Supplementary materials

Table S1. Summary of treatments applied in the experiment. *Cultivar*: Valiente (VAL) or Pony (PON). *Substrate*: Undergrowth Topsoil (US) or peat (PEAT). *Fertigation*: Water (WA) or Nutrient Solution (NS). *AMF application*: No Mycorrhiza (NM) or Mycorrhiza (M). *Trichoderma application*: No Trichoderma (NTR) or Trichoderma (TR).

Treatment	*Tomato variety*	*Substrate*	*Fertigation*	*AMF application*	*Trichoderma application*
T1	*VAL*	*US*	*WA*	*NM*	*NTR*
T2	*VAL*	*US*	*NS*	*NM*	*NTR*
T3	*VAL*	*US*	*WA*	*NM*	*TR*
T4	*VAL*	*US*	*NS*	*NM*	*TR*
T5	*VAL*	*US*	*WA*	*M*	*NTR*
T6	*VAL*	*US*	*NS*	*M*	*NTR*
T7	*VAL*	*US*	*WA*	*M*	*TR*
T8	*VAL*	*US*	*NS*	*M*	*TR*
T9	*VAL*	*PEAT*	*WA*	*NM*	*NTR*
T10	*VAL*	*PEAT*	*NS*	*NM*	*NTR*
T11	*VAL*	*PEAT*	*WA*	*NM*	*TR*
T12	*VAL*	*PEAT*	*NS*	*NM*	*TR*
T13	*VAL*	*PEAT*	*WA*	*M*	*NTR*
T14	*VAL*	*PEAT*	*NS*	*M*	*NTR*
T15	*VAL*	*PEAT*	*WA*	*M*	*TR*
T16	*VAL*	*PEAT*	*NS*	*M*	*TR*
T17	*PON*	*US*	*WA*	*NM*	*NTR*
T18	*PON*	*US*	*NS*	*NM*	*NTR*
T19	*PON*	*US*	*WA*	*NM*	*TR*
T20	*PON*	*US*	*NS*	*NM*	*TR*
T21	*PON*	*US*	*WA*	*M*	*NTR*
T22	*PON*	*US*	*NS*	*M*	*NTR*
T23	*PON*	*US*	*WA*	*M*	*TR*
T24	*PON*	*US*	*NS*	*M*	*TR*
T25	*PON*	*PEAT*	*WA*	*NM*	*NTR*
T26	*PON*	*PEAT*	*NS*	*NM*	*NTR*
T27	*PON*	*PEAT*	*WA*	*NM*	*TR*
T28	*PON*	*PEAT*	*NS*	*NM*	*TR*
T29	*PON*	*PEAT*	*WA*	*M*	*NTR*
T30	*PON*	*PEAT*	*NS*	*M*	*NTR*
T31	*PON*	*PEAT*	*WA*	*M*	*TR*
T32	*PON*	*PEAT*	*NS*	*M*	*TR*

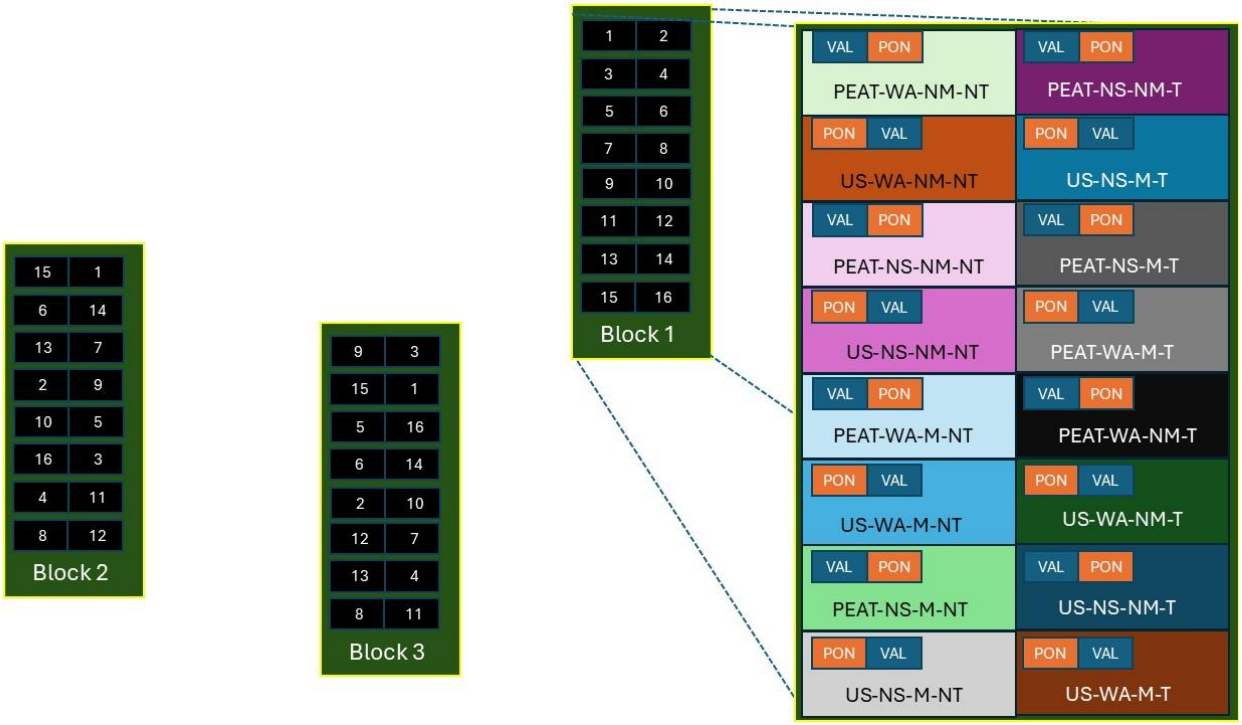

Figure S1. Graphical representation of the experimental design. Within each block, 16 plots are included, each hosting a cultivation tray where both cultivars (VAL and PON) were grown. Treatments distributed across plots included substrate (PEAT vs US), fertigation treatment (WA vs NS) and inoculation with Trichoderma (T vs NTR) or AMF (NM vs M). Across the three blocks (Block 1, Block 2 and Block 3) plots were fully randomized.

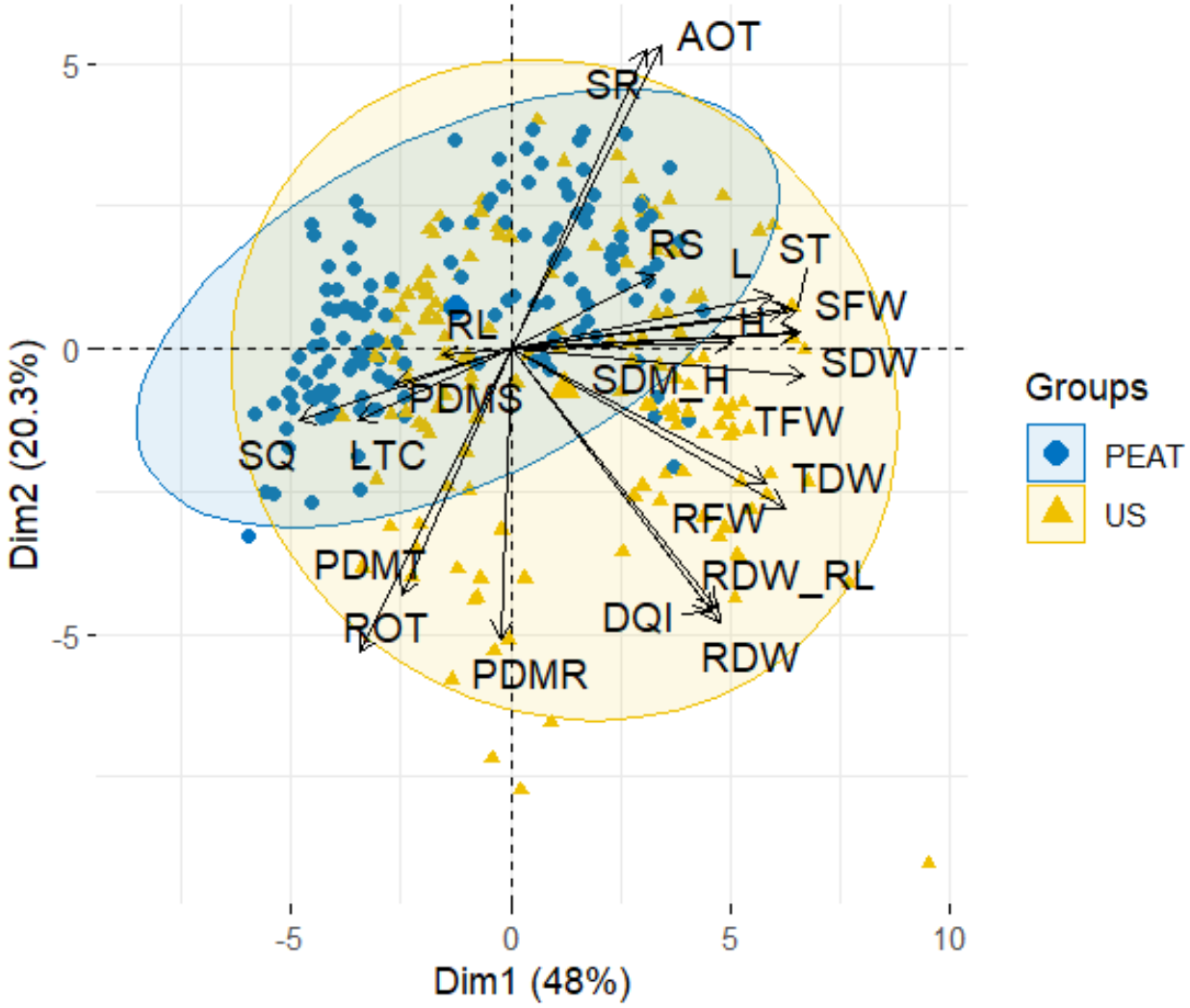

Figure S2. PCA plot showing the weights for principal components of the analysis for the 22 parameters measured in tomato seedlings for substrate treatment classification factor (PEAT = peat substrate; US = forest soil substrate).
H = height; L = leaf number; RL = root length; ST = collar diameter; RS = stem diameters ratio; SFW = shoot fresh weight; RFW root fresh weight; TFW = total fresh weight; PDMS = shoot dry matter; SDW = shoot dry weight; RDW = root dry weight; TDW = total dry weight; SDM = shoot dry matter; PDMS = shoot dry matter; PDMR = root dry matter; PDMT = seedling dry matter; SR = shoot to root ratio; AOT = Shoot dry weight / total dry weight ratio; ROT = root dry weight / total dry weight ratio; SDM_H shoot dry matter / height; RDW_RL= root dry weight / root length; DQI = Dickson quality index; LFC = leaf temperature

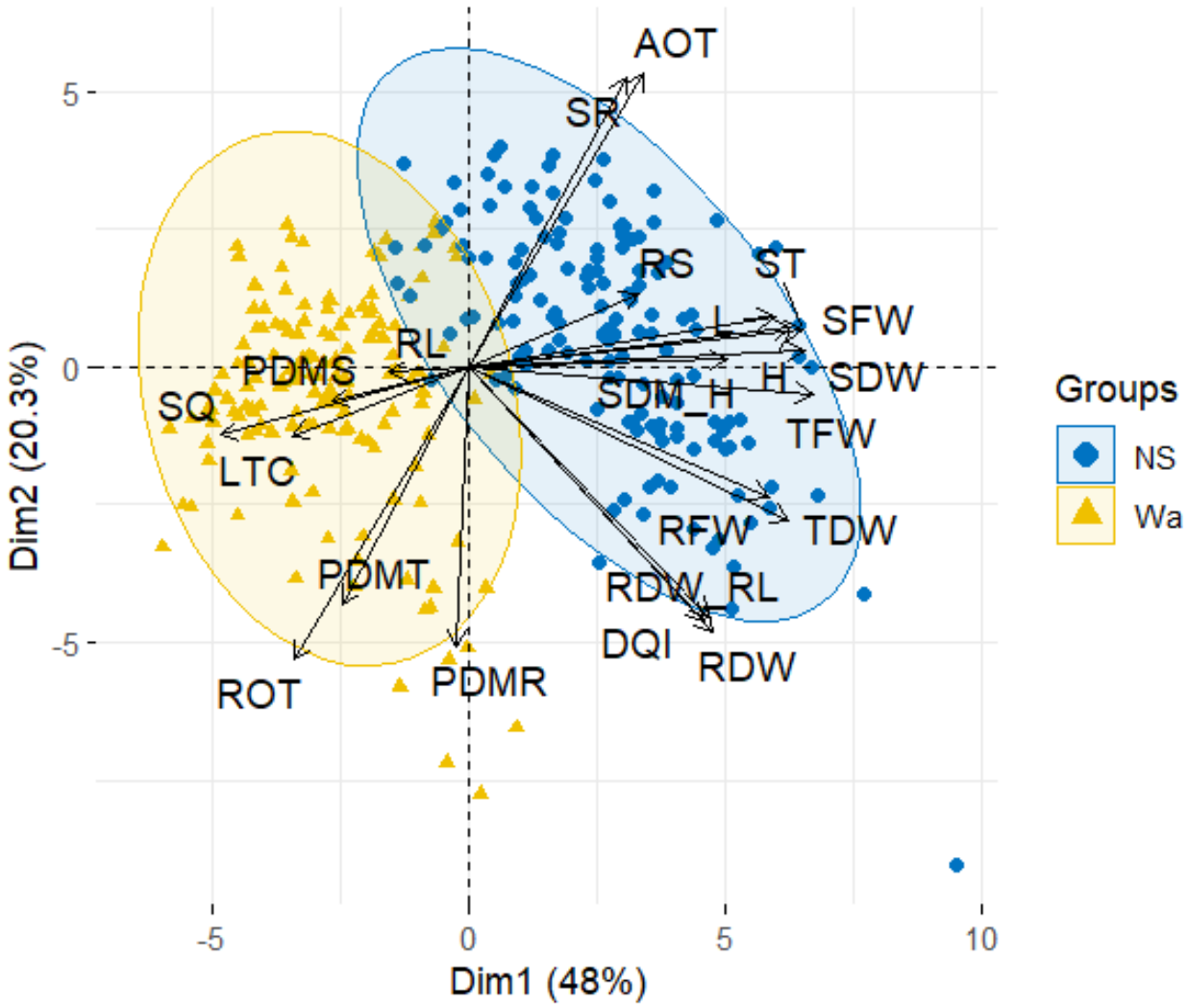

Figure S3. PCA plot showing the weights for principal components of the analysis for the 22 parameters measured in tomato seedlings for fertigation treatment classification factor (WA = water; NS = nutrient solution).
H = height; L = leaf number; RL = root length; ST = collar diameter; RS = stem diameters ratio; SFW = shoot fresh weight; RFW root fresh weight; TFW = total fresh weight; PDMS = shoot dry matter; SDW = shoot dry weight; RDW = root dry weight; TDW = total dry weight; SDM = shoot dry matter; PDMS = shoot dry matter; PDMR = root dry matter; PDMT = seedling dry matter; SR = shoot to root ratio; AOT = Shoot dry weight / total dry weight ratio; ROT = root dry weight / total dry weight ratio; SDM_H shoot dry matter / height; RDW_RL= root dry weight / root length; DQI = Dickson quality index; LFC = leaf temperature

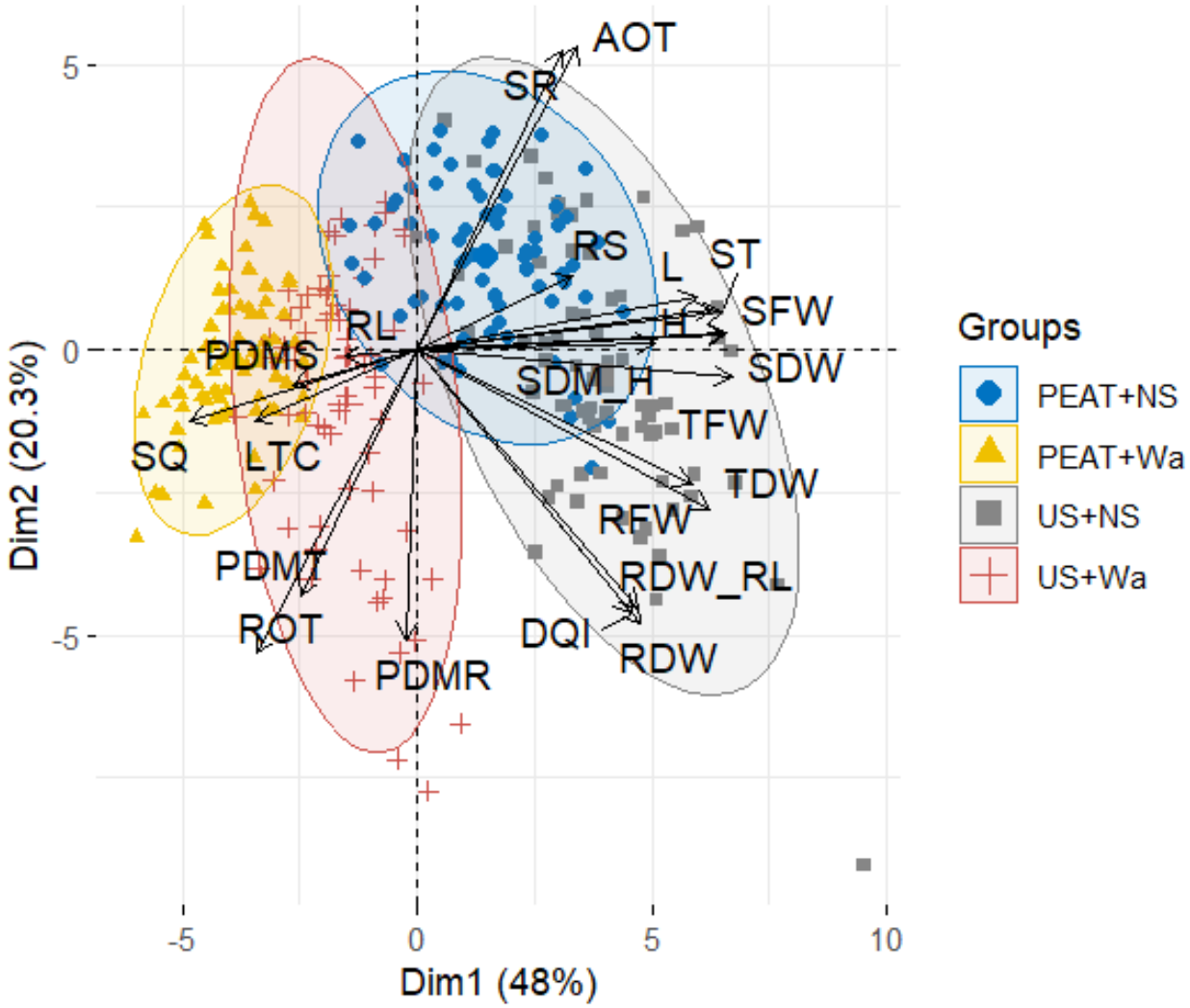

Figure S4. PCA plot showing the weights for principal components of the analysis for the 22 parameters measured in tomato seedlings for the interaction "substrate × fertigation" classification factor (WA = water; NS = nutrient solution PEAT = peat substrate; US = forest soil substrate).
H = height; L = leaf number; RL = root length; ST = collar diameter; RS = stem diameters ratio; SFW = shoot fresh weight; RFW root fresh weight; TFW = total fresh weight; PDMS = shoot dry matter; SDW = shoot dry weight; RDW = root dry weight; TDW = total dry weight; SDM = shoot dry matter; PDMS = shoot dry matter; PDMR = root dry matter; PDMT = seedling dry matter; SR = shoot to root ratio; AOT = Shoot dry weight / total dry weight ratio; ROT = root dry weight / total dry weight ratio; SDM_H shoot dry matter / height; RDW_RL= root dry weight / root length; DQI = Dickson quality index; LFC = leaf temperature

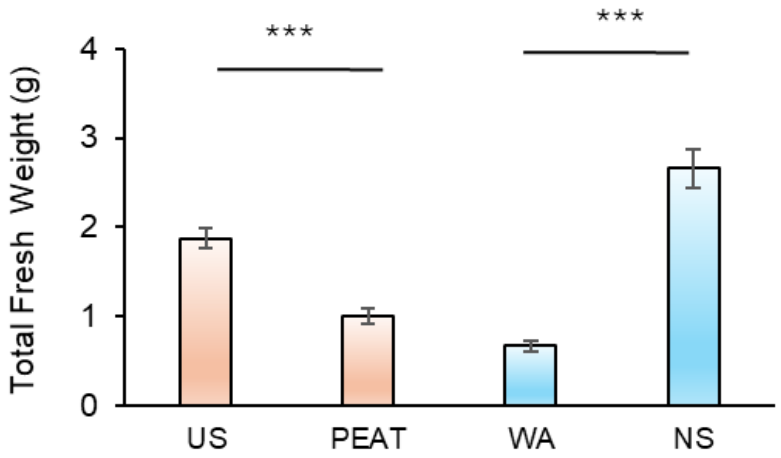

Figure S5. Effect of the substrate and the fertigation treatments on the total fresh weight. Histograms represent the average values, and error bars represent the standard error mean (SEM). Only significant differences for $p \leq 0.01$ are reported, resulting from the Tukey's honestly significant difference test (HSD). ***: $p \leq 0.001$. See the caption of Figure 2 for abbreviations.