



DOI: **10.5958/2249-7137.2021.00686.8**

THE EFFECTS OF THE BUDS TO YIELDS, MECHANICAL AND CHEMICAL COMPOSITIONS IN THE PROCESS OF CULTIVATION OF “WHITE HUSAYNI” VARIETIES OF GRAPES BY THE METHOD OF “VOISH”

P.E.Egamberdiev*; **F.M.Khojaqulov****; **R. Xudoyberdiev*****;
U. J. Bababekov****; **D. Botirova*******; **Sh.K.Suyunov*******

^{1,4} Teachers of Gulston State University,
UZBEKISTAN

*****Student of Gulston State University,
UZBEKISTAN

***** Master Degree Student,
Tashkent State Agrarian University,
UZBEKISTAN

ABSTRACT

In this article, it was found that the yield rate is higher if the buds are left in the buds in moderation. It was found that if more or less buds are left than the norm, the mechanical composition, grape heads are small and large, leading to a decrease in the sugar content and acidity in the chemical composition.

KEYWORDS: *grape head, chemical, bud, loading, yield, variant, control, content.*

INTRODUCTION

In recent years, in the Republic of Uzbekistan, comprehensive measures have been taken to create new varieties and hybrids of grapes with high yields, resistant to common dangerous diseases and pests, as well as to develop optimal agricultural technologies for growing. However, the improvement of agrotechnical measures used in viticulture, depending on the soil and climatic conditions of each region, will further increase the productivity of the viticulture sector [1].

High efficiency can be achieved through the fullest possible use of all the factors that determine the quantity and quality of the crop of grapes. Given the importance of vine loading in the

formation of grape yields, we set ourselves the task of determining the optimal amount of bud load on the vine, the aim of the study is to explore the possibility of making fuller use of the voices[2].

Experiences:

It is carried out at the farm “Karima Muruvvat Agro”, established in 2009, located in Tashkent district of Tashkent region. The total area of the farm was 36 hectares of which, the area of grape varieties grown by the “Voish” method is carried out in vineyards on 5 hectares.

They are given different vine bush loads. The selection of experiments, the method of placement of options were carried out in the generally accepted ways, statistical analysis of the obtained data Buriev H.Ch., Enileev N.Sh., N.I.Ryabova., V.L.Viktovskiy and B.A. Dispersion analysis was performed according to Dospekhov's method.

In the cultivation of vines by the voish method, the vines are not cut (control), 80-120, 121-160, 161-200, 201-240, 241-280 By forming a vine bush with bud load, it was determined that the yield and chemical composition of the bush load depend on the “White Husayni” variety[3-4].

MAIN BODY

The yield of twigs depends on the average weight of each vine head on the number of grape heads available on these twigs per unit of land or on the number of harvested twigs per hectare. Options with high performance on these factors will always yield higher yields per unit of land.

The results of the study showed that, The effect of yield characteristics of buckwheat “White Husayni” on the bud load The following results were obtained. In the uncut (control) variant, there were 34.0 single-crop rods, 3.4 double-crop rods and 37.4 total-yield rods. It was found that the average number of grape heads per single-fruited branch yielded 1.3.

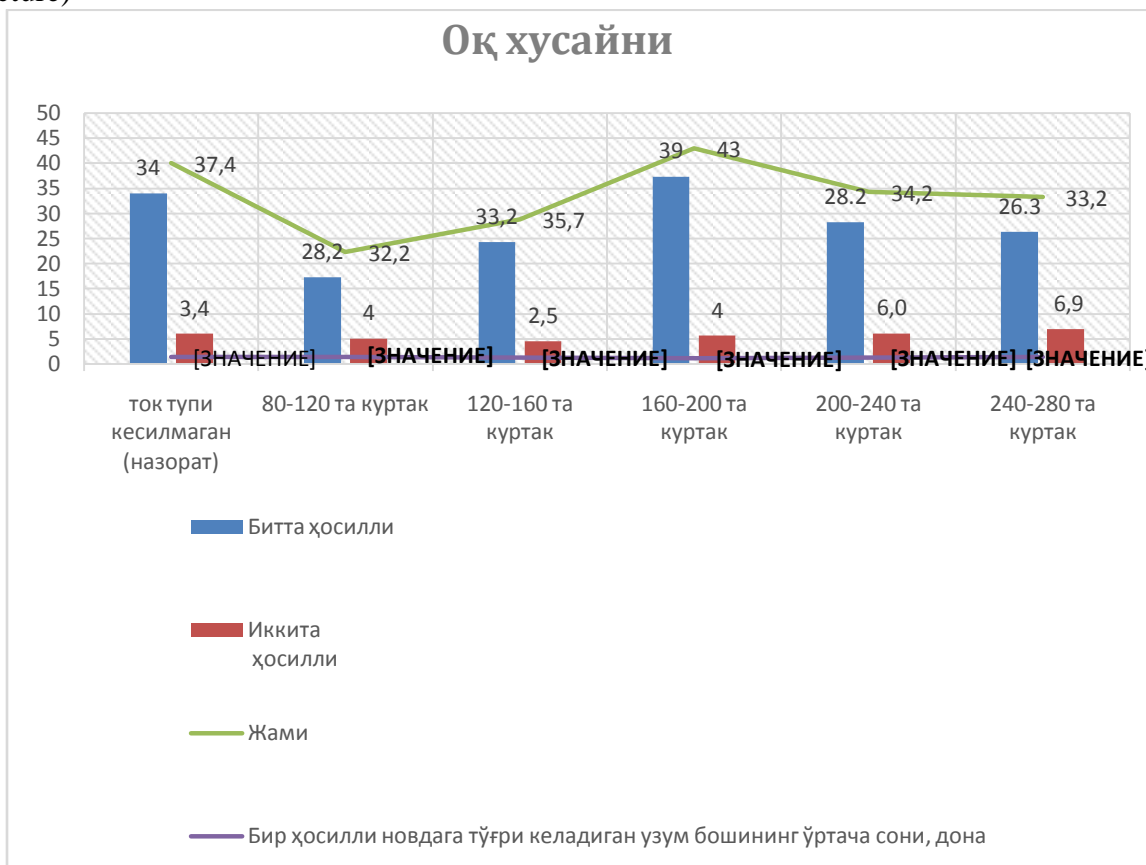
When the current bush load is left in 80-120 variants, 5.8 units of single-crop rod control variant, it was found that the two-fruited twigs had a total of 5.2 fewer grape heads than the 0.6 ones, and it was observed that the average number of grape heads corresponding to a single-fruited twig was equal.

When the current is left at 120-160 bush loads, the single-crop rod is 0.8 units less than the control option, it was found that the average number of grape heads per double-yielding rod was 0.9 and that of a single-yielding rod was 0.1 less.

When 160-200 buds are left, the single-crop rod is 5.0 more than the control variant, the two-fruited twigs differed by more than 0.6, and the average number of grape heads per single-fruited twig yielded less than 0.2.

When 200-240 buds were left, the single-yielding rod yielded 5.8 fewer than the control variant, the double-yielding rod yielded 2.7 more, and the average number of grape heads per single-yielding rod yielded 0.1 less. With 240-280 buds left, single-crop rods are 7.7 less than the control variant and double-crop rods are 3.5 more and it was found that the average number of grape heads per one fruiting twig is equal.

(Picture)



Picture. The yield indicators of “White Husain” variety of grapes

The results obtained when studying the mechanical composition of grape heads of edible grape varieties revealed that not all varieties differed significantly from each other[5].

The grape heads, flesh, grains, and seeds of edible grape varieties were weighed on an analytical balance, calculated as a percentage, and the size of the grape head was measured on a ruler.

The results obtained from the data in Table 1 show that the weight of the “White Husayni” head of grapes in the uncut (control) variant was 317.8 g, the length of the grape head is 21.7 cm, the width is 11.2 cm, the flesh and juice of the grape head is 87.8%, the bunch is 4.6%, the skin of the grape is 0.5% and the seeds of the grape are 7.1%. The weight of a bunch of grapes at a load of 80-120 buds is 22.7 g from the control option, the length of the head of grapes is more than 2.6 cm, width was less than 0.1 cm, the flesh and juice of the grape head was 3.0% more, the bunch was less than 1.2%, the skin of the grape was 0.1% and the seed of the grape was 1.6% less than the control, grape heads of vine buds with 120-160 buds load 27.3 g compared to the control variant, grape head length 2.5 cm, width 1.2 cm, grape head flesh and juice 3.3% more, bunch 1.2% low, the husk of the bunch was found to be 0.1% less, and the seed of the bunch of grapes was found to be 2.8% more.

The weight of grape heads of vines with 160-200 buds is 38.0 g heavier than the control variant, the length of the vine is 2.7 cm, the width is 4.0 cm, the flesh and juice of the vine is 3.0%

more, the bunch of grape head was reduced by 0.5% and the husk of the bunch was reduced by 0.1%, and the seed of the bunch of grapes was reduced by 2.0%. Grape heads of vines with a load of 200-240 buds are 35.9 g more than the control variant, the length of the vine is 2.6 cm, the width is 2.3 cm, the flesh and juice of the vine is 1.6% more, the bunch of the vine is 0.5% low and the husk of the bunch was 0.1% less, and the seed of the bunch was 2.8% less.

Grape heads of vines with a load of 240-280 buds are 25.9 g more than the control variant, the length of the vine is 2.5 cm, the width is 1.6 cm, the flesh and juice of the vine is 1.1% more, the bunch of the vine is 0.6% low and the husk of the grape was equal and the seed of the grape was 1.6% less (Table 1).

TABLE 1 THE EFFECT OF BUD LOAD ON THE MECHANICAL COMPOSITION OF FOOD GRAPE VARIETIES WHEN GROWN BY THE METHOD OF “VOISH”.

Options	Head of grapes average weight, g	Grapeheadsize		Grape head body and juice, %	Grapeheadband, %	Skins of grapes, %	The seeds of the vine, %
		length, sm	width, sm				
The type of grapes which is not cut off (control)	317,8	21,7	11,2	87,8	4,6	0,5	7,1
80-120 bud	340,5	23,18	11,13	90,78	3,4	0,4	5,38
120-160 bud	345,1	24,20	12,40	91,05	3,4	0,4	5,25
160-200 bud	355,8	24,43	15,18	90,83	4,1	0,4	5,08
200-240 bud	353,7	24,33	13,55	89,43	3,9	0,4	5,33
240-280 bud	343,7	24,38	12,75	88,93	3,7	0,5	5,48
EKF ₀₅	2,2	0,4	0,2				
Sx	0,36	0,07	0,03				

One of the main factors in obtaining a high and quality crop from edible grape varieties is its navigational dependence. Yield quality and chemical composition of grape heads depend on both the biological properties of the varieties and the technology of cultivation[2,5].

In the case of uncut (control) variant of “White Husayin” variety of grapes, the number of grape heads in the vine was 37.4, the yield in the bush was 11.8 kg, the sugar content was 19.7%, the acidity was 4.9%. When 80-120 buds were left in the vine, the number of grape heads in one bush was 5.2 less than the control variant, the yield in the bush was 0.9 kg, the sugar content was 3.5% higher and the acidity was 0.7% lower.

When 120-160 buds were left in the vine, the number of grape heads in one bush was 1.7 less than in the control variant, the yield in one bush was 0.5 kg more, the sugar content was 2.55% higher and the acidity was 0.4% lower.

When the load of buds was left at 160-200 in the vine, the number of grape heads in one bush was 5.6 compared to the control variant, the yield was 1.8 kg more, the sugar content was 2.6%

higher and the acidity was 0.4% lower. When 200-240 buds were left in the vine, the number of grape heads in one bush was 3.2, the yield in one bush was 1.0 kg less, the sugar content was 1.6% higher than the control variant, and the acidity was 0.3% lower.

When 240-280 buds were left in the vine, the number of grape heads in one bush was 4.2, the yield in one bush was 1.4 kg less, the sugar content was 0.2% and the acidity was 0.1% higher (Table 2).

TABLE 2 DEPENDENCE OF THE CHEMICAL COMPOSITION OF THE “WHITE HUSAYIN” VARIETY ON BUD LOAD

№	Options	Number of grape heads in the bush	Yield in per bush, kg	Sugar content, %	Acidity, g / l
1	The type of grapes which is not cut off (control)	37,4	11,8	19,7	4,9
2	80-120 bud	32,2	10,9	23,2	4,2
3	120-160 bud	35,7	12,3	22,2	4,5
4	160-200 bud	43,0	13,6	22,3	4,3
5	200-240 bud	34,2	10,8	21,3	4,6
6	240-280 bud	33,2	10,4	19,9	4,8
	EKF05 =	3,0	0,1		
	Sx =	0,49	0,02		

CONCLUSION

The effect of “White Husain” varieties on yield was studied, the highest yield was 43 seedlings in 160-200 stem vines, the lowest yield was 32.2 seedlings in 80-120 stem vines.

The dependence of the mechanical composition of the grapes on the vine load was observed when the heaviest vine in the variants was 355.8 g with 160-200 buds left, the minimum weight of the vine was 317.8 g in the uncut variant.

The effect of budding on the sugar content and acidity of the “White Husain” variety was as follows: the lowest blood pressure was observed in the uncut (control) variant of 19.7 current tubers. Acidity was observed in the vine bush with a minimum load of 80-120 buds, the maximum bush was found to be 4.9% in the uncut (control) variant.

LIST OF USED REFERENCES:

1. Arutinyan A.S., Fertilization of vineyards. -M “Kolos”, 1983.-P.43-45.
2. Buriev X.Ch., Enileev N.Sh. and methodology of calculations and phenological observations in experiments with other fruit and berry plants. - T., 2014. - 64 p.
3. Dospekhov B.A. Field experiment technique. - M.: Agropromizdat. - 1985. - p. 311-320.
4. Ryabova N.I., Viktovsky V.L., Study of grape varieties (Methodical instructions). Leningrad, 1998. -P. 22-28.
5. Temurov Sh., “Grapes culture”. State Scientific Publishing House “National Encyclopedia of

Uzbekistan”. Tashkent, 2002. 174-175 p.