



Effect on tедера accessions (*Bituminaria bituminosa* accession T3)

The net impact of individual and combined stress on plant growth

Crop: Tедера (*Bituminaria bituminosa* accession T3)
 Stress 1: Salt (200mM NaCl)
 Stress 2: Waterlogging (27 days)
 Stage of plant : 7 day old seedling

The table shows the effect of waterlogging and salt alone and in combination on growth of tедера accessions.

	Treatment	Plant response to stress**	
		Type A parameters*	
		Shoot mass (% of control)	Root dry weight (% of control)
T3	Waterlogging (27 days)	42	31.0
	Salt (200mM NaCl)	30	24.0
	Salt (200mM NaCl) + Waterlogging (Simultaneous stress)	25	16.0
T5	Waterlogging (27 days)	110	122.0
	Salt (200mM NaCl)	57	81.0
	Salt (200mM NaCl) + Waterlogging (Simultaneous stress)	33	29.0
T6	Waterlogging (27 days)	58	51.0
	Salt (200mM NaCl)	30	20.0
	Salt (200mM NaCl) + Waterlogging (Simultaneous stress)	N/A	N/A
T9	Waterlogging (27 days)	83	79.0

	Salt (200mM NaCl)	47	47.0
	Salt (200mM NaCl) + Waterlogging (Simultaneous stress)	19	15.0

Reference – Teakle NL, Real D (2010) Preliminary assessment reveals tolerance to salinity and waterlogging (and these stresses combined) in Tecera (*Bituminaria bituminosa* var. *al bomarginata*). In : Porqueddu C (ed.), Ríos S (ed.). The contributions of grasslands to the conservation of Mediterranean biodiversity. Zaragoza : CIHEAM / CIBIO / FAO / SEEP, 2010. p. 151 -154

Note:

‘*’ - *For more information on parameter classification, please refer to the ‘methodology’ tab.*

‘***’ - *Values are presented as it is from the source article without subjecting to the calculation.*

Inference from the study: Teakle et.al. 2010, studied the interaction of waterlogging and salinity in four accessions of tecera plants. Plants were subjected to single and simultaneous salt and waterlogging stress treatment. Shoot mass and root dry mass were reduced synergistically under combined stress in all four accessions. **Thus, this stress combination is detrimental to the growth of tecera plants.**