

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

The table shows the impact of individual and combined drought and heavy metal cadmium stress on yield of peanut cultivars

| Cultivar | Treatment | Response under combined stress (Type A parameters [±]) | | | |
|-----------|--|--|-------|--------------------------------|-------------------------------|
| | | Biomasses (g/plant) | | Yields (g/plant) (Pod-ripened) | Dry weight of seeds (g/plant) |
| | | Root | Shoot | | |
| Fenghua 1 | CdCl ₂ (2.76 mg/kg) + Drought SWC at 35% of WHC (Sequential stress) | 1.06 | 2.1 | 8.18 | 5.18 |
| | CdCl ₂ (2.76 mg/kg) + Well watered (Sequential stress) | 1.09 | 4.07 | 16.18 | 10.39 |
| Silihong | CdCl ₂ (2.76 mg/kg) + Drought SWC at 35% of WHC (Sequential stress) | 0.5 | 1.69 | 9.12 | 6.66 |
| | CdCl ₂ (2.76 mg/kg) + Well watered (Sequential stress) | 0.7 | 2.91 | 13.84 | 10.16 |

Reference– Liu C, Yu R, Shi G, (2016) Effects of drought on the accumulation and redistribution of cadmium in peanuts at different developmental stages. Arch. Agron. Soil Sci. 63: 1049-1057

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: Liu *et al.* 2016 studied the interactive effect of drought and heavy metal Cadmium on two peanut cultivars Fenghua 1 and Silihong. Both the cultivars were negatively affected when treated with combined drought and Cadmium stress in comparison with single stress of Cadmium only.