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## ADAPTABLE PLANTS FOR ACIDIC WASTEWATER SEDIMENT OF COPPER SULFIDE MINES

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### Abstract

The treatment of acidic wastewater of copper sulfide produces a huge amount of sediment, which can be processed into the planting matrix for ecological restoration of mines. This paper attempts to screen out the plants suitable for the acidic wastewater sediment, laying the basis for ecological restoration of mines. Therefore, 14 plant species were selected for preliminary tests on survival rate and growth tests in sediment pond. The survival rates and growth conditions of each plant species in the sediment (planting matrix) were observed and recorded, and subjected to comparative analysis of planting data of test plots. The results about 14 plant growth data show that *Dracocephalum moldavica*, *Lolium perenne* L., *Photinia fraseri* Dress, *Ligustrum compactum* (Wall. ex G. Don) Hook. f, *Robinia pseudoacacia* and *Populus tomentosa* boast high survival rate, fast growth and good greening effect. These species can be used as the pioneer plants adaptable to acidic wastewater sediment.

**Keywords:** acidic wastewater sediment, adaptable plants, ecological restoration, screening

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