**Effect of cadmium on physiological and biochemical parameters of wheat (*Triticum aestivum*  L) varieties**

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According to the degree of environmental risk, mobility, ability to accumulate in the food chain cadmium is recognized as one of the priority pollutants of the biosphere (Ermakov, 2000). The aim of the study was to identify tolerant to cadmium wheat cultivars. The effect of cadmium (0; 0,15 mM; 0,3 mM CdSO4) on growth and biochemical parameters were studied in 5 wheat varieties under hydroponically cultured conditions. Tolerant (Kazakhstanskaya-3) and sensitive (Kazakhstanskaya rannaya and Shagala) to cadmium on growth parameters wheat varieties were taken for biochemical studies. Cadmium (0,3 mM) significantly increased malondialdehyde content in sensitive varieties (by 39 and 59% in Kazakhstanskaya rannaya and Shagala, accordingly) compared to tolerant Kazakhstanskaya-3 variety (by 7%).

Cadmium (0,3 mM) decreased content of chlorophyll-*a* by 30, 33 and 36% in Shagala, Kazakhstanskaya-3, Kazakhstanskaya rannaya, accordingly; chlorophyll-*b* – by 23, 32, 34% Kazakhstanskaya-3, Shagala, Kazakhstanskaya rannaya, accordingly; carotenoids - by 37, 54, 81% in Kazkahstanskaya-3, Kazakhstanskaya rannaya, and Shagala, varieties, accordingly.

It is important that in tolerant variety content of malondialdehyde content was less and photosynthetic pigments content decreased in lower extent than in sensitive varieties. These

biochemical parameters may be a good test for the selection of resistant varieties.