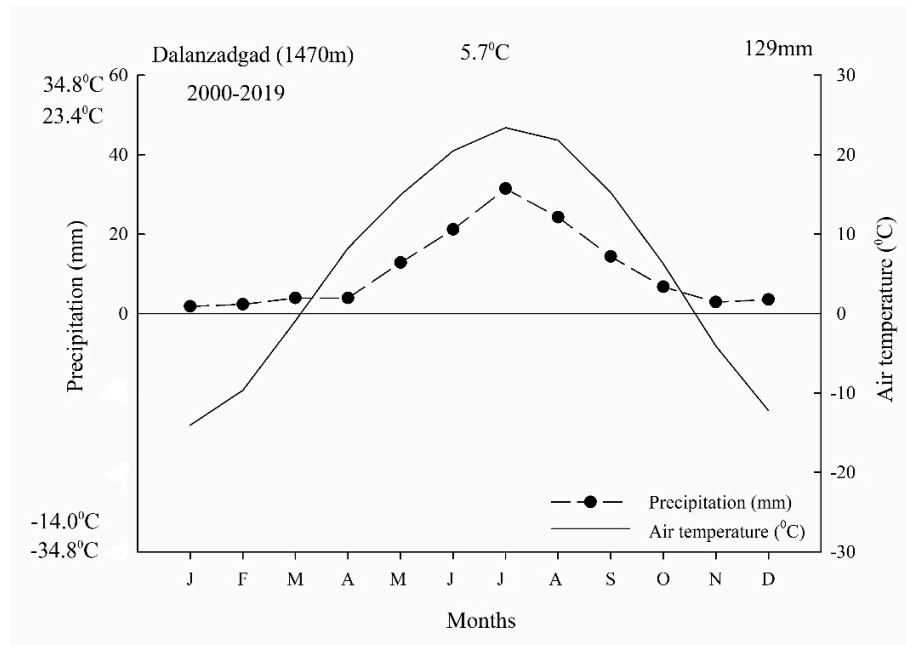**Supplementary Materials**

Figure S1. Mean annual temperature (solid line) and rainfall (broken, dotted line) in the experimental site obtained from the period of January – December (2000-2019).
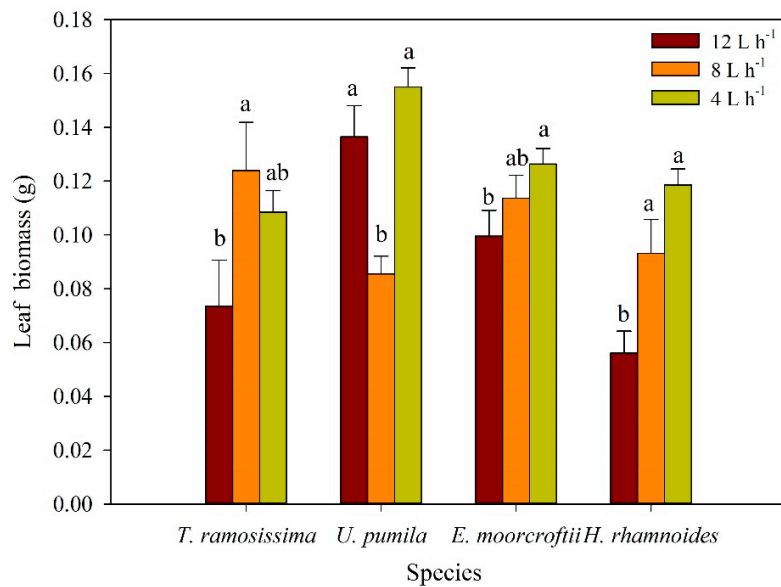

Figure S2. Leaf biomass (LB) of *Tamarix ramosissima, Ulmus pumila, Elaeagnus moorcroftii* and *Hippophae rhamnoides* across different irrigation treatments.

Table S1

P values estimated by two-way analysis of variance (ANOVA) for RCD and height growth across treatments and species. P value in bold font indicates non-significant at $\alpha = 0.05$.

Source	DF	Height		Root collar diameter	
		F Value	Pr>F	F Value	Pr>F
Species	3	26.21	<0.0001	73.50	<.0001
Treatment	2	13.82	<0.0001	13.60	<.0001
Treatment*Species	6	1.68	**0.1245**	3.97	0.0007

Table S2

Repeated measures analysis of variance for transformed heights and RCD from all measurement dates, showing sources of variance, degrees of freedom for numerator (DF) and F ratios (F value) and their probabilities (Pr) per species. P value in bold font indicates non-significant at $\alpha = 0.05$.

Source	DF	Height		Root collar diameter	
		F Value	Pr>F	F Value	Pr>F
Tamarix ramosissima Ledeb.	2	2.71	**0.0716**	0.96	**0.3873**
Ulmus pumila L.	2	3.32	0.0401	1.20	**0.3042**
Elaeagnus moorcroftii L.	2	6.04	0.0034	2.70	**0.0722**
Hippophae rhamnoides L.	2	10.43	<0.0001	15.14	<0.0001