentration was grouped by depth of sampling (0-30 cm, 30-60 cm). Dunn's Kruskal-Wallis multiple comparisons (Benjamini-Hochberg p-value adjustment, α -level=0.05) was performed using data from both sampling depths.

Table S1. Dry weight (g) of biomass per plant in the greenhouse experiment (reported values are mean \pm standard deviation).

| Trial | Hypogeal | Epigeal |
|-------|-----------------|------------------|
| B | 4.52 \pm 0.64 | 15.16 \pm 0.87 |
| B+ | 4.40 \pm 0.81 | 14.71 \pm 1.22 |
| BC | 4.50 \pm 0.80 | 14.58 \pm 1.07 |
| S | 0.79 \pm 0.11 | 5.91 \pm 0.39 |
| S+ | 0.37 \pm 0.10 | 4.73 \pm 0.51 |
| SC | 0.56 \pm 0.14 | 5.97 \pm 0.49 |

Table S2. Dry weight (g) of biomass per plant in the outdoor experiment (reported values are mean \pm standard deviation).

| Box | Root | Stem | Leaf | Infructescence |
|-----|------------------|------------------|------------------|------------------|
| 1H | 22.37 \pm 2.38 | 81.16 \pm 3.89 | 27.30 \pm 2.77 | 33.58 \pm 2.51 |
| 3H | 27.21 \pm 2.19 | 87.66 \pm 3.27 | 44.50 \pm 3.72 | 37.00 \pm 2.27 |
| H | 27.09 \pm 1.89 | 88.43 \pm 2.32 | 41.17 \pm 1.67 | 37.00 \pm 3.53 |
| 2S | 14.59 \pm 1.19 | 38.86 \pm 1.87 | 20.76 \pm 1.50 | 13.98 \pm 2.13 |
| 4S | 16.98 \pm 2.00 | 39.54 \pm 1.46 | 21.60 \pm 2.20 | 14.19 \pm 2.43 |
| S | 15.66 \pm 2.20 | 37.32 \pm 2.66 | 21.75 \pm 2.87 | 14.13 \pm 3.00 |