SUPPLEMENTARY MATERIALS

**A Simulation Study on the Effects of Plot Size and Shape on Sampling Plant Species Composition for Biodiversity Management**

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**Table**

**Table S1.** Mean species compositional similarity (%) between two plot areas (ha) of a plot shape and a sample size for Pasoh. Species composition similarity was estimated by classic-Jaccard (JAC), classic-Sørensen (SOR), abundance-adjusted-Jaccard (JACA), and abundance-adjusted- Sørensen (SORA). The coefficient of variations (%) were given in parentheses.

| Plot Shape (PSHAPE) | Plot Area (PAREA) | JAC (%) | SOR (%) | JACA (%) | SORA (%) |
| --- | --- | --- | --- | --- | --- |
| Area1 | Area2 |
| Circle | 0.025 | 0.050 | 65.20 (0.70) | 78.84 (0.43) | 81.80 (0.48) | 89.93 (0.27) |
| Circle | 0.025 | 1.000 | 45.34 (1.00) | 62.26 (0.69) | 71.56 (0.73) | 83.31 (0.43) |
| Circle | 0.050 | 1.000 | 69.48 (0.55) | 81.93 (0.33) | 87.64 (0.32) | 93.39 (0.17) |
| Rectangle (1:2.5) | 0.025 | 0.050 | 65.26 (0.69) | 78.88 (0.42) | 81.66 (0.49) | 89.85 (0.27) |
| Rectangle (1:2.5) | 0.025 | 1.000 | 45.44 (1.02) | 62.35 (0.71) | 71.31 (0.75) | 83.14 (0.45) |
| Rectangle (1:2.5) | 0.050 | 1.000 | 69.56 (0.58) | 81.99 (0.34) | 87.53 (0.33) | 93.32 (0.18) |
| Rectangle (1:10) | 0.025 | 0.050 | 65.32 (0.73) | 78.93 (0.45) | 81.02 (0.54) | 89.45 (0.31) |
| Rectangle (1:10) | 0.025 | 1.000 | 45.60 (1.02) | 62.49 (0.70) | 70.23 (0.80) | 82.38 (0.48) |
| Rectangle (1:10) | 0.050 | 1.000 | 69.73 (0.56) | 82.10 (0.33) | 86.97 (0.34) | 93.00 (0.18) |
| Rectangle (1:20) | 0.025 | 0.050 | 65.42 (0.76) | 78.99 (0.46) | 80.57 (0.56) | 89.17 (0.31) |
| Rectangle (1:20) | 0.025 | 1.000 | 45.74 (1.06) | 62.62 (0.73) | 69.54 (0.83) | 81.90 (0.50) |
| Rectangle (1:20) | 0.050 | 1.000 | 69.84 (0.58) | 82.18 (0.34) | 86.57 (0.37) | 92.77 (0.20) |
| Rectangle (1:40) | 0.025 | 0.050 | 65.48 (0.73) | 79.04 (0.44) | 80.04 (0.56) | 88.84 (0.32) |
| Rectangle (1:40) | 0.025 | 1.000 | 45.83 (1.04) | 62.71 (0.71) | 68.67 (0.86) | 81.28 (0.52) |
| Rectangle (1:40) | 0.050 | 1.000 | 69.93 (0.58) | 82.24 (0.34) | 86.04 (0.41) | 92.46 (0.22) |

**Table S2.** Mean species compositional similarity (%) between two plot areas (ha) of a plot shape and a sample size for Fushan. Species composition similarity was estimated by classic-Jaccard (JAC), classic-Sørensen (SOR), abundance-adjusted-Jaccard (JACA), and abundance-adjusted- Sørensen (SORA). The coefficient of variations (%) were given in parentheses.

| Plot Shape (PSHAPE) | Plot Area (PAREA) | JAC (%) | SOR (%) | JACA (%) | SORA (%) |
| --- | --- | --- | --- | --- | --- |
| Area1 | Area2 |
| Circle | 0.025 | 0.050 | 74.66 (1.47) | 85.01 (0.90) | 93.28 (0.49) | 96.46 (0.26) |
| Circle | 0.025 | 1.000 | 59.25 (2.24) | 73.52 (1.51) | 89.22 (0.74) | 94.17 (0.42) |
| Circle | 0.050 | 1.000 | 78.73 (1.24) | 87.77 (0.73) | 96.04 (0.33) | 97.95 (0.17) |
| Rectangle (1:2.5) | 0.025 | 0.050 | 74.81 (1.44) | 85.11 (0.88) | 93.28 (0.49) | 96.46 (0.27) |
| Rectangle (1:2.5) | 0.025 | 1.000 | 59.45 (2.17) | 73.69 (1.46) | 89.20 (0.74) | 94.15 (0.42) |
| Rectangle (1:2.5) | 0.050 | 1.000 | 78.85 (1.17) | 87.85 (0.70) | 96.03 (0.31) | 97.95 (0.16) |
| Rectangle (1:10) | 0.025 | 0.050 | 74.85 (1.44) | 85.15 (0.88) | 92.95 (0.51) | 96.28 (0.28) |
| Rectangle (1:10) | 0.025 | 1.000 | 59.65 (2.10) | 73.89 (1.42) | 88.59 (0.82) | 93.78 (0.47) |
| Rectangle (1:10) | 0.050 | 1.000 | 79.15 (1.17) | 88.05 (0.70) | 95.89 (0.35) | 97.87 (0.19) |
| Rectangle (1:20) | 0.025 | 0.050 | 74.97 (1.47) | 85.23 (0.90) | 92.78 (0.55) | 96.18 (0.30) |
| Rectangle (1:20) | 0.025 | 1.000 | 59.89 (2.02) | 74.14 (1.36) | 88.31 (0.84) | 93.61 (0.49) |
| Rectangle (1:20) | 0.050 | 1.000 | 79.44 (1.09) | 88.26 (0.64) | 95.84 (0.33) | 97.85 (0.18) |
| Rectangle (1:40) | 0.025 | 0.050 | 75.33 (1.38) | 85.50 (0.85) | 92.71 (0.53) | 96.14 (0.29) |
| Rectangle (1:40) | 0.025 | 1.000 | 60.35 (1.93) | 74.56 (1.29) | 88.08 (0.84) | 93.48 (0.48) |
| Rectangle (1:40) | 0.050 | 1.000 | 79.71 (1.01) | 88.45 (0.60) | 95.73 (0.33) | 97.79 (0.17) |

**Table S3.** Mean species compositional similarity (%) between two plot shapes of a plot area (ha) and a sample size for Pasoh. Species composition similarity was estimated by classic-Jaccard (JAC), classic-Sørensen (SOR), abundance-adjusted-Jaccard (JACA), and abundance-adjusted- Sørensen (SORA). The coefficient of variations (%) were given in parentheses.

| Plot Area (PAREA) | Plot Shape (PSHAPE) | JAC (%) | SOR (%) | JACA (%) | SORA (%) |
| --- | --- | --- | --- | --- | --- |
| Shape1 | Shape2 |
| 0.025 | Circle | Rect (1:2.5) | 66.90 (0.70) | 80.07 (0.42) | 79.12 (0.57) | 88.27 (0.32) |
| 0.025 | Circle | Rect (1:10) | 45.84 (1.04) | 62.71 (0.72) | 60.96 (1.02) | 75.55 (0.64) |
| 0.025 | Circle | Rect (1:20) | 40.34 (1.16) | 57.33 (0.83) | 55.19 (1.19) | 70.89 (0.78) |
| 0.025 | Circle | Rect (1:40) | 36.44 (1.27) | 53.25 (0.94) | 50.65 (1.34) | 66.98 (0.90) |
| 0.025 | Rect (1:2.5) | Rect (1:10) | 54.56 (0.90) | 70.47 (0.59) | 68.79 (0.82) | 81.38 (0.49) |
| 0.025 | Rect (1:2.5) | Rect (1:20) | 45.72 (1.06) | 62.60 (0.73) | 60.43 (1.04) | 75.14 (0.66) |
| 0.025 | Rect (1:2.5) | Rect (1:40) | 39.96 (1.20) | 56.94 (0.87) | 54.28 (1.22) | 70.13 (0.80) |
| 0.025 | Rect (1:10) | Rect (1:20) | 69.42 (0.71) | 81.86 (0.43) | 80.16 (0.58) | 88.92 (0.33) |
| 0.025 | Rect (1:10) | Rect (1:40) | 54.11 (0.94) | 70.09 (0.62) | 67.38 (0.90) | 80.36 (0.54) |
| 0.025 | Rect (1:20) | Rect (1:40) | 69.37 (0.68) | 81.82 (0.41) | 79.68 (0.58) | 88.62 (0.33) |
| 0.050 | Circle | Rect (1:2.5) | 71.20 (0.54) | 83.11 (0.32) | 85.37 (0.38) | 92.07 (0.21) |
| 0.050 | Circle | Rect (1:10) | 52.59 (0.81) | 68.82 (0.54) | 71.42 (0.71) | 83.22 (0.42) |
| 0.050 | Circle | Rect (1:20) | 47.62 (0.88) | 64.41 (0.60) | 66.57 (0.84) | 79.80 (0.51) |
| 0.050 | Circle | Rect (1:40) | 43.99 (0.94) | 60.99 (0.66) | 62.54 (0.97) | 76.79 (0.60) |
| 0.050 | Rect (1:2.5) | Rect (1:10) | 60.37 (0.69) | 75.20 (0.43) | 77.54 (0.56) | 87.28 (0.32) |
| 0.050 | Rect (1:2.5) | Rect (1:20) | 52.48 (0.80) | 68.73 (0.53) | 70.83 (0.73) | 82.82 (0.44) |
| 0.050 | Rect (1:2.5) | Rect (1:40) | 47.21 (0.88) | 64.03 (0.60) | 65.58 (0.89) | 79.07 (0.54) |
| 0.050 | Rect (1:10) | Rect (1:20) | 73.53 (0.52) | 84.69 (0.30) | 86.01 (0.38) | 92.45 (0.21) |
| 0.050 | Rect (1:10) | Rect (1:40) | 60.00 (0.73) | 74.92 (0.46) | 76.19 (0.63) | 86.41 (0.36) |
| 0.050 | Rect (1:20) | Rect (1:40) | 73.48 (0.53) | 84.66 (0.30) | 85.55 (0.40) | 92.18 (0.22) |
| 0.100 | Circle | Rect (1:2.5) | 75.63 (0.43) | 86.08 (0.25) | 90.64 (0.25) | 95.08 (0.13) |
| 0.100 | Circle | Rect (1:10) | 59.52 (0.64) | 74.55 (0.40) | 80.72 (0.49) | 89.28 (0.28) |
| 0.100 | Circle | Rect (1:20) | 55.10 (0.69) | 70.97 (0.45) | 76.94 (0.59) | 86.89 (0.34) |
| 0.100 | Circle | Rect (1:40) | 51.81 (0.74) | 68.17 (0.50) | 73.64 (0.69) | 84.72 (0.40) |
| 0.100 | Rect (1:2.5) | Rect (1:10) | 66.34 (0.55) | 79.71 (0.33) | 85.15 (0.38) | 91.95 (0.21) |
| 0.100 | Rect (1:2.5) | Rect (1:20) | 59.43 (0.62) | 74.48 (0.39) | 80.15 (0.50) | 88.93 (0.28) |
| 0.100 | Rect (1:2.5) | Rect (1:40) | 54.73 (0.69) | 70.66 (0.45) | 76.02 (0.62) | 86.30 (0.36) |
| 0.100 | Rect (1:10) | Rect (1:20) | 77.71 (0.40) | 87.42 (0.23) | 90.92 (0.25) | 95.23 (0.13) |
| 0.100 | Rect (1:10) | Rect (1:40) | 66.06 (0.54) | 79.51 (0.33) | 83.93 (0.43) | 91.22 (0.24) |
| 0.100 | Rect (1:20) | Rect (1:40) | 77.67 (0.41) | 87.40 (0.23) | 90.51 (0.28) | 95.00 (0.15) |

**Table S4.** Mean species compositional similarity (%) between two plot shapes of a plot area (ha) and a sample size for Fushan. Species composition similarity was estimated by classic-Jaccard (JAC), classic-Sørensen (SOR), abundance-adjusted-Jaccard (JACA), and abundance-adjusted- Sørensen (SORA). The coefficient of variations (%) were given in parentheses.

| Plot Area (PAREA) | Plot Shape (PSHAPE) | JAC (%) | SOR (%) | JACA (%) | SORA (%) |
| --- | --- | --- | --- | --- | --- |
| Shape1 | Shape2 |
| 0.025 | Circle | Rect (1:2.5) | 76.58 (1.39) | 86.28 (0.85) | 91.93 (0.58) | 95.71 (0.32) |
| 0.025 | Circle | Rect (1:10) | 61.33 (2.11) | 75.15 (1.41) | 83.83 (1.02) | 90.94 (0.60) |
| 0.025 | Circle | Rect (1:20) | 57.13 (2.37) | 71.70 (1.62) | 80.85 (1.21) | 89.06 (0.73) |
| 0.025 | Circle | Rect (1:40) | 54.08 (2.52) | 69.09 (1.77) | 78.25 (1.38) | 87.35 (0.85) |
| 0.025 | Rect (1:2.5) | Rect (1:10) | 67.66 (1.80) | 80.02 (1.16) | 87.46 (0.82) | 93.13 (0.47) |
| 0.025 | Rect (1:2.5) | Rect (1:20) | 61.07 (2.21) | 74.94 (1.47) | 83.42 (1.06) | 90.68 (0.63) |
| 0.025 | Rect (1:2.5) | Rect (1:40) | 56.72 (2.38) | 71.37 (1.65) | 80.13 (1.26) | 88.58 (0.77) |
| 0.025 | Rect (1:10) | Rect (1:20) | 78.26 (1.31) | 87.40 (0.79) | 92.30 (0.56) | 95.91 (0.30) |
| 0.025 | Rect (1:10) | Rect (1:40) | 67.27 (1.79) | 79.75 (1.17) | 86.64 (0.89) | 92.64 (0.52) |
| 0.025 | Rect (1:20) | Rect (1:40) | 78.34 (1.31) | 87.46 (0.79) | 92.12 (0.59) | 95.81 (0.33) |
| 0.050 | Circle | Rect (1:2.5) | 80.56 (1.14) | 88.92 (0.67) | 95.21 (0.38) | 97.51 (0.20) |
| 0.050 | Circle | Rect (1:10) | 67.78 (1.73) | 80.19 (1.11) | 90.06 (0.72) | 94.64 (0.40) |
| 0.050 | Circle | Rect (1:20) | 64.18 (1.93) | 77.47 (1.27) | 87.97 (0.87) | 93.42 (0.50) |
| 0.050 | Circle | Rect (1:40) | 61.28 (2.01) | 75.21 (1.35) | 85.89 (1.02) | 92.14 (0.60) |
| 0.050 | Rect (1:2.5) | Rect (1:10) | 73.23 (1.45) | 84.08 (0.90) | 92.42 (0.55) | 95.98 (0.30) |
| 0.050 | Rect (1:2.5) | Rect (1:20) | 67.60 (1.72) | 80.06 (1.10) | 89.69 (0.75) | 94.42 (0.42) |
| 0.050 | Rect (1:2.5) | Rect (1:40) | 63.63 (1.90) | 77.07 (1.25) | 87.23 (0.93) | 92.96 (0.55) |
| 0.050 | Rect (1:10) | Rect (1:20) | 82.29 (1.04) | 90.03 (0.61) | 95.49 (0.37) | 97.66 (0.20) |
| 0.050 | Rect (1:10) | Rect (1:40) | 72.97 (1.40) | 83.95 (0.87) | 91.85 (0.61) | 95.66 (0.34) |
| 0.050 | Rect (1:20) | Rect (1:40) | 82.41 (0.99) | 90.13 (0.57) | 95.42 (0.36) | 97.62 (0.19) |
| 0.100 | Circle | Rect (1:2.5) | 84.06 (0.90) | 91.15 (0.51) | 97.35 (0.22) | 98.64 (0.12) |
| 0.100 | Circle | Rect (1:10) | 73.27 (1.31) | 84.20 (0.80) | 94.17 (0.47) | 96.94 (0.25) |
| 0.100 | Circle | Rect (1:20) | 70.08 (1.46) | 81.96 (0.91) | 92.68 (0.61) | 96.10 (0.34) |
| 0.100 | Circle | Rect (1:40) | 67.58 (1.55) | 80.17 (1.00) | 91.21 (0.74) | 95.25 (0.43) |
| 0.100 | Rect (1:2.5) | Rect (1:10) | 77.92 (1.13) | 87.30 (0.67) | 95.66 (0.35) | 97.75 (0.19) |
| 0.100 | Rect (1:2.5) | Rect (1:20) | 73.11 (1.31) | 84.09 (0.80) | 93.88 (0.51) | 96.78 (0.28) |
| 0.100 | Rect (1:2.5) | Rect (1:40) | 69.66 (1.42) | 81.69 (0.90) | 92.21 (0.65) | 95.83 (0.37) |
| 0.100 | Rect (1:10) | Rect (1:20) | 85.57 (0.74) | 92.08 (0.42) | 97.51 (0.20) | 98.73 (0.11) |
| 0.100 | Rect (1:10) | Rect (1:40) | 77.77 (1.01) | 87.25 (0.60) | 95.30 (0.37) | 97.56 (0.20) |
| 0.100 | Rect (1:20) | Rect (1:40) | 85.71 (0.74) | 92.17 (0.41) | 97.45 (0.20) | 98.70 (0.10) |

**Table S5.** Mean number of shared observed species (*S12*), mean number of observed species (*S1*, *S2*), and total relative abundance of shared observed species (*U*, *V*; %) for each comparison of two plot sizes (PSIZE) given a plot shape (PSHAPE). Results were presented for Pasoh and Fushan. Coefficient of variation (CV%) were in parenthesis.

| Plot Shape (PSHAPE)a | Plot Size (PSIZE) | *S12* | *S1* | *S2* | *U* | *V* |
| --- | --- | --- | --- | --- | --- | --- |
| Size1 | Size2 |
| *Pasoh* |  |  |  |  |  |  |  |
| C | 0.025 | 0.050 | 109.1 (1.45) | 109.1 (1.45) | 167.1 (1.15) | 100.0 (0.00) | 81.8 (0.48) |
| C | 0.025 | 1.000 | 109.1 (1.45) | 109.1 (1.45) | 240.4 (0.93) | 100.0 (0.00) | 71.6 (0.73) |
| C | 0.050 | 1.000 | 167.1 (1.15) | 167.1 (1.15) | 240.4 (0.93) | 100.0 (0.00) | 87.6 (0.32) |
| R2.5 | 0.025 | 0.050 | 109.4 (1.43) | 109.4 (1.43) | 167.5 (1.16) | 100.0 (0.00) | 81.7 (0.49) |
| R2.5 | 0.025 | 1.000 | 109.4 (1.43) | 109.4 (1.43) | 240.6 (0.98) | 100.0 (0.00) | 71.3 (0.75) |
| R2.5 | 0.050 | 1.000 | 167.5 (1.16) | 167.5 (1.16) | 240.6 (0.98) | 100.0 (0.00) | 87.5 (0.33) |
| R10 | 0.025 | 0.050 | 110.8 (1.41) | 110.8 (1.41) | 169.6 (1.20) | 100.0 (0.00) | 81.0 (0.54) |
| R10 | 0.025 | 1.000 | 110.8 (1.41) | 110.8 (1.41) | 243.3 (1.09) | 100.0 (0.00) | 70.2 (0.80) |
| R10 | 0.050 | 1.000 | 169.6 (1.20) | 169.6 (1.20) | 243.3 (1.09) | 100.0 (0.00) | 87.0 (0.34) |
| R20 | 0.025 | 0.050 | 111.7 (1.43) | 111.7 (1.43) | 170.8 (1.26) | 100.0 (0.00) | 80.6 (0.56) |
| R20 | 0.025 | 1.000 | 111.7 (1.43) | 111.7 (1.43) | 244.7 (1.16) | 100.0 (0.00) | 69.5 (0.83) |
| R20 | 0.050 | 1.000 | 170.8 (1.26) | 170.8 (1.26) | 244.7 (1.16) | 100.0 (0.00) | 86.6 (0.37) |
| R40 | 0.025 | 0.050 | 112.4 (1.47) | 112.4 (1.47) | 171.7 (1.34) | 100.0 (0.00) | 80.0 (0.56) |
| R40 | 0.025 | 1.000 | 112.4 (1.47) | 112.4 (1.47) | 245.6 (1.24) | 100.0 (0.00) | 68.7 (0.86) |
| R40 | 0.050 | 1.000 | 171.7 (1.34) | 171.7 (1.34) | 245.6 (1.24) | 100.0 (0.00) | 86.0 (0.41) |
|  |  |  |  |  |  |  |  |
| *Fushan* |  |  |  |  |  |  |  |
| C | 0.025 | 0.050 | 25.5 (3.16) | 25.5 (3.16) | 33.6 (2.36) | 100.0 (0.00) | 93.3 (0.49) |
| C | 0.025 | 1.000 | 25.5 (3.16) | 25.5 (3.16) | 42.3 (1.68) | 100.0 (0.00) | 89.2 (0.74) |
| C | 0.050 | 1.000 | 33.6 (2.36) | 33.6 (2.36) | 42.3 (1.68) | 100.0 (0.00) | 96.0 (0.33) |
| R2.5 | 0.025 | 0.050 | 25.7 (3.08) | 25.7 (3.08) | 33.8 (2.28) | 100.0 (0.00) | 93.3 (0.49) |
| R2.5 | 0.025 | 1.000 | 25.7 (3.08) | 25.7 (3.08) | 42.5 (1.68) | 100.0 (0.00) | 89.2 (0.74) |
| R2.5 | 0.050 | 1.000 | 33.8 (2.28) | 33.8 (2.28) | 42.5 (1.68) | 100.0 (0.00) | 96.0 (0.31) |
| R10 | 0.025 | 0.050 | 26.4 (2.87) | 26.4 (2.87) | 34.8 (2.11) | 100.0 (0.00) | 93.0 (0.51) |
| R10 | 0.025 | 1.000 | 26.4 (2.87) | 26.4 (2.87) | 43.7 (1.53) | 100.0 (0.00) | 88.6 (0.82) |
| R10 | 0.050 | 1.000 | 34.8 (2.11) | 34.8 (2.11) | 43.7 (1.53) | 100.0 (0.00) | 95.9 (0.35) |
| R20 | 0.025 | 0.050 | 26.9 (2.71) | 26.9 (2.71) | 35.5 (1.98) | 100.0 (0.00) | 92.8 (0.55) |
| R20 | 0.025 | 1.000 | 26.9 (2.71) | 26.9 (2.71) | 44.4 (1.45) | 100.0 (0.00) | 88.3 (0.84) |
| R20 | 0.050 | 1.000 | 35.5 (1.98) | 35.5 (1.98) | 44.4 (1.45) | 100.0 (0.00) | 95.8 (0.33) |
| R40 | 0.025 | 0.050 | 27.4 (2.56) | 27.4 (2.56) | 36.1 (1.85) | 100.0 (0.00) | 92.7 (0.53) |
| R40 | 0.025 | 1.000 | 27.4 (2.56) | 27.4 (2.56) | 45.1 (1.38) | 100.0 (0.00) | 88.1 (0.84) |
| R40 | 0.050 | 1.000 | 36.1 (1.85) | 36.1 (1.85) | 45.1 (1.38) | 100.0 (0.00) | 95.7 (0.33) |

aC = circle; R2.5 = rectangle with aspect ratio of 1:2.5; R10 = rectangle with aspect ratio of 1:10; R20 = rectangle with aspect ratio of 1:20; R40 = rectangle with aspect ratio of 1:40.

**Table S6.** Mean number of shared observed species (*S12*), mean number of observed species (*S1*, *S2*), and total relative abundance of shared observed species (*U*, *V*; %) for each comparison of two plot shapes (PSHAPE) given a plot size (PSIZE). Results were presented for Pasoh and Fushan. Coefficient of variation (CV%) were in parenthesis.

| Plot Size (PSIZE) | Plot Shape (PSHAPE)a | *S12* | *S1* | *S2* | *U* | *V* |
| --- | --- | --- | --- | --- | --- | --- |
| Shape1 | Shape2 |
| *Pasoh* |  |  |  |  |  |  |  |
| 0.025 | C | R2.5 | 87.6 (1.60) | 109.1 (1.45) | 109.4 (1.43) | 88.5 (0.39) | 88.2 (0.41) |
| 0.025 | C | R10 | 69.2 (1.76) | 109.1 (1.45) | 110.8 (1.41) | 76.6 (0.71) | 74.8 (0.82) |
| 0.025 | C | R20 | 63.6 (1.81) | 109.1 (1.45) | 111.7 (1.43) | 72.6 (0.86) | 69.7 (0.99) |
| 0.025 | C | R40 | 59.2 (1.84) | 109.1 (1.45) | 112.4 (1.47) | 69.2 (0.99) | 65.4 (1.15) |
| 0.025 | R2.5 | R10 | 77.8 (1.65) | 109.4 (1.43) | 110.8 (1.41) | 82.3 (0.54) | 80.7 (0.66) |
| 0.025 | R2.5 | R20 | 69.4 (1.73) | 109.4 (1.43) | 111.7 (1.43) | 76.7 (0.71) | 74.0 (0.87) |
| 0.025 | R2.5 | R40 | 63.4 (1.79) | 109.4 (1.43) | 112.4 (1.47) | 72.2 (0.88) | 68.6 (1.04) |
| 0.025 | R10 | R20 | 91.2 (1.56) | 110.8 (1.41) | 111.7 (1.43) | 89.6 (0.36) | 88.4 (0.46) |
| 0.025 | R10 | R40 | 78.4 (1.65) | 110.8 (1.41) | 112.4 (1.47) | 81.7 (0.57) | 79.3 (0.74) |
| 0.025 | R20 | R40 | 91.8 (1.54) | 111.7 (1.43) | 112.4 (1.47) | 89.3 (0.35) | 88.1 (0.48) |
| 0.050 | C | R2.5 | 139.2 (1.27) | 167.1 (1.15) | 167.5 (1.16) | 92.2 (0.24) | 92.0 (0.26) |
| 0.050 | C | R10 | 116.1 (1.37) | 167.1 (1.15) | 169.6 (1.20) | 84.2 (0.45) | 82.4 (0.56) |
| 0.050 | C | R20 | 109.1 (1.41) | 167.1 (1.15) | 170.8 (1.26) | 81.3 (0.55) | 78.5 (0.69) |
| 0.050 | C | R40 | 103.6 (1.46) | 167.1 (1.15) | 171.7 (1.34) | 78.9 (0.65) | 75.1 (0.80) |
| 0.050 | R2.5 | R10 | 126.9 (1.34) | 167.5 (1.16) | 169.6 (1.20) | 88.1 (0.34) | 86.6 (0.45) |
| 0.050 | R2.5 | R20 | 116.5 (1.39) | 167.5 (1.16) | 170.8 (1.26) | 84.2 (0.46) | 81.6 (0.60) |
| 0.050 | R2.5 | R40 | 108.9 (1.45) | 167.5 (1.16) | 171.7 (1.34) | 81.0 (0.57) | 77.4 (0.74) |
| 0.050 | R10 | R20 | 144.2 (1.29) | 169.6 (1.20) | 170.8 (1.26) | 93.0 (0.22) | 92.0 (0.30) |
| 0.050 | R10 | R40 | 128.0 (1.39) | 169.6 (1.20) | 171.7 (1.34) | 87.6 (0.37) | 85.4 (0.51) |
| 0.050 | R20 | R40 | 145.1 (1.35) | 170.8 (1.26) | 171.7 (1.34) | 92.8 (0.23) | 91.7 (0.32) |
| 0.100 | C | R2.5 | 207.2 (1.04) | 240.4 (0.93) | 240.6 (0.98) | 95.2 (0.16) | 95.0 (0.17) |
| 0.100 | C | R10 | 180.6 (1.13) | 240.4 (0.93) | 243.3 (1.09) | 90.1 (0.30) | 88.6 (0.39) |
| 0.100 | C | R20 | 172.5 (1.17) | 240.4 (0.93) | 244.7 (1.16) | 88.2 (0.36) | 85.7 (0.48) |
| 0.100 | C | R40 | 166.0 (1.22) | 240.4 (0.93) | 245.6 (1.24) | 86.5 (0.43) | 83.1 (0.55) |
| 0.100 | R2.5 | R10 | 193.0 (1.12) | 240.6 (0.98) | 243.3 (1.09) | 92.6 (0.22) | 91.3 (0.30) |
| 0.100 | R2.5 | R20 | 181.0 (1.18) | 240.6 (0.98) | 244.7 (1.16) | 90.1 (0.29) | 87.9 (0.40) |
| 0.100 | R2.5 | R40 | 172.1 (1.25) | 240.6 (0.98) | 245.6 (1.24) | 88.0 (0.37) | 84.8 (0.50) |
| 0.100 | R10 | R20 | 213.4 (1.16) | 243.3 (1.09) | 244.7 (1.16) | 95.7 (0.13) | 94.8 (0.20) |
| 0.100 | R10 | R40 | 194.6 (1.25) | 243.3 (1.09) | 245.6 (1.24) | 92.3 (0.23) | 90.3 (0.36) |
| 0.100 | R20 | R40 | 214.4 (1.24) | 244.7 (1.16) | 245.6 (1.24) | 95.5 (0.14) | 94.5 (0.23) |
|  |  |  |  |  |  |  |  |
| *Fushan* |  |  |  |  |  |  |  |
| 0.025 | C | R2.5 | 22.4 (3.50) | 25.5 (3.16) | 25.7 (3.08) | 95.9 (0.36) | 95.6 (0.42) |
| 0.025 | C | R10 | 20.1 (3.77) | 25.5 (3.16) | 26.4 (2.87) | 92.1 (0.60) | 90.2 (0.85) |
| 0.025 | C | R20 | 19.4 (3.81) | 25.5 (3.16) | 26.9 (2.71) | 90.9 (0.68) | 87.9 (1.04) |
| 0.025 | C | R40 | 18.9 (3.78) | 25.5 (3.16) | 27.4 (2.56) | 89.9 (0.73) | 85.7 (1.26) |
| 0.025 | R2.5 | R10 | 21.3 (3.58) | 25.7 (3.08) | 26.4 (2.87) | 94.0 (0.46) | 92.5 (0.67) |
| 0.025 | R2.5 | R20 | 20.3 (3.70) | 25.7 (3.08) | 26.9 (2.71) | 92.3 (0.58) | 89.6 (0.91) |
| 0.025 | R2.5 | R40 | 19.6 (3.68) | 25.7 (3.08) | 27.4 (2.56) | 90.9 (0.63) | 87.0 (1.15) |
| 0.025 | R10 | R20 | 23.6 (3.13) | 26.4 (2.87) | 26.9 (2.71) | 96.6 (0.29) | 95.4 (0.46) |
| 0.025 | R10 | R40 | 21.9 (3.24) | 26.4 (2.87) | 27.4 (2.56) | 94.1 (0.42) | 91.6 (0.80) |
| 0.025 | R20 | R40 | 24.0 (2.94) | 26.9 (2.71) | 27.4 (2.56) | 96.5 (0.29) | 95.2 (0.51) |
| 0.050 | C | R2.5 | 30.2 (2.63) | 33.6 (2.36) | 33.8 (2.28) | 97.6 (0.23) | 97.4 (0.27) |
| 0.050 | C | R10 | 27.9 (2.81) | 33.6 (2.36) | 34.8 (2.11) | 95.5 (0.38) | 93.9 (0.58) |
| 0.050 | C | R20 | 27.2 (2.84) | 33.6 (2.36) | 35.5 (1.98) | 94.9 (0.42) | 92.3 (0.74) |
| 0.050 | C | R40 | 26.7 (2.77) | 33.6 (2.36) | 36.1 (1.85) | 94.2 (0.44) | 90.6 (0.92) |
| 0.050 | R2.5 | R10 | 29.2 (2.65) | 33.8 (2.28) | 34.8 (2.11) | 96.7 (0.27) | 95.4 (0.45) |
| 0.050 | R2.5 | R20 | 28.2 (2.72) | 33.8 (2.28) | 35.5 (1.98) | 95.7 (0.33) | 93.4 (0.65) |
| 0.050 | R2.5 | R40 | 27.4 (2.70) | 33.8 (2.28) | 36.1 (1.85) | 94.9 (0.38) | 91.5 (0.84) |
| 0.050 | R10 | R20 | 31.9 (2.31) | 34.8 (2.11) | 35.5 (1.98) | 98.1 (0.17) | 97.2 (0.31) |
| 0.050 | R10 | R40 | 30.1 (2.38) | 34.8 (2.11) | 36.1 (1.85) | 96.7 (0.25) | 94.8 (0.54) |
| 0.050 | R20 | R40 | 32.5 (2.15) | 35.5 (1.98) | 36.1 (1.85) | 98.1 (0.17) | 97.2 (0.30) |
| 0.100 | C | R2.5 | 38.8 (1.91) | 42.3 (1.68) | 42.5 (1.68) | 98.7 (0.14) | 98.6 (0.15) |
| 0.100 | C | R10 | 36.5 (1.97) | 42.3 (1.68) | 43.7 (1.53) | 97.6 (0.23) | 96.4 (0.38) |
| 0.100 | C | R20 | 35.8 (1.99) | 42.3 (1.68) | 44.4 (1.45) | 97.2 (0.26) | 95.2 (0.53) |
| 0.100 | C | R40 | 35.3 (1.97) | 42.3 (1.68) | 45.1 (1.38) | 96.8 (0.28) | 94.0 (0.68) |
| 0.100 | R2.5 | R10 | 37.9 (1.91) | 42.5 (1.68) | 43.7 (1.53) | 98.3 (0.15) | 97.3 (0.30) |
| 0.100 | R2.5 | R20 | 36.8 (1.95) | 42.5 (1.68) | 44.4 (1.45) | 97.7 (0.19) | 96 .0(0.45) |
| 0.100 | R2.5 | R40 | 36.1 (1.93) | 42.5 (1.68) | 45.1 (1.38) | 97.2 (0.23) | 94.6 (0.59) |
| 0.100 | R10 | R20 | 40.7 (1.65) | 43.7 (1.53) | 44.4 (1.45) | 99.0 (0.09) | 98.5 (0.17) |
| 0.100 | R10 | R40 | 38.9 (1.70) | 43.7 (1.53) | 45.1 (1.38) | 98.2 (0.14) | 96.9 (0.33) |
| 0.100 | R20 | R40 | 41.4 (1.57) | 44.4 (1.45) | 45.1 (1.38) | 99.0 (0.09) | 98.4 (0.17) |

aC = circle; R2.5 = rectangle with aspect ratio of 1:2.5; R10 = rectangle with aspect ratio of 1:10; R20 = rectangle with aspect ratio of 1:20; R40 = rectangle with aspect ratio of 1:40.