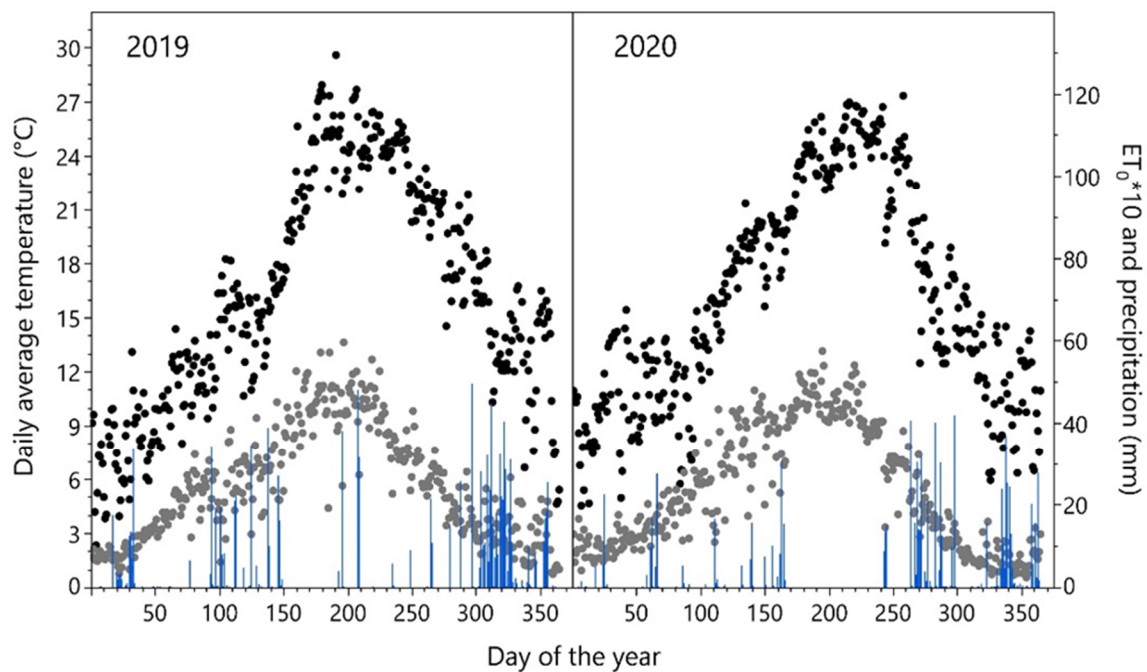




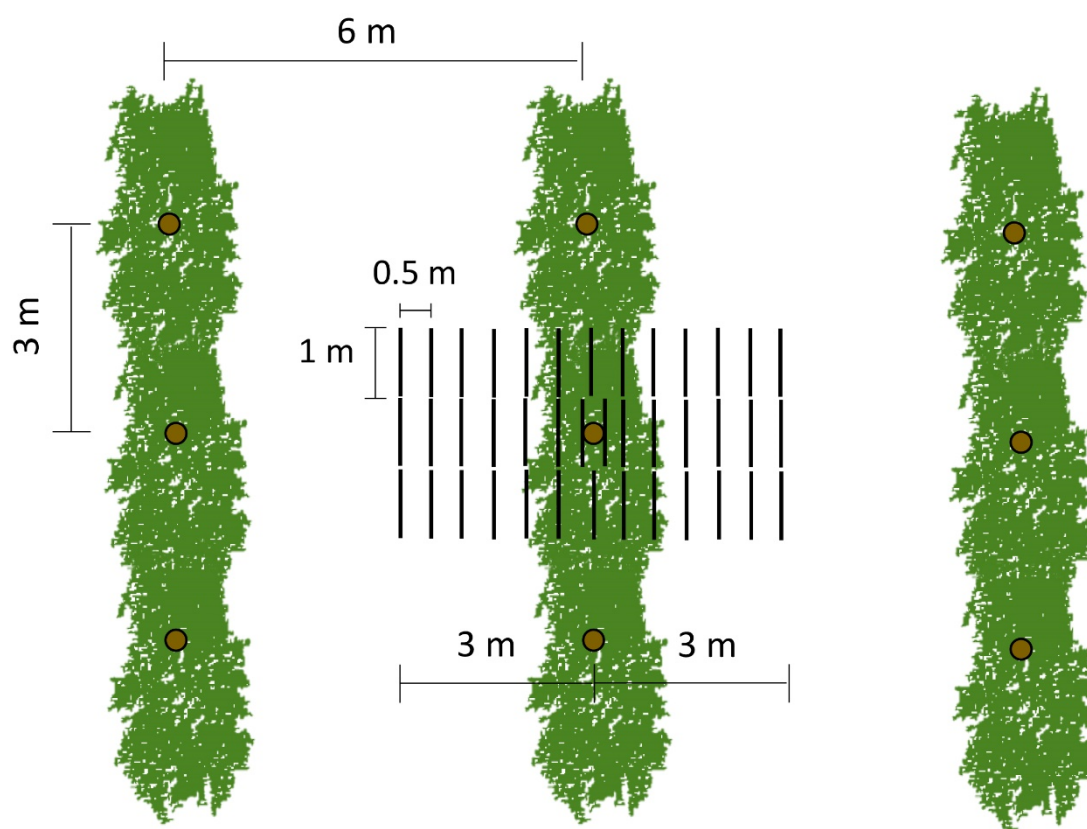
Supplemental material

Supplemental Table S1. Physical and chemical characteristics of the soil sampled at two depths (0–0.3 m, 0.3–0.6 m) in 2019. Values are means \pm standard deviation of three samples ($n=3$) collected in the FI, DI and RF plots (see Figure 1 for more information).

Texture and chemical parameters	Soil depth	
	0–0.3 m	0.3–0.6 m
Sand (%)	71.8 \pm 4.0	67.7 \pm 2.7
Silt (%)	12.3 \pm 2.7	15.1 \pm 1.1
Clay (%)	15.9 \pm 2.2	17.2 \pm 1.7
pH (water extract)	8.24 \pm 0.09	8.21 \pm 0.19
Total organic carbon (%)	0.61 \pm 0.11	0.45 \pm 0.05
Soil organic matter (%)	1.04 \pm 0.18	0.77 \pm 0.08
Total nitrogen (%)	0.08 \pm 0.01	0.06 \pm 0.01
C/N	7.42 \pm 0.62	7.79 \pm 0.54
Available P (mg kg ⁻¹)	112 \pm 40	88 \pm 34
Exchangeable K (mg K ₂ O kg ⁻¹)	535 \pm 139	330 \pm 97
Exchangeable Ca (mg CaO kg ⁻¹)	2121 \pm 138	2140 \pm 76
Exchangeable Mg (mg MgO kg ⁻¹)	181 \pm 6	209 \pm 58
Exchangeable Na (mg kg ⁻¹)	61.2 \pm 7.2	64.3 \pm 8.9
K/Mg	1.27 \pm 0.33	0.74 \pm 0.35
Ca/Mg	5.03 \pm 0.17	4.57 \pm 1.00
Cation exchange capacity (meq 100g ⁻¹)	10.9 \pm 0.7	10.6 \pm 0.4



Supplemental Figure S1. Daily values of mean air temperature (°C, black dots), evapotranspiration (ET₀ mm x 10, grey dots) and precipitation (mm, histograms) at the experimental site in 2019 and 2020.



Supplemental Figure S2. Schematic representation of the procedure followed for the LAI measurements. Black lines indicate the position below the canopy and in the inter-row where the PAR was measured using a one-meter line quantum sensor array.