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Pb AND Cd INFLUENCE ON BIOCHEMICAL INDICES OF *AVENA SATIVA* (POÁCEAE, LILIOPSIDA)

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This work is devoted to studying of changes of vegetable raw under Pb and Cd translocation in the tissues of oat grown on turf and sand soils at model pollution, as well the impact of Pb and Cd accumulation on the biochemical status of plants. The oat germinants accumulated the intriduced metals actively; at a combined action of Pb and Cd, synergism of the elements in the organogenic soil and antagonism in the mineral soil were revealed. Oat cultivation on equally contaminated organogenic and mineral soils led to a higher accumulation of the metals under study in plant tissues in the experiment with mineral soil. Especially high Pb and Cd contents were observed in the underground part of the plants which were in immediate contact with the toxicants. Intriduction of Cd led to stimulation of the photosynthetic pigments and antioxidants, while Pb caused damage of cell membranes, a decreased flavonoid level and peroxidase inhibition. Flavonoids and catalase were the most effective antioxidants in the organogenic soil, while peroxidase and carotenoids were efficient in the mineral soil.

Key words: *Avena sativa*, translocation, lead, cadmium, antioxidants, lipid peroxidation.

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