**S1 Table. Elemental composition of core set accessions in comparison to the available literature values.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Elements** | **Range obtained (mg/100 g)** | **Literature values (mg/100 g)** | **References** |
| **Na** | 30.0-318.0 | 10.85-23.00 30.60-79.00  | Laghetti et al. (2008)Zia-Ul Haq et al. (2011) |
| **K** | 138.29-1578.00 | 916.8-1071.8 872-875 638-950 674.4-1061.2 | Laghetti et al. (2008)Zia-Ul Haq et al. (2011)Karakoy et al. (2012), Alghamdi et al. (2014) |
| **P** | 37.50-593.75 | 405.4-542.4 292-294 286-533286.9-546.7 | Laghetti et al. (2008)Zia-Ul Haq et al. (2011)Karakoy et al. (2012)Alghamdi et al. (2014) |
| **Ca** | 4.74-188.75 | 49.57-59.79 118-121 48-128 64.9-84.8  | Laghetti et al. (2008)Zia-Ul Haq et al. (2011)Karakoy et al. (2012)Alghamdi et al. (2014) |
| **Mg** | 15.0-159.00 | 85-126 126.1-157.3 | Karakoy et al. (2012)Alghamdi et al. (2014) |
| **Fe** | 2.82-14.12 | 6.46-7.47 7.56-9.74 7.3 – 9.0 2.7-3.2 4.896-8.139 6.57-8.579.17-11.91 | Cabrera et al. (2003)Laghetti et al. (2008)Thavarajah et al. (2011)Zia-Ul Haq et al. (2011)Karakoy et al. (2012)Alghamdi et al. (2014)Leshe andTessema (2014) |
| **Zn** | 1.29-12.62 | 4.51-7.02 4.4-5.4 3.9-4.6 4.230-7.310  2.63-4.518.62-10.03 | Cabrera et al. (2003)Thavarajah et al. (2011)Zia-Ul Haq et al. (2011)Karakoy et al. (2012)Alghamdi et al. (2014)Leshe andTessema (2014) |
| **Cu** | 0.50-7.12 | 0.20-0.330.92-1.61 8.9-9.9 0.910-1.692 0.86-1.370.226-0.282  | Cabrera et al. (2003)Laghetti et al. (2008)Zia-Ul Haq et al. (2011)Karakoy et al. (2012)Alghamdi et al. (2014)Leshe andTessema (2014) |
| **Mn** | 1.22-9.99 | 12.07 1.4-4.3 1.150-1.620 1.26-2.856.7-8.2  | Kostova et al. (2008)Zia-Ul Haq et al. (2011)Karakoy et al. (2012)Alghamdi et al. (2014)Leshe andTessema (2014) |
| **Mo** | 1.02-11.89 | 1.56  | Kostova et al. (2008) |
| **Ni** | 0.16-3.50 | 0.01-0.033 0.120-0.244  | Cabrera et al. (2003)Leshe andTessema (2014) |
| **Pb** | 0.01-0.58 | 0.04-0.06 0.142-0.176 | Cabrera et al. (2003)Leshe andTessema (2014) |
| **Cd** | 0.00-0.03 | 0.0008-0.0010 0.009-0.013  | Cabrera et al. (2003)Leshe andTessema (2014) |
| **Co** | 0.00-0.63 | 0.285-0.360  | Leshe andTessema (2014) |