

Figure S1. Experimental design of the greenhouse assays. A, the greenhouse-umbraculum; B, schematic view of the avocado plant pot with the organic amendment; C-F, treatments included in the assays: C, unamended control; D, composted almond shells; E, composted pruning waste; F, composted yard waste; G-I, timeline of the experiment: G, beginning of the assay; H, inoculation of the pathogen (6 months); I, end of the assay (12 months).

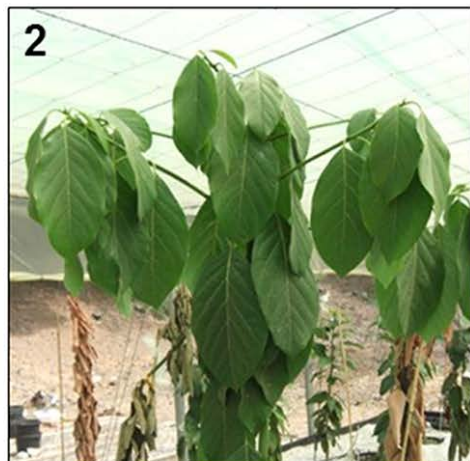
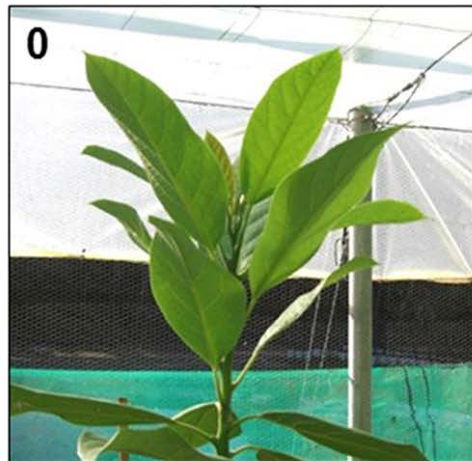


Figure S2: Severity scale for evaluation of white root rot aerial symptoms: 0, healthy plant; 1, plant with some wilted leaves; 2, overall wilted plant; 3, wilted plant with some dry leaves; 4, completely dry plant (dead plant)

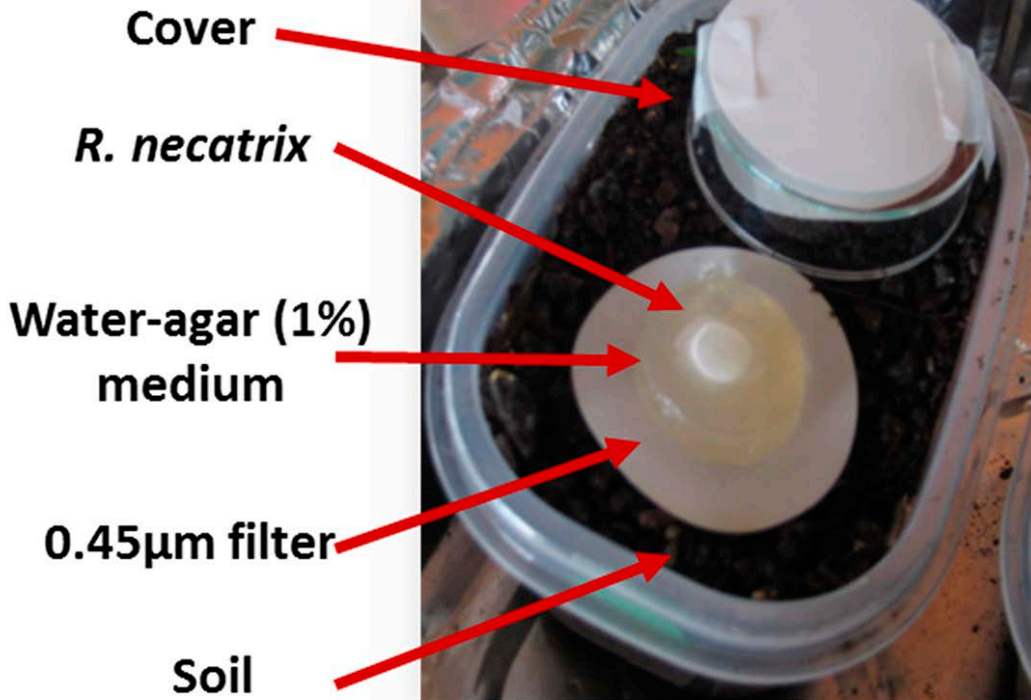


Figure S3: Microcosms assay to evaluate the role of microbial community in suppressive soils. Diffusion chamber experimental design where *R. necatrix* growing on water-agar medium (1%) was placed on a nitrocellulose filter on top of different soils and covered. Fresh, pasteurized and complemented soils were tested.

Table S1. Chemical composition of the amended and unamended soils under analysis. Mean values and standard deviation (in brackets).

	UC	AS	PW	YW
N (%)	0.17 (0.01)	0.29 (0.02)	0.40 (0.02)	0.50 (0.06)
C (%)	3.55 (0.08)	7.02 (0.03)	6.47 (0.27)	7.71 (1.00)
Organic C (%)	3.28 (0.05)	6.90 (0.01)	5.92 (0.54)	7.35 (1.27)
P (%)	0.10 (0.00)	0.09 (0.00)	0.11 (0.01)	0.13 (0.02)
S (%)	0.02 (0.00)	0.03 (0.00)	0.04 (0.00)	0.06 (0.01)
Al (%)	5.69 (0.07)	5.01 (0.02)	5.33 (0.10)	4.63 (0.32)
B (ppm)	9.21 (0.55)	10.14 (0.10)	12.40 (0.42)	13.76 (1.34)
Ca (%)	0.77 (0.06)	0.84 (0.08)	0.95 (0.05)	1.20 (0.03)
Cd (ppm)	4.05 (0.86)	2.86 (0.09)	3.00 (0.07)	2.63 (0.15)
Cr (ppm)	85.02 (3.21)	72.53 (0.48)	74.24 (2.08)	67.67 (4.67)
Cu (ppm)	43.07 (6.64)	35.55 (0.77)	46.56 (4.97)	36.42 (1.10)
Fe (ppm)	46657 (5541)	37726 (325)	38777 (1549)	34795 (3222)
K (%)	1.70 (0.03)	1.50 (0.02)	1.61 (0.03)	1.40 (0.08)
Mn (ppm)	572 (35)	569 (26)	519 (7)	691 (4.23)
Ni (ppm)	40.75 (4.87)	33.17 (0.60)	32.89 (0.80)	31.98 (3.72)
Zn (ppm)	82.35 (9.40)	75.91 (1.36)	99.05 (1.62)	93.88 (10.33)

Table S2. Correlation of chemical parameters to ordination axes derived from PCA of soil samples from the assay 2 (Fig. 3): positive correlations indicate higher nutrient content in samples with bigger coordinate scores for the axis; negative correlations indicate greater nutrient content in samples with lower coordinate scores for the axis. The absolute value of the correlation index indicated the load of each parameter in the ordination axes.

<b>PC1</b>		<b>PC2</b>	
<b>Chemical parameters</b>	<b>r</b>	<b>Chemical parameters</b>	<b>r</b>
Nitrogen	0.923	Zinc	0.910
Sulphur	0.906	Copper	0.674
Calcium	0.899		
Carbon	0.894		
Organic carbon	0.857		
Boron	0.852		
Phosphorus	0.693		
Manganese	0.525		
Chrome	-0.908		
Aluminium	-0.844		
Iron	-0.843		
Potassium	-0.823		
Cadmium	-0.813		
Nickel	-0.745		
<b>Eigenvalues</b>	<b>9.889</b>	<b>Eigenvalues</b>	<b>3.105</b>
<b>Percent. variance</b>	<b>61.804</b>	<b>Percent. variance</b>	<b>19.406</b>
<b>Cumulative explanation</b>	<b>61.804</b>	<b>Cumulative explanation</b>	<b>81.210</b>

Table S3. Functional diversity indices based on CLPP. Mean values and standard deviation (in brackets).

Soil assay 1	UC	AS	PW	YW
Shannon	3.15 (0.02)	3.28** (0.03)	3.21** (0.02)	3.25** (0.02)
Richness	13.67 (0.58)	16.67** (0.58)	15.33** (0.58)	15.67 (1.53)
Evenness	1.20 (0.02)	1.17* (0.02)	1.18 (0.01)	1.19 (0.05)
Soil assay 2	UC	AS	PW	YW
Shannon	3.28 (0.02)	3.31** (0.01)	3.27 (0.00)	3.15* (0.09)
Richness	16.67 (0.58)	17.33 (2.52)	14.33 (1.53)	14.33* (1.16)
Evenness	1.16 (0.01)	1.17 (0.06)	1.23** (0.04)	1.18 (0.01)
Rhizosphere	UC	AS	PW	YW
Shannon	3.08 (0.08)	3.22** (0.04)	3.01 (0.05)	2.99 (0.07)
Richness	14.67 (0.58)	16.00 (1.00)	12.00* (1.00)	15.33 (1.16)
Evenness	1.15 (0.04)	1.16 (0.03)	1.22 (0.06)	1.10 (0.01)