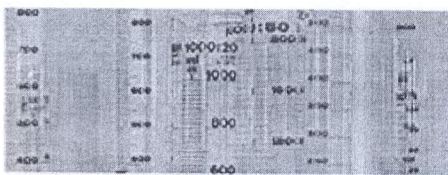




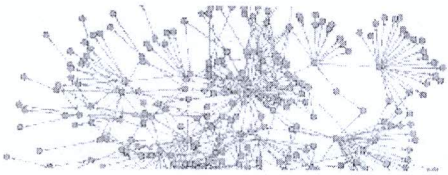
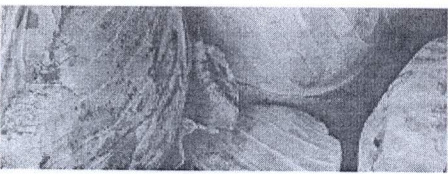
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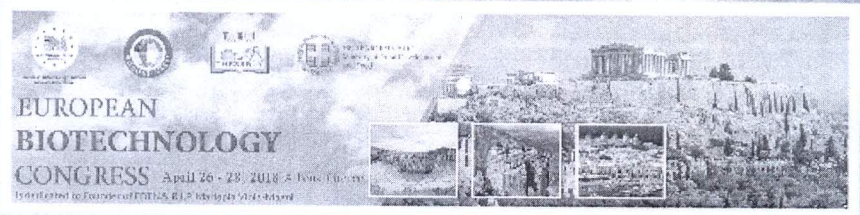


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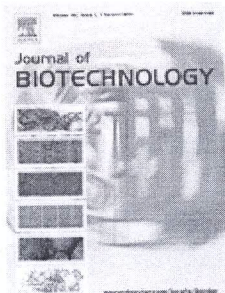
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The genetic potential of spring wheat (*Triticum aestivum* L.) resistance to heavy metals

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The genetic potential of spring wheat (*Triticum aestivum* L.) resistance to heavy metals

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ABSTRACT

The aim of our study was to identify wheat germplasm resistant to heavy metals (copper and lead), priority soil pollutants in the East Kazakhstan. The objects of the study are different genotypes of spring wheat from the collection of the East - Kazakhstan Agricultural Research Institute. The following parameters were studied: phenological indicators, survival in summer vegetation, yield, crop structure, amount of metals in the root zone soil, accumulation of studied metals in wheat grain. The variety Ulbinka-25 can be recommended for growing on soils contaminated with copper, and the variety Eritrospermum-616 can be recommended for cultivation on soils contaminated with lead, so they least accumulate the corresponding metals in seeds and at the same time are characterized by high yield and good survival in the summer vegetation. The Kutulukskaya variety can be recommended for cultivation on soils contaminated with both copper and lead, as this spring wheat variety accumulates the least amount of copper and lead in the seeds and at the same time is characterized by good yield and survival in the summer vegetation in conditions of polymetallic soil contamination.

Key words: heavy metals, wheat, metal resistant germplasm, physiological parameters, promising forms.