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Do the earthworm caused soil modifications alter course of vegetation succession in post mining sites?

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In field observation shows two distinct clusters of vegetation in choronosequence of unreclaimed post mining sites (3-45 year old) near Sokolov. First (ruderal) cluster was dominated by ruderal species while in the second (post ruderal) cluster forest and meadow specialist become abundant. Discriminat analysis show that from about 60 parameters studied in these sites, presence of A layer is the strongest predictor for post ruderal cluster. A layer was formed mainly by earthworm casts and timing its appearance correspond with earthworm colonization in this sites. We postulate that earthworm colonization can be important factor that affects vegetation succession in these sites. Set of field and laboratory experiment indicated that substrates with different succession age differ in their suitability for plant growth and presence of worms in microcosms affect soil conditions and plant growth, which is in agreement with above mentioned hypothesis.