Appendix 2. – Metal concentration (mg/kg) in leaves of the most abundant perennial species from the central Nacozari tailings deposit. Means ± standard deviation are given.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Element** | **Plant species** | | | | | **Maximum Tolerable**  **Level for Animals2**  (NRC, 2005) |
| *Baccharis sarothroides* | *Gnaphalium leucocephalum* | *Brickellia coulteri* | *Acacia farnesiana* | *Prosopis velutina* |
| Ca | 17260± 7653 | 17029± 2957 | 21552± 2577 | 25795± 12737 | 49225 ± 13333 | 0.9 – 2% dry mass |
| Cu | 71.43± 15.0 | 279.49± 91.96 | 60.04± 13.64 | 124.33± 28.94 | 208.50± 48.73 | 15 – 500 mg/kg |
| Fe | 178.47±69.04 | 4456 ± 1440 | 429.76± 270.88 | 1148± 1182 | 1708±442 | 500 – 3000 mg/kg |
| K | 44976± 14042 | 73824± 6073 | 53581± 7377 | 24631± 4563 | 21899± 10608 | 1-2% dry mass |
| Mn | <BDL1 | 857.9± 550.4 | 320.17± 180.03 | <BDL | <BDL | 400 – 2000 mg/kg |
| Mo | 11.11± 0.83 | 17.41± 1.15 | 10.76± 0.95 | 13.88± 1.47 | 14.29±1.32 | 5 – 150 mg/kg |
| Rb | 59.23± 22.23 | 80.28± 35.13 | 51.51± 19.13 | 53.77± 7.16 | 47.30±12.59 | 200 mg/kg |
| Sr | 52.47± 35.72 | 54.13± 13.96 | 50.50± 18.34 | 80.32± 68.97 | 194.9±135.7 | 1000-2000 mg/kg |
| Zn | 277.2 ± 209.1 | 807.1 ±460.1 | 258.49± 157.72 | 159.7 ± 117.79 | 342.74±164.47 | 250-1000 mg/kg |
| Zr | 10.46± 3.61 | 16.08± 3.89 | 8.17± 0.67 | 10.17± 0.85 | 9.16±1.20 | n.a.3 |

1BDL= below detection limit

2Ranges represent values from the NRC (2005) report “Mineral Tolerance of Animals”. The maximum tolerable level is defined in the report as “the dietary level that, when fed for a defined period of time, will not impair animal health and performance”. Ranges are provided since values differ for animals tested including swine, poultry, horses, cattle, sheep and fish.

3n.a. = not available