

**Table S2.** Treatment mean ( $\pm$  standard error) of annual tree girth, height and canopy cover area (measured in October 2023), and total fruit weight and number over the period of 2021-2024 for nine soil amendment treatment and the untreated control. The treatment details are given in Table 1. The first eight treatments were from the  $2 \times 2 \times 2$  factorial design where trees of the apple cultivar Gala, grafted onto the M9 rootstock, were planted in March 2020 and amended with a single AMF strain (yes, no), biocontrol agents (BCAs) (yes, no) and plant growth-promoting rhizobacteria (PGPR) (yes, no). For each treatment, there were 20 replicate trees (although several trees died during the experimental four-year period).

Treatment	Girth (mm, 20 cm above the graft union)				Height (cm)	Canopy cover area	Total fruit yield		Large fruit (> 60 mm)	
	2021	2022	2023	2024			Weight (kg)	Number	Weight	Number
Single AMF (A)	5.46 $\pm$ 0.076	6.03 $\pm$ 0.110	6.87 $\pm$ 0.139	7.70 $\pm$ 0.185	73.4 $\pm$ 6.76	4186 $\pm$ 1344.5	9.93 $\pm$ 0.666	153.3 $\pm$ 9.25	3.75 $\pm$ 0.430	35.6 $\pm$ 3.49
BCA (B)	5.47 $\pm$ 0.099	5.97 $\pm$ 0.137	6.87 $\pm$ 0.144	7.46 $\pm$ 0.176	71.2 $\pm$ 5.58	3042 $\pm$ 728.5	8.22 $\pm$ 0.523	151.8 $\pm$ 8.48	3.11 $\pm$ 0.324	28.4 $\pm$ 2.83
PGPR (C)	5.36 $\pm$ 0.104	5.97 $\pm$ 0.141	6.85 $\pm$ 0.189	7.56 $\pm$ 0.224	67.5 $\pm$ 5.87	2576 $\pm$ 543.6	9.63 $\pm$ 0.834	139.8 $\pm$ 10.15	3.98 $\pm$ 0.578	36.8 $\pm$ 5.44
A + B	5.61 $\pm$ 0.093	6.28 $\pm$ 0.100	7.32 $\pm$ 0.165	8.07 $\pm$ 0.207	85.8 $\pm$ 7.16	4544 $\pm$ 1137.9	9.82 $\pm$ 0.739	165.3 $\pm$ 13.36	4.16 $\pm$ 0.462	38.1 $\pm$ 4.33
A + C	5.50 $\pm$ 0.092	6.04 $\pm$ 0.110	6.94 $\pm$ 0.111	7.71 $\pm$ 0.149	76.2 $\pm$ 6.31	4067 $\pm$ 934.5	9.48 $\pm$ 0.756	156.5 $\pm$ 9.05	3.65 $\pm$ 0.383	32.3 $\pm$ 3.08
B + C	5.44 $\pm$ 0.108	5.97 $\pm$ 0.091	6.88 $\pm$ 0.119	7.61 $\pm$ 0.137	69.9 $\pm$ 7.13	3512 $\pm$ 874.4	9.85 $\pm$ 0.733	152.7 $\pm$ 11.86	4.23 $\pm$ 0.374	39.6 $\pm$ 3.20
A + B + C	5.51 $\pm$ 0.113	6.19 $\pm$ 0.119	7.13 $\pm$ 0.153	7.83 $\pm$ 0.182	84.4 $\pm$ 4.65	4342 $\pm$ 872.0	9.44 $\pm$ 0.652	162.9 $\pm$ 12.83	4.07 $\pm$ 0.396	36.8 $\pm$ 3.57
Untreated	5.29 $\pm$ 0.087	5.81 $\pm$ 0.122	6.59 $\pm$ 0.150	7.21 $\pm$ 0.198	65.8 $\pm$ 4.84	2740 $\pm$ 690.1	9.12 $\pm$ 0.689	136.3 $\pm$ 9.83	3.77 $\pm$ 0.464	35.7 $\pm$ 4.45
Biofence	5.28 $\pm$ 0.086	5.93 $\pm$ 0.090	6.72 $\pm$ 0.129	7.35 $\pm$ 0.178	88.8 $\pm$ 7.36	4701 $\pm$ 726.7	10.4 $\pm$ 0.98	156.0 $\pm$ 11.76	4.21 $\pm$ 0.546	42.5 $\pm$ 6.51
Mixed AMF	5.49 $\pm$ 0.102	6.09 $\pm$ 0.121	7.06 $\pm$ 0.176	7.73 $\pm$ 0.180	81.0 $\pm$ 7.03	4711 $\pm$ 2176.7	9.3 $\pm$ 0.756	161.1 $\pm$ 11.08	3.75 $\pm$ 0.417	34.6 $\pm$ 3.82
Overall mean	5.44 $\pm$ 0.031	6.03 $\pm$ 0.037	6.93 $\pm$ 0.048	7.62 $\pm$ 0.059	76.4 $\pm$ 2.03	3831 $\pm$ 334.8	9.52 $\pm$ 0.232	153.7 $\pm$ 3.42	3.87 $\pm$ 0.139	36.1 $\pm$ 1.33