The Turkish Journal of Occupational / Environmental Medicine and Safety

Vol:2, No:1 (1), 2017 Web: http://www.turjoem.com ISSN : 2149-4711

SHC 31 . BIOCHEMICAL AND MORPHOLOGICAL RESPONSES OF HEAVY METAL STRESS IN CROP VARIETIES FROM CENTRAL ANATOLIA

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Today, the factors like industrial activities, environmental pollution, increased traffic load due to population denstity and wrong applications of agricultural applications could be counted as a source of heavy metal accumulation in soil, air and water. The effects of heavy metals which accumulated in soils continue for a long period of time as a result of food chain between organisms and considered as a serious threat to human health. In this study, toxic effects of heavy metals on roots and shoots lengths, water, glutathione (GSH), protein contents and glutathione *S*-transferase (GST) activities of wheat (*Triticum aestivum cv*. Yunus) and barley (*Hordeum vulgare* cv. Ince 04) varieties were investigated through single and combined applications of cadmium chloride ($CdCl_2$) and lead chloride ($PbCl_2$). In conclusion, it was shown that biochemical and morphological mechanisms were affected differently with varying concentrations of heavy metals and Ince 04 (barley) were found to be more tolerant to heavy metal stress by comparing to Yunus (wheat).

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