

## **Annotation**

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***The productivity of young pear trees repeatedly grown in the area of the uprooted pear orchard depending on the optimized fertilizer***

*The results of studies of changes in rates of fruiting trees and pear fruit quality of Konferentsia and Osnovianskaya varieties on the clonal rootstock of A quince are given. It was grown again after the uprooted old pear orchard on the dark gray ashy soil depending on the fertilizer – determined norms of plant food compounds according to the results of agrochemical soil testing to adjust the content of N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O in the root zone to optimum levels.*

*Optimized backgrounds of the mineral nutrition created by this fertilizer contributed to abundant flowering, increasing the number of fruits and higher yields in the early years of fruition beginning. During the period of growth and fruiting increasing yields of young trees of the Konferentsia variety in variants with the fertilizer was 21.1-42.1% as compared with the check variant (no fertilizer) and with production check variant (N<sub>90</sub>R<sub>60</sub>K<sub>90</sub>) – 6.5-17.4%. Speaking about the Osnovianskaya variety, they were 23.5-41.2% and 9.5-14.3%, respectively.*

*Application of fertilizers calculated on the basis of determination of nitrogen, phosphorus and potassium content available for plants in the soil and with the addition of low doses (30 kg/ha of active NPK substance) provides almost the same increase in the productivity of pear varieties, as well as adding large quantities in the production check variant. Therefore, this fertilizer is economically and ecologically profitable and expedient.*

***Keywords:*** pear, variety, Konferentsia, Osnovianskaya, double crop, fertilizer, optimal level, productivity.