**Supplemental Table S4**. Bi-variate correlations among physical-chemical properties of archived soil samples.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Total cobalt | | Total chromium | | Total copper | | Total nickel | | Total Lead | | Extract. zinc | | Extract. iron | |
| Sand | | -.053 | | -.205 | | -.018 | | -.006 | | -.167 | | -.008 | | -.128 | | |
| Silt | | -.099 | | .241 | | .022 | | .079 | | .311\*\* | | -.212 | | -.304\*\* | | |
| Clay | | .107 | | .262\* | | .102 | | .151 | | -.025 | | -.150 | | .101 | | |
| Ash | | -.305\*\* | | -.072 | | -.194 | | -.149 | | .057 | | -.354\*\* | | -.206 | | |
| pH | | -.063 | | .167 | | .033 | | -.076 | | .054 | | -.409\*\*\* | | -.165 | | |
| Phosphorus,  total | | .371\*\* | | .208 | | .183 | | .290\* | | -.035 | | -.208 | | .387\*\*\* | | |
| Carbon, organic | | .324\*\* | | -.007 | | .211 | | .157 | | -.099 | | .398\*\*\* | | .119 | | |
| Cobalt, total | | - | | .333\*\* | | .821\*\*\* | | .741\*\*\* | | .080 | | -.067 | | .207 | | |
| Chromium,  total | | .333\*\* | | - | | .565\*\*\* | | .463\*\*\* | | -.011 | | -.120 | | .225 | | |
| Copper, total | | .821\*\*\* | | .565\*\*\* | | - | | .737\*\*\* | | .071 | | -.124 | | .240 | | |
| Nickel, total | | .741\*\*\* | | .463\*\*\* | | .737\*\*\* | | - | | .321\*\* | | -.018 | | .279\* | | |
| Lead, total | | .080 | | -.011 | | .071 | | .321\*\* | | - | | -.008 | | .099 | | |
| Zinc,extractable | | -.067 | | -.120 | | -.124 | | -.018 | | -.008 | | - | | -.046 | | |
| Iron, extractable | | .207 | | .225 | | .240 | | .279\* | | .099 | | -.046 | | - | |

|  |  |
| --- | --- |
| **\*** | Significant at *P* < 0.100 level ( = 10%). |
| **\*\*** | Significant at *P* < 0.050 level ( = 5%). |
| **\*\*\*** | Significant at *P* < 0.010 level ( = 1%). |