

## Supplementary materials

**Table 1.** Soil infiltration rates (m/d) at different soil depths in the three test tanks.

Soil depth (m)	Tank	Run	Tube 01	Tube 02	Tube 03	Tube 04	Mean value	Standard deviation
0.35	Blank test	1	1.31	0.61	0.88	1.11	0.98	0.001
		2	1.14	0.62	1.08	1.08	0.98	
	<i>M. baccata</i>	1	0.86	1.17	1.31	1.23	1.14	0.124
		2	0.79	0.98	1.08	1.03	0.97	
	<i>S. japonica</i>	1	1.14	0.62	1.20	0.77	0.93	0.036
		2	0.98	0.62	1.20	0.72	0.88	
0.70	Blank test	1	0.61	0.33	0.32	0.14	0.35	0.005
		2	0.55	0.33	0.33	0.20	0.36	
	<i>M. baccata</i>	1	0.72	0.40	0.33	0.98	0.61	0.021
		2	0.88	0.41	0.33	0.94	0.64	
	<i>S. japonica</i>	1	0.55	0.24	0.28	0.96	0.51	0.001
		2	0.55	0.18	0.43	0.86	0.51	

**Table 2.** Soil infiltration rates (m/d) at different distances (10 cm, 65 cm, and 130 cm) from the tree trunks in the three test tanks.

Tank.	Distances from tree trunk (m)	0.10			0.65			1.30		
		Vertical Tube	01	02	03	04	05	06	07	09
Blank test	Run 1		0.11	0.30	0.32	0.18	0.47	0.42	0.39	0.48
	Run 2		0.11	0.28	0.31	0.18	0.47	0.45	0.38	0.48
	Mean value		0.11		0.31				0.44	
	Standard deviation		0.003		0.112				0.048	
<i>M. baccata</i>	Run 1		0.13	0.49	0.53	0.39	0.48	0.66	0.88	0.69
	Run 2		0.14	0.49	0.53	0.59	0.36	0.66	0.88	0.73
	Mean value		0.14		0.48				0.80	
	Standard deviation		0.008		0.076				0.131	
<i>S. japonica</i>	Run 1		0.21	0.63	0.39	0.49	0.63	1.05	0.63	0.88
	Run 2		0.18	0.53	0.39	0.46	0.63	1.05	0.53	0.88
	Mean value		0.19		0.52				0.84	
	Standard deviation		0.016		0.101				0.184	