

Supplementary information

Table S1. Summary Statistics for plant height, age, and growth traits across different batches. Batch- averages, maximum values, minimum values, sample sizes (n), and standard errors (SE) are presented for the variables: Plant height (cm), Age (days), and growth (cm)

Batch	1	2	3	4	5	6
avg_Height	19.652	23.497	6.946	16.036	16.050	14.859
max_Height	53	58	49	26	24	33
min_Height	5	8	1	10	11	1
n_Height	48	66	82	14	20	110
SE_Height	1.320	1.080	0.913	1.103	0.709	0.494
avg_Age	689.292	914.652	457.402	653.500	552.700	509.682
max_Age	1608	1458	1095	1017	938	813
min_Age	147	294	76	78	97	443
n_Age	48	66	82	14	20	110
SE_Age	83.353	46.975	34.572	72.467	61.466	13.253
avg_Growth	5.069	6.527	1.934	1.893	1.325	0.732
max_Growth	35	36.1	23	7.5	9	18.5
min_Growth	0	0	0	0	0	0
n_Growth	48	66	82	14	20	110
SE_Growth	1.236	0.955	0.385	0.506	0.465	0.271

Table S2. Analysis of the impact of treatment, planting date, and their interaction (treatment x planting date) on the studied traits. Significance is denoted by bold.

Trait		Treatment	Planting date	Treatment x Planting Date
height	F	21.502	9.685	0.371
	p	<0.001	<0.001	0.542
age	F	20.651	7.436	2.285
	p	<0.001	0.006	0.131
growth	F	6.097	23.748	0.864
	p	0.003	<0.001	0.353



Fig. S1. Wire mesh fences placed around the Opuntias. Additional protection with rock was supplied to avoid fence damage by tortoises.

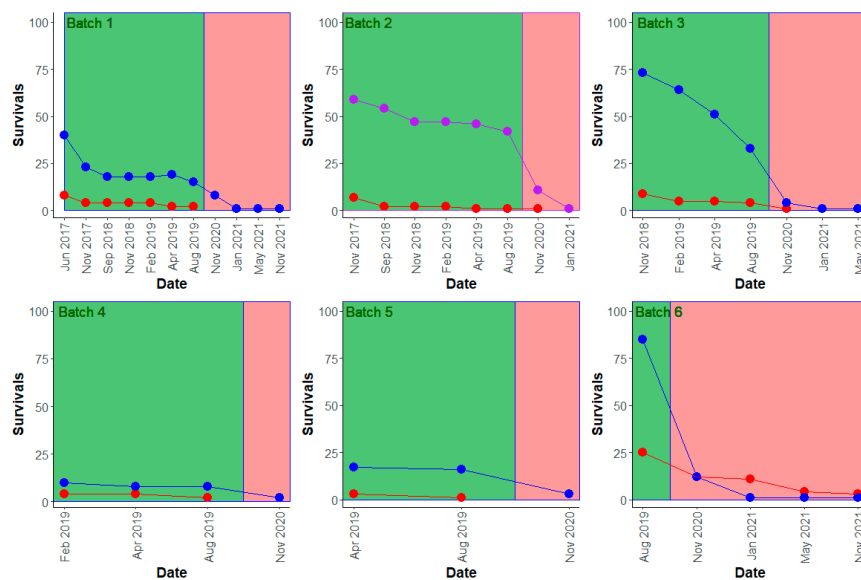


Fig. S2. Number of surviving plants based on batch and treatment. Red lines represent Control, blue is Waterboxx + hydrogel (W+H), and purple is Waterboxx only.

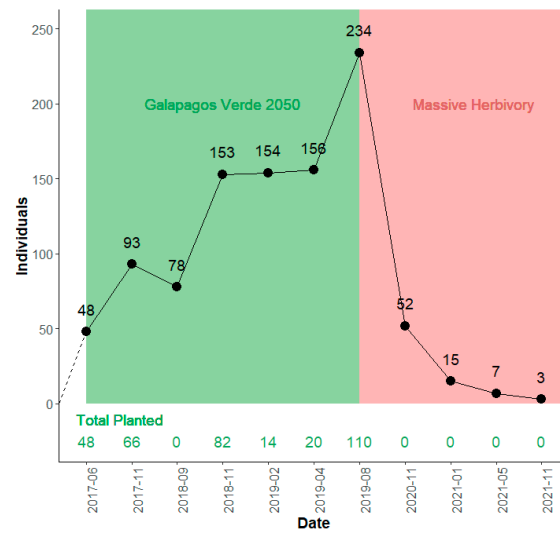


Fig. S3. Population balance between survivals and planted individuals on each monitoring date. The green background represents the time period when the plants were protected by the fences. And the red background the time when the fences were removed and no more plantings were conducted.