**Table S2. Factor analysis of indices under different N application levels**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Indices | N104 | | |  | N207 | | |  | N311 | | |
| Principal component | | |  | Principal component | | |  | Principal component | | |
| 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| X3 | 0.34 | 0.22 | -0.36 |  | 0.45 | -0.51 | 0.30 |  | 0.46 | -0.33 | -0.45 |
| X4 | 0.25 | -0.70 | 0.17 |  | 0.40 | 0.23 | -0.36 |  | 0.59 | -0.14 | -0.31 |
| X6 | 0.76 | 0.45 | 0.23 |  | 0.61 | 0.47 | 0.49 |  | 0.60 | 0.40 | -0.10 |
| X14 | 0.57 | 0.74 | 0.28 |  | 0.62 | 0.82 | -0.19 |  | 0.49 | 0.84 | 0.20 |
| EV | 1.53 | 1.40 | 1.00 |  | 1.59 | 1.29 | 1.01 |  | 1.71 | 1.27 | 1.02 |
| VCR (%) | 33.18 | 29.93 | 19.76 |  | 34.62 | 27.28 | 19.88 |  | 37.79 | 22.78 | 20.53 |
| CCR (%) | 33.18 | 63.11 | 82.87 |  | 34.62 | 61.89 | 81.77 |  | 37.79 | 60.58 | 81.10 |

EV= eigen values; VCR= variance contribution rates; CCR= cumulative contribution rates.