Methods

Technologies of micropropagation and green cuttings will be carried out according to standard procedures and techniques with cultivation of isolated organs and tissues of plants *in vitro* and growing in a greenhouse.

Results

- 1. Nursery «Rare wild fruit species of Zhetysu Alatau»
- 2. Genetically identical saplings (1-3 years old) of wild fruit rare species of Zhetysu Alatau, propagated by methods tissue culture, micropropagation and cuttings.

Assortment

- 1. Sivers apple,
- 2. Nedzvetsky apple,
- 3. Common apricot,
- 4. Almaty hawthorn,
- 5. Jungar hawthorn,
- 6. Ili honeysuckle,
- 7. Tianshan ash,
- 8. Ili barberry,
- 9. **Meyer currant**

About the team

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Grant financing of the most promising projects for the commercialization of the results of scientific and (or) scientific and technical activities for 2023-2025



PRODUCTION OF
SAPLINGS OF RARE WILD
FRUIT SPECIES OF
ZHETYSU ALATAU BY
VEGETATIVE
REPRODUCTION

Funded by: JSC «Science Fund»



The purpose of the project

Production of saplings of wild-fruit rare species of Zhetysu Alatau by creating a nursery farm for vegetative propagation for consumers working in the field of preserving unique biological diversity, forming collection plantations and producing fruit products and green urban planning.

Relevance

One of the important tasks of FAO at present is the conservation and sustainable use of biodiversity to ensure food security. Mountain fruit forests of Kazakhstan are the world center of origin of varietal diversity of cultivated plants. Zhetysu Alatau fruit forests are highly valued as genetic reserves for cultivated fruit species, especially apple trees. Over the past decade, the restoration of degraded wild fruit forests on an industrial scale remains an urgent problem for many countries, including Kazakhstan. Therefore, the creation of a nursery farm of unique genetically identical rare species of Zhetysu Alatau, and the production of saplings is an urgent problem that requires timely solutions.

CUTTINGS IN THE FORM OF A DIAGRAM



Selection and preparation of cuttings



Treatment with growth stimulants



Planting cuttings



Transplanting rooted cuttings



STAGES OF MICROCLONAL PROPAGATION IN THE FORM OF A SCHEME



Explant preparation



Introduction into sterile medium (in vitro)





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Propagation in the laboratory





Adaptation to growth in the open ground



Ready-made seedlings