Appendix Table 2

Kendall's tau correlation analysis of phosphorus solubilizing ability and auxin production ability of PGPR strains with rhizosphere soil microbial diversity, soil element content and plant growth status

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Capacity of strains | Acidobacteriota | Actinomycetota | Bacteroidota | Pseudomonadota | Verrucomicrobiota | Ascomycota | Basidiomycota | Mucoromycota |
| Phosphorus | 0.613\*\* | 0.390\*\* | 0.765\*\* | -0.187 | -0.561\*\* | 0.424\*\* | -0.429\*\* | -0.220 |
| Auxin | 0.501\*\* | 0.349\*\* | 0.653\*\* | -0.321\* | -0.465\*\* | 0.421\*\* | -0.576\*\* | -0.195 |
|  | OCC | TNC | HNC | TPHC | APHC | TPOC | APOC | - |
| Phosphorus | 0.313\* | 0.266\* | 0.102 | 0.140 | -0.049 | 0.069 | -0.097 | - |
| Auxin | 0.228 | 0.143 | -0.024 | 0.218 | 0.016 | 0.033 | -0.211 | - |
|  | Branch Number | Leaf Number | Chl | Primary Root Length | Plant Height | - | - | - |
| Phosphorus | 0.219 | 0.276\* | 0.388\*\* | 0.289\* | 0.134 | - | - | - |
| Auxin | 0.096 | 0.204 | 0.159 | 0.073 | 0.028 | - | - | - |

Phosphorus: Phosphorus- solubilizing capacity of strains used for root irrigation, Auxin: Auxin production capacity of strains used for root irrigation，OCC: organic carbon content, TNC: total nitrogen content, TPHC: total phosphorous content, TPOC: total potassium content, HNC: hydrolysable nitrogen content, APHC: available phosphorous content, and APOC: available potassium content

\* p < 0.05; \*\* p < 0.01