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Methods of photosynthetically active radiation use increase and the production rate of potato plants in forest steppe of middle Volga region

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Abstract

© 2016, International Journal of Pharmacy and Technology. All rights reserved. The studies were conducted on gray forest soil of Zakamye in the Republic of Tatarstan on the background without the use of fertilizers and their introduction in the dose calculated for the planned tuber yield of 30 t/ha. The reaction was studied of the new early maturing variety of RedScarlet potato on the ways of Silk and Albit drug use (soaking of seed tubers before planting, double foliar processing of plants, complex processing (tubers + plants twice). It was found that the use of Silk growth regulator for the treatment of tubers before planting, increased the yield of tubers by 2,79-3,11 t/ha, Albit drug by 1,46-1,89 t/ha depending on a feeding background. The double foliar treatment by Silk during the growing season increased the yield by 3,85-3,94 t/ha, the processing by Albit increased the yield by 2.88-3.00 t/ha. At a complex processing (tubers + tops) the yield increase made 5,47-6,78 and 4,89-5,02 t/ha respectively.

Keywords

Calculated doses of fertilizers, Fluke, Growth regulators, Leaf area, Nitrates, Photosynthetic potential (PP), Potatoes, Starch, Vitamin C, Yield