

**Appendix 4.** Mean values of  $\alpha$ -diversity (0.0001, 0.001, 0.01, 0.1, 1, 10, 100 m<sup>2</sup>), and calculated  $z$ -values of the power law function expressing  $\beta$ -diversity of each of the 45 nested-plot series

| Nested plot series | 0.0001 m <sup>2</sup> | 0.001 m <sup>2</sup> | 0.01 m <sup>2</sup> | 0.1 m <sup>2</sup> | 1 m <sup>2</sup> | 10 m <sup>2</sup> | 100 m <sup>2</sup> | $z$   |
|--------------------|-----------------------|----------------------|---------------------|--------------------|------------------|-------------------|--------------------|-------|
| 1                  | 1.5                   | 3.5                  | 7                   | 12                 | 19               | 31                | 41                 | 0.183 |
| 2                  | 1                     | 3                    | 4                   | 10                 | 22               | 33                | 44                 | 0.199 |
| 3                  | 1.5                   | 3                    | 5                   | 8.5                | 19               | 31                | 47                 | 0.221 |
| 4                  | 2                     | 2.5                  | 6.5                 | 14                 | 22.5             | 35                | 48                 | 0.190 |
| 5                  | 1                     | 2                    | 5                   | 13.5               | 21.5             | 36.5              | 50                 | 0.204 |
| 6                  | 1.5                   | 3.5                  | 7.5                 | 9                  | 18               | 35                | 56                 | 0.239 |
| 7                  | 2                     | 4.5                  | 6.5                 | 10                 | 17.5             | 26                | 45                 | 0.213 |
| 8                  | 2.5                   | 4.5                  | 7.5                 | 11.5               | 19.5             | 27                | 42                 | 0.185 |
| 9                  | 2                     | 3.5                  | 8                   | 15                 | 21.5             | 28                | 51                 | 0.200 |
| 10                 | 2.5                   | 3.5                  | 7                   | 12                 | 17               | 33.5              | 45                 | 0.197 |
| 11                 | 1.5                   | 3.5                  | 6.5                 | 10.5               | 23.5             | 28.5              | 45                 | 0.193 |
| 12                 | 1                     | 3                    | 6                   | 11.5               | 16               | 33                | 46                 | 0.212 |
| 13                 | 2                     | 3                    | 5                   | 9                  | 15               | 29                | 42                 | 0.217 |
| 14                 | 2                     | 4                    | 8.5                 | 16                 | 24.5             | 39.5              | 57                 | 0.190 |
| 15                 | 1.5                   | 3                    | 7                   | 12.5               | 20.5             | 34.5              | 52                 | 0.210 |
| 16                 | 2                     | 2.5                  | 7                   | 13                 | 19               | 28                | 41                 | 0.184 |
| 17                 | 1.5                   | 3                    | 5.5                 | 9                  | 15               | 24.5              | 42                 | 0.225 |
| 18                 | 1.5                   | 3                    | 4.5                 | 7                  | 14.5             | 25.5              | 41                 | 0.233 |
| 19                 | 1                     | 2                    | 3.5                 | 10                 | 14               | 31.5              | 52                 | 0.222 |
| 20                 | 1.5                   | 2.5                  | 5.5                 | 8.5                | 12               | 19.5              | 40                 | 0.220 |
| 21                 | 2.5                   | 2.5                  | 5.5                 | 12.5               | 18.5             | 26.5              | 40                 | 0.188 |
| 22                 | 1.5                   | 3                    | 5                   | 7.5                | 11               | 16                | 29                 | 0.205 |
| 23                 | 1.5                   | 1.5                  | 2.5                 | 7.5                | 11.5             | 21.5              | 33                 | 0.228 |
| 24                 | 2                     | 3.5                  | 6.5                 | 9.5                | 16               | 26.5              | 39                 | 0.197 |
| 25                 | 1                     | 3                    | 7                   | 14.5               | 21               | 31.5              | 47                 | 0.192 |
| 26                 | 2.5                   | 4                    | 10                  | 16.5               | 25.5             | 38.5              | 53                 | 0.178 |
| 27                 | 1.5                   | 2.5                  | 5.5                 | 20                 | 27.5             | 39                | 54                 | 0.183 |
| 28                 | 2.5                   | 3                    | 5.5                 | 10.5               | 17               | 28.5              | 39                 | 0.192 |
| 29                 | 1                     | 2                    | 5                   | 11                 | 16               | 25.5              | 37                 | 0.196 |
| 30                 | 1                     | 2.5                  | 7.5                 | 21.5               | 32               | 50                | 63                 | 0.184 |
| 31                 | 2                     | 3                    | 7                   | 17                 | 25.5             | 43.5              | 53                 | 0.183 |
| 32                 | 3                     | 5                    | 10.5                | 22.5               | 34               | 48                | 60                 | 0.164 |
| 33                 | 2                     | 4.5                  | 9                   | 16.5               | 27.5             | 38                | 53                 | 0.177 |
| 34                 | 1                     | 2                    | 3.5                 | 5.5                | 7                | 10                | 13                 | 0.150 |
| 35                 | 0.5                   | 1.5                  | 3                   | 9                  | 12               | 16.5              | 24                 | 0.181 |
| 36                 | 2                     | 3                    | 5                   | 9.5                | 15.5             | 22                | 34                 | 0.190 |
| 37                 | 1.5                   | 2.5                  | 3                   | 8.5                | 12.5             | 18                | 23                 | 0.170 |
| 38                 | 1                     | 2.5                  | 5.5                 | 7.5                | 11               | 14.5              | 20                 | 0.153 |
| 39                 | 1.5                   | 3                    | 4.5                 | 7                  | 9.5              | 14.5              | 21                 | 0.169 |
| 40                 | 1.5                   | 1.5                  | 3                   | 6.5                | 11.5             | 15.5              | 21                 | 0.176 |
| 41                 | 3.5                   | 5.5                  | 11.5                | 15.5               | 24.5             | 33.5              | 49                 | 0.167 |
| 42                 | 2.5                   | 4                    | 8.5                 | 12                 | 20               | 25.5              | 37                 | 0.164 |
| 43                 | 1.5                   | 2.5                  | 8                   | 15.5               | 27.5             | 36.5              | 54                 | 0.189 |
| 44                 | 2                     | 2.5                  | 6                   | 9.5                | 14.5             | 22                | 31                 | 0.179 |
| 45                 | 2.5                   | 4                    | 10                  | 23.5               | 32               | 45                | 56                 | 0.161 |