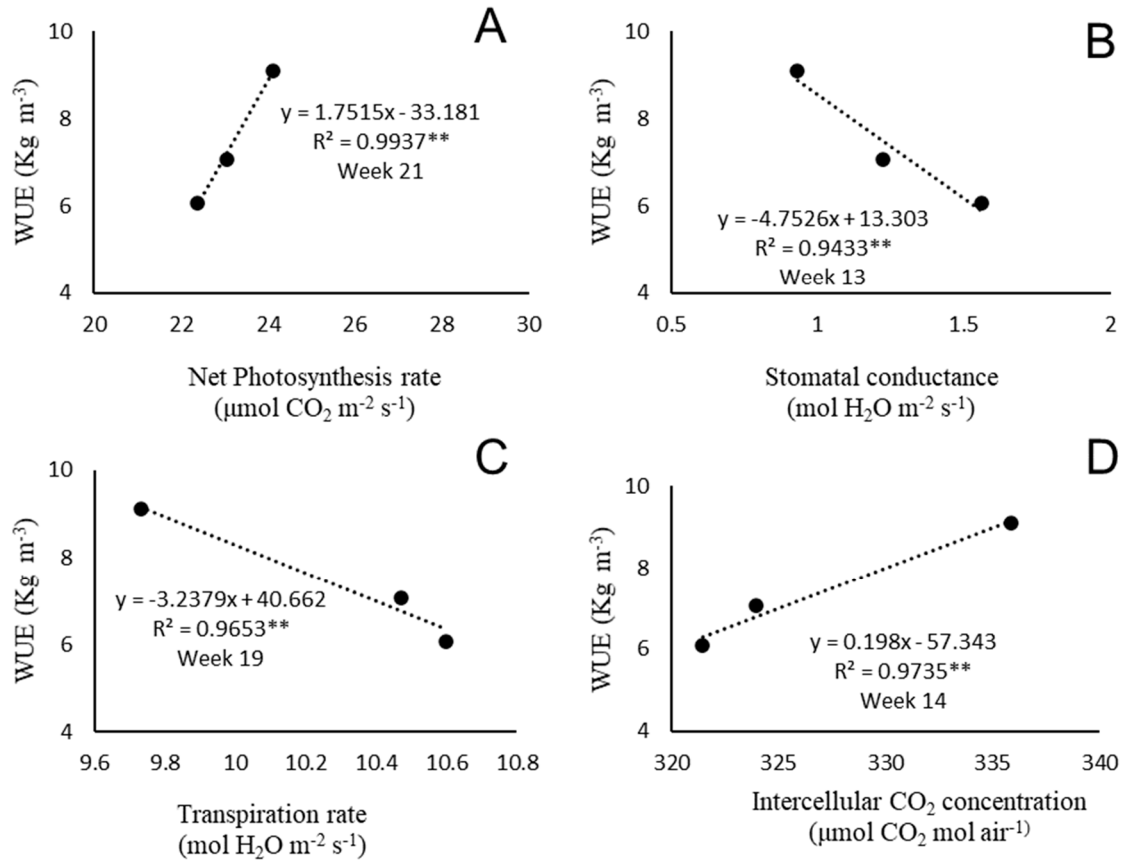**Figure S1.** Vapor pressure deficit (*VPD)* for the eggplant cultivars grown in a high-tech glasshouse. Data are mean ± SE with an average of 6 measurements over 6 weeks.

Figure S2. Correlation analysis of overall water use efficiency and photosynthetic parameters in different weeks of gas exchange measurements. Net photosynthetic rate (*A*), stomatal conductance (g_s), transpiration rate (T_r), and intercellular CO_2 concentration (C_i)** P<0.01.

Table S1. Key gas exchange parameters during the growth season of three eggplant cultivars in a high-tech greenhouse.

Time/ Cultivar	Week 13 25 Oct	Week 14 1 Nov	Week 15 8 Nov	Week 16 15 Nov	Week 19 6 Dec	Week 21 20 Dec
Net Photosynthetic Rate (μmol CO_2 m^{-2} s^{-1})						
Longa	29.3	25.3	26.6	21.4	23.2	22.4
Lydia	23.5	20.4	24.2	18.8	24.7	23.1
Tracey	22.0	18.4	27.8	19.3	20.6	24.1
Stomatal Conductance (mol H_2O m^{-2} s^{-1})						
Longa	1.6	1.6	1.6	0.3	0.7	1.0
Lydia	1.2	1.2	1.2	0.1	0.8	0.8
Tracey	0.9	1.7	1.4	1.2	0.7	0.9
Transpiration Rate (mol H_2O m^{-2} s^{-1})						
Longa	14.9	10.8	15.3	6.6	10.6	9.1
Lydia	10.4	10.6	13.1	3.3	10.5	8.0
Tracey	10.1	15.1	13.6	11.4	9.7	7.3
Intercellular CO_2 Concentration (μmol CO_2 mol s^{-1})						
Longa	306.4	321.5	313.2	219.0	288.6	312.0
Lydia	319.0	324.0	321.7	111.8	286.3	303.2
Tracey	313.7	335.8	304.9	306.3	297.2	308.8