

**Effect on peanut cultivars (*Arachis hypogaea* L.)**
**The net impact of individual and combined stress on plant growth**

Stress 1: Drought Stress 2: Cadmium Stage of plant: 15-day old seedling
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The table shows the impact of individual and combined drought and heavy metal cadmium stress on peanut cultivars yield and photosynthetic parameters

Cultivar	Treatment	Response under combined stress					
		(Type A parameters*)			(Type B parameters*)		
		Biomasses (g/plant)			Net photosynthetic rate ( $\mu\text{mol m}^{-2}\text{s}^{-1}$ )	Transpiration rate ( $\text{mol m}^{-2}\text{s}^{-1}$ )	Stomatal conductance ( $\text{mmol m}^{-2}\text{s}^{-1}$ )
		Root	Shoot	Pod			
Haihua 1	CdCl <sub>2</sub> (4 mg/kg) + Drought SWC at 35% of WHC (Sequential stress)	0.5	4.7	3	11.39	0.078	2.09
	CdCl <sub>2</sub> (4 mg/kg) + Well watered (Sequential stress)	1.3	17.5	16.8	21.62	0.27	5.46
Luhua 8	CdCl <sub>2</sub> (4 mg/kg) + Drought SWC at 35% of WHC (Sequential stress)	1.2	11.2	10	12.32	0.084	2.20
	CdCl <sub>2</sub> (4 mg/kg) + Well watered (Sequential stress)	2.5	20.6	25.6	19.76	0.258	5.29
Qishan 208	CdCl <sub>2</sub> (4 mg/kg) + Drought SWC at 35% of WHC (Sequential stress)	0.8	14.8	5.9	13.25	0.087	2.20
	CdCl <sub>2</sub> (4 mg/kg) + Well watered (Sequential stress)	2.9	26.4	26.8	19.76	0.22	4.65
Xvhua 13	CdCl <sub>2</sub> (4 mg/kg) + Drought SWC at 35% of WHC (Sequential stress)	1.1	7.4	8.5	12.32	0.087	2.20
	CdCl <sub>2</sub> (4 mg/kg) + Well watered (Sequential stress)	2.1	14.9	26	21.62	0.264	5.46
Zhenghong 3	CdCl <sub>2</sub> (4 mg/kg) + Drought SWC at 35% of	0.7	6.2	4	12.09	0.095	2.38



## Stress Combination and their Interactions in Plants (SCIP) Database

Website link- <http://www.nipgr.ac.in/scipdb.php>

	WHC (Sequential stress)						
	CdCl <sub>2</sub> (4 mg/kg) + Well watered (Sequential stress)	1.1	16.1	18.7	19.53	0.26	5.40

**Reference**– Xia S, Wang X, Su G, Shi G (2015) Effects of drought on cadmium accumulation in peanuts grown in a contaminated calcareous soil. *Environ. Sci. Pollut. Res.* **22**: 18707–18717

**Note:** *Values are presented as it is from the source article without subjecting to the calculation.*

**\*\***- *For more information on parameters classification, please refer to 'methodology' tab*

**Inference from the study:** Xia *et al.*, studied the interactive effect of drought and heavy metal Cadmium on various Peanut cultivars. The combined treatment of drought and Cadmium reduced the biomass and net photosynthesis rates in all the cultivars in comparison to single stress of Cadmium.