



THE EFFECT OF DIFFERENT METHODS OF PRODUCTION ON THE PRODUCTIVITY OF CHILD VARIETIES AND THE COMMERCIAL CHARACTERISTICS OF FRUITS

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Named after Academician M. Mirzaev

Abstract

The article deals with the yield of plum varieties, fruit quality, and marketability, formed in four different ways. In the selection of methods of shaping, four new modern methods used, tested on three varieties of plums, and the effect of different shaping methods on the passage of the growing season was determined.

Keywords: varieties, yield, fruit size, fruit weight, shaping methods.

Introduction

President of the Republic of Uzbekistan number PP-4246 of March 20, 2019 “On measures further develop horticulture and greenhouses in the Republic of Uzbekistan” and President of the Republic of Uzbekistan No. PP-4575 of January 28, 2020 “On development of agriculture of the Republic of Uzbekistan 2020-2030” The resolution “On measures to implement the tasks set out in the strategy for the coming years” specifies the tasks for the establishment of new orchards and the reconstruction of old ones [4].

Plum trees are one of the fruit trees that can adapt well to almost all regions of Uzbekistan. The amount of yield in the gardens depends not only on the correct selection of varieties, but also on the effectiveness of agro-technical measures, the width of the row spacing, the orderly placement and distance of trees [2].

When planting trees and their placement, it should be borne in mind that the factors that determine the planting scheme depend on the size of the trees, methods of shaping them, inter-row cultivation, level of mechanization, proper selection of varieties and many other factors.

Mistakes in the organization of plum orchards, because of thick planting of trees and their care, including improper shaping, can adversely affect the quantity and quality of fruit [5, 3].





Currently, the world's annual plum production produces 12,063,776 tons of plums. Of these, Chinese plums produce 6,676,142 tons per year. Romania ranks second with 512,975 tons per year. The Russian Federation ranks 13th with 164,602 tons. Production in Uzbekistan is 134,103 tons per year, production per capita is 4,107 kg 14 483 per hectare [7].

Research "Methods and programs for the study of varieties of fruits, berries and plums" (Oryol 1999) [6] and methods of calculations and phenological observations in experiments with fruit and berry plants, developed by the All-Russian Research Institute of Fruit Selection. H.C. Buriev 2014) [1]. In experiments, the effect of shaping plums in different ways on Leto, Burton, Chyornaya bagira varieties on fruit quality and yield studied. The shaping methods implemented in five variants, which are as follows:

- ❖ Option 1 (Austrian bush) shaping method
- ❖ Option 2 (Rare tier) shaping method
- ❖ Option 3 (KGB (Kim Green Bush)) shaping method
- ❖ Option 4 (Vase-shaped) shaping method (standard)
- ❖ Option 5 Figure is not given.

According to the results of the study, in 2021, when the control variant of the summer navigation of plums formed by the method of "Kosasimon", the average yield per bush is 17.85 kg. The average yield was 142.8 hundredweight (centner) per hectare. In addition, the weight of 100 fruits was 7.3 kg, the average weight of one fruit was 60.2 grams and the weight of the largest fruit was 76 grams.

Option 1. When formed by the method of "Austrian bush", the average yield is 14.9 kg per bush. The average yield was 119.2 hundredweight (centner) per hectare. In addition, the weight of 100 fruits was 7.17 kg, the average weight of one fruit was 61.4 grams and the weight of the largest fruit was 77 grams.



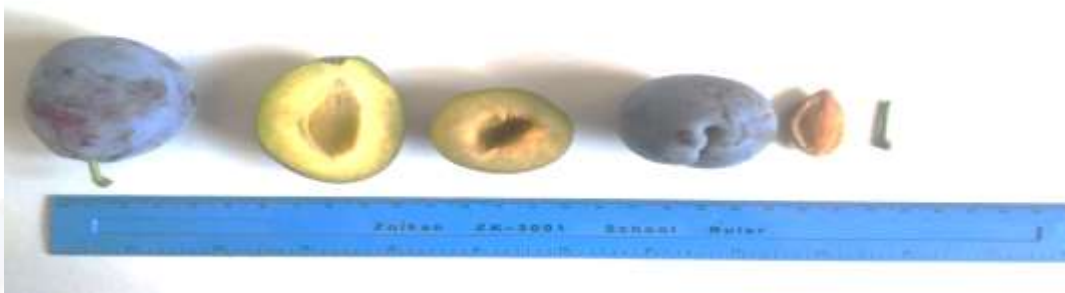
Option 2. When formed by the method of "Austrian bush", the average yield is 16.6 kg per bush. The average yield was 133.1 hundredweight (centner) per hectare. Also, the



weight of 100 fruits was 7.24 kg, the average weight of 1 fruit was 63.2 grams and the weight of the largest fruit was 81 grams.

Option 3. When formed using the “KGB Kim Green Bush” method, the average yield is 11.0 kg per bush. The average yield was 88.24 hundredweight (centner) per hectare. In addition, the weight of 100 fruits was 7.06 kg, the average weight of one fruit was 58.6 grams and the weight of the largest fruit was 77 grams.

In the “unformed” variant five, the average yield is 13.8 kg per bush. The average yield was 110.4 hundredweight (centner) per hectare. In addition, the weight of 100 fruits was 4.02 kg, the average weight of one fruit was 32.2 grams and the weight of the largest fruit was 43 grams.



The average yield of a plum is 15.04 kg when the Burton navigation control variant of the plum formed by the “Kosasimon” method. The average yield was 120.3 hundredweight (centner) per hectare. In addition, the weight of 100 fruits was 6.3 kg, the average weight of one fruit was 59.2 grams and the weight of the largest fruit was 80 grams.

Option 1. When formed by the method of “Austrian bush”, the average yield is 14.08 kg per bush. The average yield was 112.6 hundredweight (centner) per hectare. In addition, the weight of 100 fruits was 7.44 kg, the average weight of one fruit was 65.4 grams and the weight of the largest fruit was 77 grams.

Option 2. When formed in the “Austrian bush” method, the average yield is 14.24 kg per bush. The average yield was 113.9 hundredweight (centner) per hectare. In addition, the weight of 100 fruits was 6.64 kg, the average weight of one fruit was 62.4 grams and the weight of the largest fruit was 77 grams.

Option 3. The average yield is 10.8 kg per bush when shaped by the “KGB Kim Green bush” method. The average yield was 86.5 hundredweight (centner) per hectare. In addition, the weight of 100 fruits was 6.84 kg, the average weight of one fruit was 64.6 grams and the weight of the largest fruit was 81 grams.

In the unformed variant, the average yield is 12.8 kg per bush. The average yield was 102.8 hundredweight (centner) per hectare. In addition, the weight of 100 fruits was



3.76 kg, the average weight of one fruit was 30.8 grams and the weight of the largest fruit was 43 grams.

The average yield of a plum is 16.36 kg. The average yield was 130.8 hundredweight (centner) per hectare. Also, the weight of 100 fruits was 5.66 kg, the average weight of 1 fruit was 60.8 grams and the weight of the largest fruit was 80 grams.

Option 1. When formed by the method of "Austrian bush", the average yield is 14.8 kg per bush. The average yield was 118.7 hundredweight (centner). Also, the weight of 100 fruits was 6.42 kg, the average weight of 1 fruit was 63.2 grams and the weight of the largest fruit was 80 grams.

Table 1 Yield and Fruit Quality Indicators of Plum Varieties Formed in Different Ways.

Options	The average yield per bush, kg	Yield in 1 area, hundredweight (centner)	The number of fruits in 1 kg	100 fruit weight, kg	Average fruit mass of 1, g	The biggest fruit, g
Types Leto						
Option 1 (Austrian bush)	14,9	119,2	15	7,17	61,4	77
Option 2 (Rare tier)	16,6	133,1	13,8	7,24	63,2	81
Option 3 (KGB Kim Green bush)	11,0	88,24	14,8	7,06	58,6	77
Option 4 (control Kosasimon)	17,85	142,8	14	7,3	60,2	76
Option 5 (Not Shaped)	13,8	110,4	23,2	4,02	32,2	43
Types Berton						
Option 1 (Austrian bush)	14,08	112,6	13,2	7,44	65,4	77
Option 2 (Rare tier)	14,24	113,9	16	6,64	62,4	77
Option 3 (KGB Kim Green bush)	10,8	86,5	16,8	6,84	64,6	81
Option 4 (control Kosasimon)	15,04	120,3	17,2	6,3	59,2	80
Option 5 (Not Shaped)	12,8	102,8	27	3,76	30,8	43
Chyorniy bagira (Black Bagheera)						
Option 1 (Austrian bush)	14,8	118,7	13,8	6,42	63,2	80
Option 2 (Rare tier)	15,36	122,8	15,2	6,24	62,8	78
Option 3 (KGB Kim Green bush)	11,6	92,8	15,4	5,96	64,8	79
Option 4 (control Kosasimon)	16,36	130,8	17,2	5,66	60,8	80
Option 5 (Not Shaped)	13,46	107,6	28,6	4,04	30,8	43



Option 2. When formed by the method of “Austrian bush”, the average yield is 15.36 kg per bush. The average yield was 122.8 hundredweight (centner) per hectare. In addition, the weight of 100 fruits was 6.24 kg, the average weight of one fruit was 62.8 grams and the weight of the largest fruit was 78 grams.

Option 3 When formed using the “KGB Kim Green Bush” method, the average yield is 11.6 kg per bush. The average yield was 92.8 hundredweight (centner) per hectare. Also, the weight of 100 fruits was 5.96 kg, the average weight of 1 fruit was 64.8 grams and the weight of the largest fruit was 79 grams.

In the unformed variant, the average yield is 13.46 kg per bush. The average yield was 107.6 hundredweight (centner) per hectare. Also, the weight of 100 fruits was 4.04 kg, the average weight of 1 fruit was 30.8 grams and the weight of the largest fruit was 43 grams.

Conclusion

The high yield of fruits in the formation of plum varieties in different ways, with the size of the fruit is as follows:

1. Two variants of the Leto variety differed in yield and fruit size in the sparse stratification method.
2. Three variants of the Burton variety in terms of yield and fruit size according to the method of forming a bush of the “KGB Kim Green Bush” distinguished.
3. One variant of the Chyorniy bagira (Black Bagheera) variety differs in yield and fruit size with the Austrian method of bush formation.

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