

Table S1. Mean ($\bar{\theta}$) and mean CV ($\overline{CV_{\theta}}$) of Jaccard and Sørensen similarity indices for comparing species composition between a single plot and a cluster plot of a cluster layout for Fushan and Pasoh controlling for PAREA (250, 500, 1000 m²) and CEXTENT (1000, 2500, 10000 m²). The three comparisons are: (1) single vs CLAYOUT = rectangle, (2) single vs CLAYOUT = square, (3) single vs CLAYOUT = triangle. There are 27 types of combinations for a study site. The empirical 95% confidence intervals are given in parentheses

No.	Controlled Design Factor		Comparison	Mean ($\bar{\theta}$)		Mean CV ($\overline{CV_{\theta}}$)	
	PAREA	CEXTENT	Single vs CLAYOUT	Jaccard	Sørensen	Jaccard	Sørensen
Fushan							
1	250	1000	rectangle	49.1 (48.0, 50.2)	64.7 (63.6, 65.6)	27.9 (26.3, 29.4)	20.1 (18.8, 21.3)
2	250	1000	square	50.2 (49.1, 51.4)	65.7 (64.7, 66.8)	27.1 (25.9, 29.0)	19.4 (18.4, 21.0)
3	250	1000	triangle	56.7 (55.7, 57.7)	71.3 (70.4, 72.2)	24.3 (22.8, 25.7)	16.9 (15.7, 18.0)
4	250	2500	rectangle	47.7 (46.6, 48.9)	63.4 (62.4, 64.5)	28.2 (26.2, 30.2)	20.6 (18.9, 22.2)
5	250	2500	square	48.8 (47.6, 50.1)	64.4 (63.3, 65.7)	27.6 (26.0, 29.3)	20.0 (18.5, 21.5)
6	250	2500	triangle	55.6 (54.7, 56.7)	70.3 (69.5, 71.4)	25.1 (23.5, 26.5)	17.6 (16.4, 18.9)
7	250	10000	rectangle	45.6 (44.3, 46.7)	61.5 (60.1, 62.6)	28.8 (26.9, 30.7)	21.5 (20.0, 23.4)
8	250	10000	square	46.8 (45.7, 48.0)	62.6 (61.5, 63.7)	28.2 (26.2, 30.0)	20.8 (19.1, 22.3)
9	250	10000	triangle	53.9 (52.9, 55.0)	68.9 (68.0, 69.9)	26.2 (24.6, 27.8)	18.7 (17.3, 20.0)
10	500	1000	rectangle	58.4 (57.5, 59.4)	73.0 (72.2, 73.8)	20.9 (19.7, 22.1)	14.1 (13.1, 15.0)
11	500	1000	square	59.8 (58.8, 60.8)	74.1 (73.3, 75.0)	20.1 (18.7, 21.7)	13.4 (12.4, 14.6)
12	500	1000	triangle	64.8 (63.8, 65.8)	78.0 (77.2, 78.7)	18.4 (17.2, 19.8)	12.0 (11.0, 13.1)
13	500	2500	rectangle	57.1 (56.2, 58.1)	71.8 (71.0, 72.8)	21.4 (19.8, 22.9)	14.7 (13.3, 16.0)
14	500	2500	square	58.2 (57.3, 59.3)	72.8 (72.0, 73.7)	20.7 (19.4, 22.0)	14.0 (12.8, 15.0)
15	500	2500	triangle	63.7 (62.7, 64.7)	77.1 (76.3, 77.9)	19.1 (17.7, 20.4)	12.6 (11.6, 13.7)
16	500	10000	rectangle	54.7 (53.5, 55.8)	69.9 (68.8, 70.9)	22.1 (20.5, 23.7)	15.7 (14.3, 17.4)
17	500	10000	square	55.9 (55.0, 57.0)	70.9 (70.1, 71.9)	21.5 (19.9, 23.0)	15.0 (13.8, 16.3)
18	500	10000	triangle	61.8 (60.8, 62.9)	75.6 (74.7, 76.5)	20.2 (18.6, 21.6)	13.7 (12.5, 15.0)
19	1000	1000	rectangle	67.0 (66.2, 67.9)	79.8 (79.2, 80.5)	14.6 (13.6, 15.4)	9.2 (8.4, 9.8)
20	1000	1000	square	71.3 (70.7, 72.2)	82.9 (82.5, 83.5)	12.9 (12.2, 13.7)	7.9 (7.3, 8.4)
21	1000	1000	triangle	72.2 (71.5, 73.0)	83.5 (83.0, 84.1)	13.0 (12.1, 13.9)	7.9 (7.3, 8.5)
22	1000	2500	rectangle	65.4 (64.6, 66.3)	78.6 (78.0, 79.3)	15.3 (14.2, 16.2)	9.8 (9.0, 10.8)
23	1000	2500	square	66.6 (65.9, 67.3)	79.5 (79.0, 80.0)	14.7 (13.8, 15.7)	9.3 (8.6, 10.1)
24	1000	2500	triangle	70.8 (70.1, 71.7)	82.5 (82.0, 83.1)	13.7 (12.8, 14.6)	8.5 (7.8, 9.3)
25	1000	10000	rectangle	62.8 (62.0, 63.7)	76.6 (75.9, 77.4)	16.4 (15.1, 18.0)	11.2 (9.9, 13.0)
26	1000	10000	square	64.1 (63.2, 65.0)	77.6 (76.9, 78.4)	15.7 (14.5, 16.7)	10.3 (9.3, 11.2)
27	1000	10000	triangle	68.7 (68.0, 69.7)	81.0 (80.4, 81.8)	14.8 (13.2, 15.8)	9.5 (8.3, 10.3)

No.	Controlled Design Factor		Comparison	Mean ($\bar{\theta}$)		Mean CV ($\overline{CV_{\theta}}$)	
	PAREA	CEXTENT	Single vs CLAYOUT	Jaccard	Sørensen	Jaccard	Sørensen
Pasoh							
1	250	1000	rectangle	27.1 (26.7, 27.7)	42.4 (41.9, 43.1)	19.6 (17.6, 21.3)	15.0 (13.7, 16.1)
2	250	1000	square	28.0 (27.5, 28.4)	43.4 (42.9, 44.0)	18.9 (17.4, 20.4)	14.4 (13.3, 15.4)
3	250	1000	triangle	38.0 (37.5, 38.5)	54.8 (54.3, 55.4)	14.3 (13.4, 15.4)	10.4 (9.7, 11.1)
4	250	2500	rectangle	26.0 (25.6, 26.6)	41.0 (40.4, 41.7)	20.5 (18.7, 22.2)	15.9 (14.5, 17.1)
5	250	2500	square	26.8 (26.3, 27.3)	42.0 (41.4, 42.6)	19.6 (18.1, 21.4)	15.1 (14.1, 16.3)
6	250	2500	triangle	37.1 (36.6, 37.5)	53.9 (53.3, 54.4)	14.6 (13.5, 15.6)	10.7 (9.9, 11.4)
7	250	10000	rectangle	24.4 (23.9, 25.0)	39.0 (38.3, 39.6)	21.9 (20.2, 23.6)	17.3 (15.9, 18.7)
8	250	10000	square	25.1 (24.7, 25.7)	39.9 (39.3, 40.5)	20.8 (19.3, 22.3)	16.3 (15.1, 17.5)
9	250	10000	triangle	35.8 (35.2, 36.3)	52.5 (51.8, 53.1)	15.2 (14.3, 16.1)	11.2 (10.6, 11.9)
10	500	1000	rectangle	36.7 (36.2, 37.2)	53.5 (53.0, 54.0)	14.1 (13.0, 15.3)	10.1 (9.3, 10.8)
11	500	1000	square	37.8 (37.3, 38.3)	54.6 (54.2, 55.2)	13.6 (12.4, 14.8)	9.6 (8.8, 10.4)
12	500	1000	triangle	46.2 (45.9, 46.6)	63.1 (62.8, 63.4)	10.6 (9.8, 11.3)	7.2 (6.7, 7.7)
13	500	2500	rectangle	35.4 (34.9, 35.9)	52.1 (51.5, 52.6)	14.9 (13.5, 16.0)	10.8 (9.8, 11.5)
14	500	2500	square	36.3 (35.8, 36.8)	53.1 (52.5, 53.6)	14.3 (12.9, 15.7)	10.2 (9.3, 11.1)
15	500	2500	triangle	45.1 (44.7, 45.6)	62.0 (61.6, 62.5)	10.8 (10.2, 11.7)	7.4 (7.0, 8.0)
16	500	10000	rectangle	33.6 (33.1, 34.1)	50.0 (49.5, 50.6)	16.1 (15.0, 17.3)	11.9 (11.0, 13.0)
17	500	10000	square	34.4 (34.1, 34.9)	51.0 (50.6, 51.5)	15.2 (13.9, 16.5)	11.1 (10.2, 12.0)
18	500	10000	triangle	43.7 (43.3, 44.1)	60.6 (60.3, 61.0)	11.4 (10.6, 12.2)	7.9 (7.4, 8.5)
19	1000	1000	rectangle	47.2 (46.7, 47.6)	64.0 (63.5, 64.3)	10.2 (9.5, 11.1)	6.8 (6.3, 7.3)
20	1000	1000	square	53.2 (52.8, 53.6)	69.3 (69.0, 69.7)	8.6 (7.9, 9.2)	5.5 (5.1, 5.9)
21	1000	1000	triangle	55.3 (54.9, 55.7)	71.1 (70.8, 71.4)	7.8 (7.0, 8.4)	5.0 (4.5, 5.4)
22	1000	2500	rectangle	45.7 (45.2, 46.1)	62.5 (62.1, 63.0)	11.1 (10.1, 12.0)	7.5 (6.8, 8.1)
23	1000	2500	square	46.8 (46.3, 47.2)	63.6 (63.1, 64.0)	10.5 (9.5, 11.5)	7.0 (6.4, 7.5)
24	1000	2500	triangle	53.9 (53.5, 54.4)	70.0 (69.6, 70.3)	8.2 (7.5, 8.8)	5.3 (4.8, 5.7)
25	1000	10000	rectangle	43.7 (43.2, 44.2)	60.6 (60.2, 61.1)	12.3 (11.3, 13.3)	8.6 (7.8, 9.7)
26	1000	10000	square	44.7 (44.3, 45.1)	61.6 (61.2, 62.0)	11.4 (10.3, 12.2)	7.8 (7.0, 8.3)
27	1000	10000	triangle	52.3 (52.0, 52.7)	68.6 (68.3, 68.9)	8.7 (8.1, 9.4)	5.7 (5.3, 6.2)