Table S1. Optimum analytical conditions maintained on AAS for the quantification of heavy metals using air-acetylene flame (AA-670 Shimadzu, Japan)

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Metal | Wavelength (nm) | HCL current (mA) | Slit width (nm) | Fuel-gas flow rate (L/min) | Limit of Detection (µg/L) | Limit of Quantification (µg/L) | NIST SRM 1515 (Apple Leaves) | | |
| Certified Level (µg/g) | Measured Level (µg/g) | Recovery (%) |
| Cd | 228.8 | 4.0 | 1.8 | 0.3 | 4 | 13 | 0.013 | 0.013 | 100 |
| Co | 240.7 | 6.0 | 0.2 | 2.2 | 5 | 16 | 0.09 | 0.088 | 98 |
| Cr | 357.9 | 5.0 | 0.5 | 2.6 | 6 | 18 | 0.3 | 0.296 | 99 |
| Cu | 324.8 | 3.0 | 0.5 | 1.8 | 4 | 13 | 5.64 | 5.640 | 100 |
| Fe | 248.3 | 8.0 | 0.2 | 2.0 | 6 | 18 | 83 | 82.5 | 99 |
| Li | 670.7 | 4.0 | 0.5 | 1.6 | 3 | 9 | -- | -- | -- |
| Mn | 279.5 | 5.0 | 0.4 | 1.9 | 3 | 10 | 54 | 53.3 | 99 |
| Pb | 217.0 | 7.0 | 0.3 | 1.8 | 10 | 29 | 0.470 | 0.461 | 98 |
| Zn | 213.9 | 4.0 | 0.5 | 2.0 | 2 | 6 | 12.5 | 12.2 | 98 |