**Table S3.** The nutritive elements content and pH value of the soil in the Changyang orchard and the control orchard.

|  |  |  |
| --- | --- | --- |
| **Orchard** | **Changyang** | **Control** |
| pH value | 7.88 ± 0.05 | 5.54 ± 0.01 |
| nutritive element content（mg/kg） | Available nitrogen (N) | 170.81 ± 3.43 | 136.51 ± 15.72\* |
| Available phosphorus (P) | 99.80 ± 14.40 | 139.62 ± 23.35 |
| Available potassium (K) | 323.00 ± 1.00 | 297.00 ± 2.00\*\* |
| Calcium (Ca) | 7075.27 ± 40.85 | 946.74 ± 22.66\*\* |
| Magnesium （Mg） | 159.23 ± 1.40 | 343.22 ± 91.82\* |
| Ferrum (Fe) | 18.13 ± 0.16 | 411.38 ± 2.51\*\* |
| manganese (Mn) | 8.71 ± 0.19 | 43.15 ± 1.05\*\* |
| Copper (Cu) | 0.96 ± 0.01 | 4.45 ± 0.06\*\* |
| Zinc (Zn) | 2.27 ± 0.05 | 9.68 ± 0.24\*\* |

Note: A single asterisk (\*) represents statistically significant differences (P < 0.05), and double asterisks (\*\*) represent highly statistically significant differences (P < 0.01). Analysed using Student's t-test.