



# ACADEMICIA

## An International Multidisciplinary Research Journal

(Double Blind Refereed & Peer Reviewed Journal)



DOI: 10.5958/2249-7137.2020.01828.5

### METHODS OF GROWING A POTATO PLANT BY CHANGING THE SOIL TREATMENT PARAMETERS OF AND AGRICULTURAL MACHINERY

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#### ABSTRACT

*Nowadays, agriculture needs to improve its quality by cultivating the soil and improve the soil fertility of the lands intended for cultivation, because any agricultural machine can produce a specific product soil, seeds, fertilizers, grain, processes agricultural products such as cotton, fruits, vegetables. Of course, before studying tillage machines, it is necessary to study the physical properties of the soil and the technological properties of tillage machines. The soil in which the crop is grown differs from the ordinary soil in terms of soil structure, ie fertility. Agricultural machinery only cultivates fertile soil. The physical properties of the soil for the cultivation of climate-resistant, disease-resistant varieties of Surkhandarya region, such as "Santa" and "Romana" for the effective cultivation of potatoes, the distances of tillage and tillage were studied. The majority of vegetable crops grow in high humidity conditions, and 70-75% of their production is water. Potato tuber contains 25% dry matter, 14-22% starch, 1.4-3% protein, around 1% wood, 0.3% fat and 10.8-1% ash, vitamins: C, B, B1, There are B2, B6 and K. Due to the high content of vitamins in the new crop, if 150 quintals of tubers and 80 quintals of leaf stalks are harvested per hectare, 5,500 nutrients will be collected. The root penetrates mainly at a distance of 30 cm, then 50 cm. Potato roots make up 8-10% of the aboveground stem. Potato roots absorb nutrients from the soil. The results showed that the plow penetration angle at 75 ° was more efficient than the plow penetration angle at 90 °, as the tillage distance was effective at 70 cm intervals and the other at 80 cm and 90 cm intervals.*

**KEYWORDS:** Tillage, Plowing, Ploughshare, Capillary, No Capillary, Soil Porosity, Corpus