Productivity and quality of potato tubers depending on protective measures
Scientific novelty. For the first time on the sod-podzolic soil of the Republic of Mari El, a comparative assessment of the fungicidal properties of new systems for protecting early potato varieties from diseases was carried out and their effect on the yield and quality of potato tubers was analyzed.

Purpose of work - to study in the conditions of the Republic of Mari El the influence of various systems of protection against diseases, on the yield and quality of products, of two varieties of potatoes.
Experiment scheme:
treatment of potatoes: dressing + treatment during vegetation in phases 2–3 of true leaves; budding and before closing the tops.

1. Celeste Top: 0 + Ordan + 0; 2. Celest Top: Metaxil, Ridomil, Ordan; 3. Celeste Top: Fitosporin, Gamair, Ordan; 4. Celeste Top: Fitosporin, Gamair, Fitosporin - 1 l / ha); 5. Taboo + Gamair: Metaxil, Ridomil, Ordan; 6. Taboo + Gamair: Fitosporin, Gamai and Ordan; 7. Taboo + Gamair: Fitosporin, Gamair, Fitosporin.
Conclusions

1. Treatment of tubers before planting with the fungicide Celest Top and treatment of potato plants during vegetation with the preparations Metaxil, Ridomil, Ordan, a high yield was obtained. On average, over three years, it amounted to 21.0 and 21.1 t/ha. In this variant, the starch content in tubers increased by 0.5–0.7 % for the Bellarosa variety and by 0.2-0.8 % for the Gala variety.

2. A positive effect on the yield and quality of potato tubers on sod-podzolic soil is exerted by the treatment of tubers before planting and three times treatment of plants during the growing season.

3. An effective way to increase potato productivity and reduce disease is the treatment of potato tubers before planting Celest Top at a dose of 0.4 l/t and during the growing season with fungicides Metaxil-2.5 kg/ha, Ridomil-2.5 kg/ha, Ordan -2.5 kg/ha against late blight, rhizoctonia and alternaria.

4. In the production conditions of the Republic of Mari El in order to increase the resistance of potato plantings to phytophorosis, rhizoctoniosis, alternaria, it is possible to introduce an agricultural method of pre-planting potato tubers with Celest Top insectofugicide at a dose of 0.4 l/t and during the