

Original article

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Successional Properties of Vegetation on the Example of the Recultivated Open Surface Coal Mine «Chernogorsky»

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Abstract. Presents the results of studies of successional processes of plant communities on the long-term dump of the open surface coal mine «Chernogorsky». The three stages of community succession have been identified: groupings, simple and complex phytocenoses. Among the most active species are *Psathyrostachys juncea*, *Calamagrostis epigeios*, *Ulmus pumila*, *Poa pratensis*, *Galatella punctata*, *Artemisia glauca*, *Cirsium setosum*, *Artemisia annua*. The eight invasive species have been identified, of which *Ulmus pumila* is the most common one. The relatively rich biodiversity, high projective coverage – 65 % and above, as well as the presence of communities closed in species composition to steppe and settled meadow communities, as well as the abundance of tree and shrub vegetation on the studied recultivated dump allow us to consider it as a perspective site for the placement of a carbon polygon in order to study carbon sequestration in conditions of semiarid climate.

Keywords: coal dumps, successions, syngensis, invasive plants, open surface coal mine «Chernogorsky».

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