Table S1: *p* and f values (two-way ANOVA) are indicated. Analyzed the interaction between water levels (field capacity, flooding, drought) x moments (stress and recovery) on the concentration of total alkaloids and liriodenine.

	Water levels × Moment	
	p	f
Total alkaloids	<0.001**	16.320
Liriodenine	0.002**	10.916

**1% significance (p-value ≤ 0.01).

Table S2: *p* and f values (two-way ANOVA) are indicated. Analyzed the interaction between water levels (field capacity, flooding, drought) x moments (stress and recovery) on the Carbon assimilation rate (A_{net}), Rubisco carboxylation efficiency (A_{net}/Ci), Instantaneous water use efficiency (WUE), Stomatal conductance (gs), Transpiration (E).

	Water levels		Moment		Water levels × Moment	
	p	f	*p*	f	*p*	f
Carbon assimilation rate (A_{net})	<0.001**	224.589	0.308 n.s	1.098	<0.001**	115.505
Rubisco carboxylation efficiency (A_{net}/Ci)	0.008*	6.346	-	-	-	-
Instantaneous water use efficiency (WUE)	0.002*	9.478	0.013*	7.632	<0.001**	72.639
Stomatal conductance (gs)	<0.001**	149.203	0.775 n.s	0.0843	<0.001**	32.582
Transpiration (E)	<0.001**	328.017	<0.001**	15.607	<0.001**	25.245

n.s.: not significant (p-value >0.05); *5% significance (p-value ≤0.05); **1% significance (p-value ≤0.01).

Table S3: *p* and f values (two-way ANOVA) are indicated. Analyzed the interaction between water levels (field capacity, flooding, drought) x moments (stress and recovery) on the Maximum quantum yield (Fv/Fm), Potential quantum efficiency (Fv'/Fm'), Electron transport rate (ETR), Effective quantum yield (ϕPSII), Non-photochemical quenching (NPQ), Photosystem II energy that cannot be dissipated (Ex), Energy dissipated in the form of heat (D).

	Water levels		Moment		Water levels × Moment	
	p	f	*p*	f	*p*	f
Maximum quantum yield (Fv/Fm)	<0.001**	47.713	-	-	-	-
Potential quantum efficiency (Fv'/Fm')	<0.001**	11.051	<0.001**	17.187	0.012*	37.442
Electron transport rate (ETR)	<0.001**	250.009	<0.001**	37.442	<0.001**	28.267
Effective quantum yield (ϕPSII)	<0.001**	65.064	0.002*	13.062	0.01**	5.783
Non-photochemical quenching (NPQ)	0.025*	4.582	<0.001**	478.074	0.03*	4.294
Photosystem II energy that cannot be dissipated (Ex)	0.001**	10.068	0.013*	7.668	0.016*	5.270
Energy dissipated in the form of heat (D)	<0.001**	45.785	0.145 n.s.	2.320 n.s.	<0.001**	38.589

n.s.: not significant (p-value >0.05); *5% significance (p-value ≤0.05); **1% significance (p-value ≤0.01).

Table S4: *p* and f values (two-way ANOVA) are indicated. Analyzed the interaction between water levels (field capacity, flooding, drought) x moments (stress and recovery) on the Total sugars, Reducing sugars, Sucrose, Starch, Glucose, Fructose, Trehalose, Arabinose.

	Water levels		Moment		Water levels × Moment	
	p	f	*p*	f	*p*	f
Total sugars	<0.001**	29.009	<0.001**	169.820	< 0.001**	13.578
Reducing sugars	<0.001**	46.475	<0.001**	159.753	<0.001**	26.994
Sucrose	0.015*	5.399	0.982n.s	0.0001	0.012*	5.662
Starch	<0.001**	40.220	<0.001**	187.663	<0.001**	17.010
Glucose	<0.001**	135.062	<0.001**	585.954	<0.001**	32.354
Fructose	<0.001**	93.320	<0.001**	414.968	<0.001**	18.504
Trehalose	< 0.001**	28.420	<0.001**	24.952	<0.001**	29.150
Arabinose	0.211n.s	1.699	0.186n.s	1.890	<0.001**	19.658

n.s.: not significant (p-value >0.05); *5% significance (p-value ≤0.05); **1% significance (p-value ≤0.01).