

3.Kostadinov, G. D. Systematization of devices for soil cultivation in gardens / G. D. Kostadinov, G. G. Parkhomenko, S. A. Tverdokhlebov, A.V. Ponomarev // Plant and Science Days. – 2016. – No. 53 (1–3). – S. 88–97.

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**ОБОСНОВАТЬ ПАРАМЕТРЫ РЫХЛИТЕЛЯ, ДЛЯ  
ОБРАБОТКИ МЕЖДУ САДОВЫМИ РЯДАМИ**

**JUSTIFY RIPPER PARAMETERS WHICH ARE PROCESSED  
BETWEEN GARDEN ROWS**

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*В статье приведены сведения о времени и глубине обработки почвы между рядами для получения высоких урожаев плодовых деревьев. Кроме того, проанализирована взаимозависимость скоростей обработки и сопротивления тяговому усилию рабочих органов между садовыми рядами.*

*The article provides information on the time and depth of soil cultivation between rows to obtain high yields of fruit trees. In addition, the interdependence of processing speeds and resistance to tractive effort of working bodies between garden rows has been analyzed.*

Ключевые слова: почвы, глубины, саду, фруктах.

Keywords: soil, depth, garden, fruit.

To obtain high yields, fruit plants must be provided with water and nutrients throughout the growing season. The latter should be in a state easily assimilated by the roots, and located closer to them.

By properly cultivating the soil for fruit, a number of problems are solved: the conditions for the accumulation and preservation of moisture in the soil are improved, air penetration to the roots of plants is ensured, and at the same time, the removal of carbon dioxide from the soil, which is formed as a result of root respiration, is facilitated.

The depth of autumn cultivation depends on the soil and climatic conditions of growing the fruit. In the southern regions of the fruit, where the root system of fruit bushes develops deeply, the soil is loosened by 25–30 cm, and in the northern regions, where the roots develop in more superficial soil horizons, it is enough to process it by 20–22 cm. Both in the southern and northern districts the soil is plowed or dug up with the turnover of the layer. On irrigated fruit, even if they are located in the southern regions of fruit, the depth of soil cultivation should be no more than 20 cm, since on such

After the above works on caring for fruit trees are completed, you should start processing the soil of the garden and fertilizing it. In the garden, it is necessary to carry out continuous tillage, keep it under black steam. This should be especially borne in mind in the arid zones of Kashkadaryo. The grass in the garden takes moisture and nutrients from the soil for its 1 growth, which fruit trees desperately need. Therefore, the destruction of the grass cover in the garden is the first task of gardening. Continuous cultivation of the garden soil is carried out by plowing and additional digging of tree trunks. The best time for continuous cultivation of the garden soil is autumn. However, in cases where autumn plowing has not been carried out, it should be done in the spring. Spring plowing of the garden soil should be carried out as early as possible, when there are large reserves of moisture in the soil 5. Plowing is carried out to a depth of approximately 12–15 centimeters in the water or in two intersecting directions. There are several ways to water your garden. The best and most common way to water your garden is by furrow watering.

In the republic, large-scale measures are being taken to reduce labor and energy costs, save resources using advanced technologies and develop high-performance agricultural machines in the production of fruit.

As the ascending angle of the dolot increases from 26 to 34° the sinking capacity of the working organs noticeably increases, ranging from 11.60 to 12.73 cm at the specified stroke depth of 12.0 cm. In this case, the tolerances are of 1.11–1.42 cm mean square deviation with coefficients of variation of 9.96–11.15 %. Similar results are obtained by the uniformity of the depth in the length of the stroke with the corresponding depth of 11,18 to 12.02 cm with satisfactory values of 1.00–1.49 cm mean square deviation, coefficient of variation 9.68–13.94 % and experience error 0.04–0.06 cm. It should be noted, however, that with the complete elimination of weeds by flattened lemons, there is a slight reduction in the degree of soil disintegration by the optimal fraction: less. 10 mm – between 68.61 and 53.64 per cent; above 10 per cent.

## CONCLUSION

Analyzing and comparing the averaged indicators of traction resistance depending on the speed when processing intercutting strips and row spacings, as well as cultivating only row spacings when working on heavy soils, we will determine with sufficient accuracy their difference for the actual values of the side universal working bodies of the machine, the values of traction resistance for two working bodies working in adjacent rows of interbusting fruit stripes, increases at appropriate speeds. Thus, the results of the energy assessment of the traction resistance of the lateral rotary working bodies in contact with the root stem of the fruit bushes give reason to consider the optimal speed of movement within the speed of avoiding damage to the fruit root system.

## REFERENCES

1. Develop energy-saving technologies and a set of high-performance technical tools for the treatment of soils in vineyards. Report on the R&D of the project P-19.42 /NIITS/Ahmedov T.T. Tashkent. 2004. – 18 p.
2. «Production of a prototype of a resource-saving universal soil-processing grape-growing machine and conduct of field tests». Report on the NIR of the project KHI-5-01 /NIISVI/ Mirzaev M. M. Tashkent. 2016. – 87 p.
3. Parkhomenko, G. G. Transformation of working bodies of soil-cultivating machines / G.G. Parkhomenko // Selskostopanska technique. – 2015. – No. 1. – P. 17–26.

4. Kostadinov, G. D. Systematization of devices for soil cultivation in gardens / G. D. Kostadinov, G. G. Parkhomenko, S. A. Tverdokhlebov, A. V. Ponomarev // Plant and Science Days. – 2016. – No. 53 (1–3). p. 88–97.

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## **ОСОБЕННОСТИ РАЗВИТИЯ ТРОЛЛЕЙБУСНОГО ТРАНСПОРТА В НЕКОТОРЫХ ГОРОДАХ УКРАИНЫ**

### **FEATURES OF TROLLEYBUS TRANSPORT DEVELOPMENT IN SOME CITIES OF UKRAINE**

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*Проведен анализ процесса развития троллейбусного транспорта некоторых областных центров Украины (г. Житомир, г. Ровно, г. Тернополь, г. Чернигов) и самого большого по численности населения города в Киевской области – г. Белая Церковь. Показано сходство подходов по развитию данного вида транспорта в указанных городах, что даст возможность использовать их совместный опыт не только между собой, но и в других городах с подобной инфраструктурой.*

*Analysis of the development of trolleybus transport in Ukrainian regional centers (Zhytomyr, Rivne, Ternopil, Chernihiv, the largest city in terms of population of Kyiv region – Bila Tserkva) was conducted. The similarity of approaches to the development of this transport in these cities is proved. This will make it possible to use their joint experience*