**Table S1.** Total heavy metal uptake\* (mg kg-1) in shoot (sum of three harvests) and root parts of palmarosa.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Treatments | Cd | | Total uptake | Cr | | Total uptake | Ni | | Total uptake | Pb | | Total uptake |
| Shoot | Root | Shoot | Root | Shoot | Root | Shoot | Root |
| 100s:0ss | 0.001 | 0.0003 | 0.00 | 0.035 | 0.00 | 0.04 | 0.031 | 0.001 | 0.03 | 0.469 | 0.01 | 0.48 |
| 80s:20ss | 0.377 | 0.0088 | 0.39 | 0.577 | 0.02 | 0.59 | 0.782 | 0.016 | 0.80 | 7.799 | 0.16 | 7.96 |
| 60s:40ss | 0.701 | 0.0159 | 0.72 | 1.805 | 0.07 | 1.88 | 2.882 | 0.064 | 2.95 | 19.302 | 0.44 | 19.74 |
| 40s:60ss | 1.448 | 0.0389 | 1.49 | 5.255 | 0.19 | 5.45 | 5.424 | 0.246 | 5.67 | 43.094 | 1.64 | 44.74 |
| 20s:80ss | 3.137 | 0.0798 | 3.22 | 8.739 | 0.28 | 9.02 | 8.544 | 0.483 | 9.03 | 73.455 | 2.67 | 76.12 |
| 0s:100ss | 6.701 | 0.1590 | 6.86 | 15.92 | 0.53 | 16.45 | 13.659 | 0.779 | 14.44 | 133.93 | 4.95 | 138.88 |

\*Dry weight basis

**Table S2.** Total micronutrient uptake\* (mg kg-1) in in shoot (sum of three harvests) and root parts of palmarosa.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Treatments | Fe | | Total uptake | Zn | | Total uptake | Cu | | Total uptake | Mn | | Total uptake |
| Shoot | Root | Shoot | Root | Shoot | Root | Shoot | Root |
| 100s:0ss | 72.84 | 0.62 | 78.42 | 4.20 | 0.04 | 4.24 | 3.95 | 0.022 | 3.97 | 14.15 | 0.189 | 14.34 |
| 80s:20ss | 143.77 | 1.84 | 161.05 | 67.29 | 0.53 | 67.82 | 11.72 | 0.163 | 11.9 | 33.01 | 0.613 | 33.62 |
| 60s:40ss | 235.21 | 3.62 | 266.79 | 107.28 | 1.10 | 108.38 | 31.66 | 0.465 | 32.1 | 57.02 | 0.920 | 57.94 |
| 40s:60ss | 409.16 | 8.03 | 501.34 | 178.29 | 2.60 | 180.89 | 70.99 | 1.271 | 72.3 | 96.85 | 2.117 | 98.96 |
| 20s:80ss | 591.95 | 11.61 | 722.28 | 324.72 | 4.78 | 329.50 | 132.38 | 1.941 | 134.3 | 133.90 | 3.545 | 137.44 |
| 0s:100ss | 740.30 | 17.56 | 946.53 | 505.87 | 12.04 | 517.90 | 185.59 | 2.984 | 188.6 | 183.44 | 6.649 | 190.09 |

\*Dry weight basis

**Table S3.** Pearson’s correlation coefficient among, metal uptake in shoot and essential oil constituents.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Analysed parameter | Cd | Cr | Ni | Pb | Fe | Zn | Cu | Mn | Genaniol | Geranyl acetate | Linalool | β-Caryophyllene |
| Cd | 1.00 | 0.93\*\* | 0.90\*\* | 0.93\*\* | 0.85\*\* | 0.91\*\* | 0.86\*\* | 0.86\*\* | -0.40\* | 0.46\* | -0.29 | 0.03 |
| Cr |  | 1.00 | 0.99\*\* | 0.99\*\* | 0.97\*\* | 0.99\*\* | 0.98\*\* | 0.97\*\* | -0.58\*\* | 0.65\*\* | -0.40\* | -0.07 |
| Ni |  |  | 1.00 | 0.99\*\* | 0.99\*\* | 0.99\*\* | 0.99\*\* | 0.99\*\* | -0.64\*\* | 0.72\*\* | -0.46\* | -0.15 |
| Pb |  |  |  | 1.00 | 0.97\*\* | 0.99\*\* | 0.98\*\* | 0.98\*\* | -0.56\*\* | 0.65\*\* | -0.41\* | -0.08 |
| Fe |  |  |  |  | 1.00 | 0.98\*\* | 0.99\*\* | 0.99\*\* | -0.69\*\* | 0.77\*\* | -0.47\* | -0.21 |
| Zn |  |  |  |  |  | 1.00 | 0.99\*\* | 0.98\*\* | -0.60\*\* | 0.71\*\* | -0.46\* | -0.16 |
| Cu |  |  |  |  |  |  | 1.00 | 0.98\*\* | -0.61\*\* | 0.71\*\* | -0.42\* | -0.13 |
| Mn |  |  |  |  |  |  |  | 1.00 | -0.68\*\* | 0.78\*\* | -0.48\* | -0.22 |
| Genaniol |  |  |  |  |  |  |  |  | 1.00 | -0.87\*\* | 0.64\*\* | 0.55\*\* |
| Geranyl acetate |  |  |  |  |  |  |  |  |  | 1.00 | -0.68\*\* | -0.67\*\* |
| Linalool |  |  |  |  |  |  |  |  |  |  | 1.00 | 0.50\* |
| β-caryophyllene |  |  |  |  |  |  |  |  |  |  |  | 1.00 |

\*\*Correlation is significant at the 0.01 level (2-tailed); \*Correlation is significant at the 0.05 level (2-tailed).