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-  
, -  
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, -

108

100-

( , , ).

*Prunus avium L.* - ”  
*Prunus cerasus*  
 2007 . 2008  
 ”  
 ”” ”  
 ”  
 ( - ).  
 , ,  
 , -  
 ” ” -  
 ” ” 1173 kg, 1044 kg  
 1000 kg . -  
 ” ”  
 2040 kg 1100 kg [1].  
 :  
 1. ,  
 2. - ,  
 :  
 2.1. ,  
 2.2. .  
 -  
 1. ,  
 (*Prunus avium L.*) (*Prunus cerasus L.*)  
 ( ),  
 [1].  
 - , [40].  
 [30].  
 , -  
 370

2007 . - 4 222 kg/ha, 4 018 kg/ha,  
3 948 kg/ha, 3 543 kg/ha 2 380 kg/ha.

2007 . - 3 925 kg/ha, 2 512 kg/ha, 2 399 kg/ha,  
1 623 kg/ha 1 315 kg/ha.

[13].  
( -  
) , ( -  
) , - ( -  
) [7]  
7,67  
13,10%, - 9,43 14,65%.

2,43% [22].  
( „ ”), „ „ ”), 0,40%  
1,94% ( „  
[1].

(  
) ( - )  
[16, 20].

(  
) ,  
- ( -  
) [5].

[41] , -

g 436  $\mu\text{mol}/100\text{ g}$  „Algila”. „Sue” 2 669  $\mu\text{mol}/100$

100 g 19,6 mg/100 g [36]. 78,8 mg/

[1] 50%

2 3

0,455% ( „ ”) 0,060% ( „ ”) 0,108%

[1].

[35]. [39].

[7] 69,25 96,74 g/kg . F. Blando [31] [15].

1145 2592  $\mu\text{mol}/100\text{ g}$  [43]

Gao, Mazza, Wang

[33, 42].

( )

(135,20 g/kg )  
(54 g/kg ).

– 36,00 139,97 g/kg [7].

[3]

( , , , , , )

[19],  
1,00 1,50%,  
– 0,10 0,15% 0,07 0,09%

[12]  
0,74 1,15%, 0,29 0,44%, 1,02 1,71%,  
0,08 0,17%, 0,04 0,07%.

( )

[9].

– 3 : – 4 g,  
4,1 5,5 g – 5,5 g,  
– 3 5 g : – 3 g, 5 g,

[1,4].

”) . (,, ”, ” ” ” -  
 ”) - . (,, ”, ” 7,09%  
 ( ” ”) 14,85% ( ” ”) [1].  
 : ( + )  
 [11]. -  
 . Sedat . Cevat  
 (*Prunus lauracerasus L.*) (13,05  
 mm), (14,10 mm), (11,26 mm), (12,71 mm)  
 (0,95 ) [38]. M. Naderiboldaji  
 6  
 :  
 (17,92-26,78 mm), (16,50-24,57 mm), (14,62-23,41 mm),  
 (4,51-7,39 g) [37].  
 108,  
 [29].  
 ( )  
 [18]. , , , )  
 [1, 4]. . 100-  
 [21].  
 ( ) ,  
 -  
 ,  
 [2].

[24, 25, 26, 27]. -

[1, 3, 4, 5, 7, 8, 10], -

,

[11, 12, 16, 17, 19]. -

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100-

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( , ).

## 2.

### 2.1.

- , ( , -

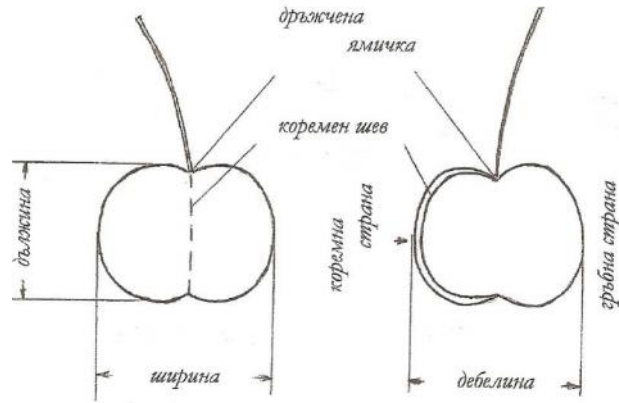
)

[9].

50 ,

: ( ), , .

( . 1).



.1.

( )  
 , : , mm ( -  
 ), , mm ( -  
 )  
 ).

-  
 108  
 108  
 [29]  
 2, .8 ( -6. , -21 108,  
 )  
 - “ ”,  
 : “ ”  
 - 20 mm;  
 17 mm. 10%  
 - : “ ” - 17 mm; - 15mm [29].





(  $\text{CuSO}_4$  ) [24];  
 0,1N Na H [26];  
 [2];  
 2,6- [25] [27].  
 o

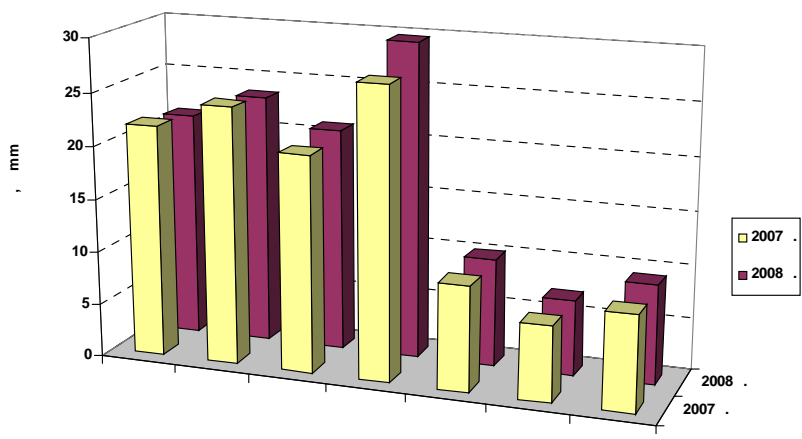
**3.**

**3.1.**

2 6 . ”  
 ”  
 5-6%  
 2007 . ” . 2.  
 mm, 19,5 mm 4,58 g. : 18,9 mm, 22,4  
 (49,5 mm),  
 0,36 g. : 10,3 mm, 7,4 mm, 8,8 mm  
 7,9%  
 2007 .  
 20,25 mm.

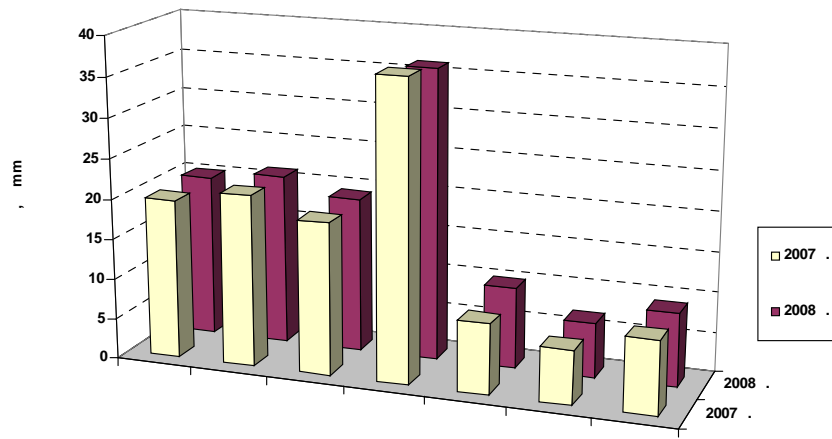


mm. 27,3 mm -  
 ” 0,39 g 6,11 %  
 22,11 mm. ” 2007 . [29].  
 6,71 g. ” 2008 .  
 23,5 mm 21,1 mm. 21,2 mm,  
 mm ( . 3). 0,40 g 5,96 % 29,7  
 . 21,91 mm. -  
 ” ,  
 108 [29].



. 3. ” ’ ” 2007 . 2008 .

” 2007 . 3,87 g. ”  
 0,44 g 11,37% ( . 2). -  
 : 19,83 mm, 21,33 mm 18,93 mm. -  
 37,09 mm. , -  
 8,72 mm, 6,69 mm 9,10 mm ( . 4).



. 4. ” ’ ” 2007 . 2008 .  
 20,03 mm. -  
 “ ”

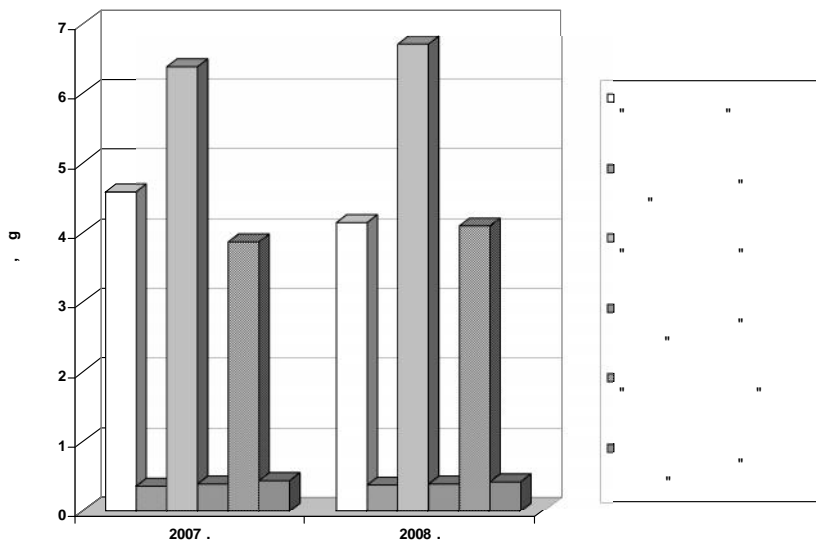
[29]. ” ” 2008 .  
 4,10 . 0,43 g, 9,27%  
 : 20,24 mm, 21,27 mm  
 19,27 mm ( . 4), 36,17 mm. -  
 10,02 mm, 6,79 mm 9,19 mm ( . -  
 4). 2008 . 20,26 mm. -  
 , ” 2008 . -  
 [29]. -

. 2. ” ” ” ” ” ”  
 2007 . , - ” ” ” ” ” ”  
 ” , ” ” ” ” ” ”



” – 11,88%,  
 ” – 6,90%.

2008 .



.5. ” ” ” ” 2007 . 2008 .

2007 . 2008 .

.5.

93,10% 2007 . 6,98%, 2008 . (93,02% 2007 . ) ( + )  
 – 2007 . 6,98%, 2008 . 6,90%.

2007 . 2008 .

108 [29],

” ”

” ” 2007 . 2008 .

” ”

2007 . .6.

17,98 mm 3,03 g. : 15,44 mm, 18,25 mm,

(57,97 mm),

mm 0,41 g. : 8,71 mm, 6,95 mm, 8,27

12,42%

2007 . 17,22 mm.

108, ” ”

[29].

” ” 2008 . ( . 6)

16,79 mm, 20,18 mm, 18,69 mm.

3,51 g, 56,78 mm.

9,33 mm, 7,45 mm, 8,94 mm.

0,39 g 11,11%

18,55 mm. 2008 . -

( 1,33 mm) 2007 . 2008 .

[29]. ” ”

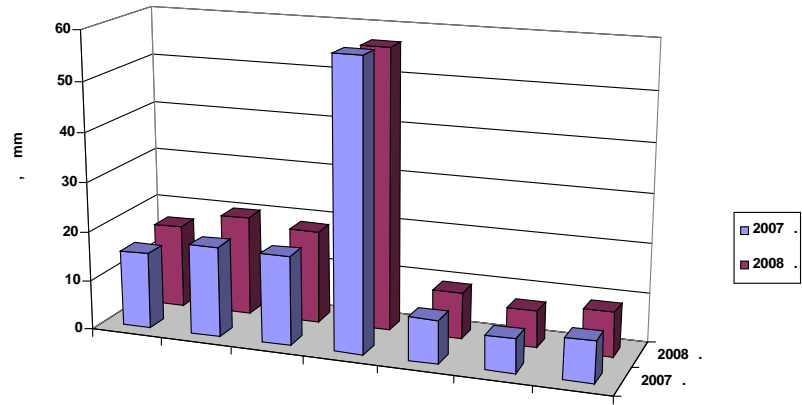
2007 . 4,39 g. 0,54 g

12,30% ( . 3). :

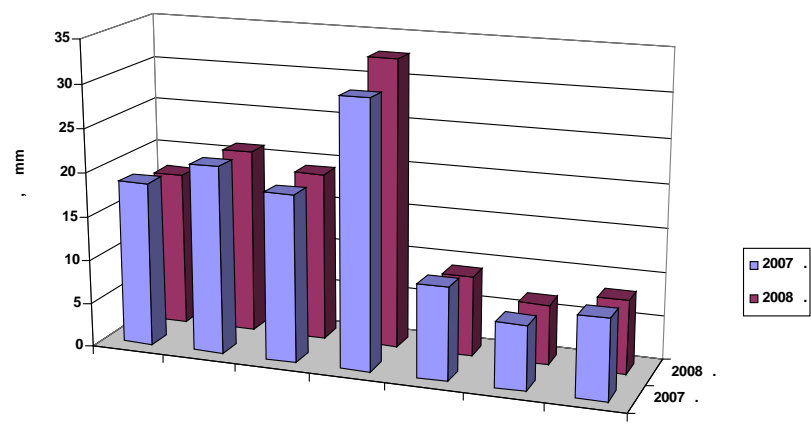
18,74 mm, 21,40 mm 19,02 mm. -



30,26 mm. ,  
 10,55 mm, 7,33 mm 9,14 mm ( . 7).  
 20,01 mm.  
 “ ” [29].



. 6. ” ’ ” 2007 . 2008 .



. 7. ” ’ ” 2007 . 2008 .





**3.2.**

100-  
5  
” ”  
2007 .  
-  
-  
-  
” ”  
100- ( . 4) 80,40  
2007 . -  
19,6 ( 5-6%) -  
-  
2,80 -  
4  
100-  
” ”  
2007 . 2008 .

		2007 .	2008 .
1.	10	8,20	7,63
2.	10	8,20	7,40
3.	20	17,20	16,25
4.	20	14,00	13,10
5.	40	32,80	30,25
:	100	80,40	74,63

” ” 2008 . ( . 4)  
-  
-  
-  
0,57 0,80  
-  
-

		2007 .,	-	0,95	.	
		2007 .				
-		0,90	2,55			
					2008 .	
-	5,77					
		2008 .				
		”	”	2007 .		
		5%				
			1	-		
	0,50	-		( .5).		
		2008 .	( .5)			
	0,25	-				
				2007 .		0,23
					2007 .	
			0,50			

100-

2007 . 2008 .

		2007 .	2008 .
1.	10	9,25	9,50
2.	10	9,00	9,23
-			
-			
3.	20	19,50	19,75
4.	20	17,50	18,00
5.	40	37,00	37,25
:	100	92,25	93,73

( .5)

2008 . - 1,48

2008 .

”

”

2007 .

( )

( .6) -

3,30

2,20 -

2007 . ( .6)

100-

2007 . 2008 .

		2007 .	2008 .
1.	10	6,70	8,10
2.	10	7,80	7,90
-			
-			
3.	20	19,60	19,20
4.	20	17,00	17,10
5.	40	34,90	35,50
:	100	86,00	87,80

**2008 .**

1,4

2008 . - 1,80      ” ( .6). -

2008 .

**2007 .**

7

**100- 2007 . 2008 .**

		2007 .	2008 .
1.	10	9,00	8,70
2.	10	8,50	8,00
3.	20	18,67	17,25
4.	20	14,00	14,10
5.	40	34,00	31,50
:	100	84,17	80,55

100- ( ” .7) 15,83 -

( 5%) -

2007 .

2008 . ( .7) -

- 0,30 0,50 -  
 ( - )  
 0,10 1,42  
 2,50 2008 . 3,62  
 2008 .  
 ” ” 2007 .  
 ( . 8).  
 2007 .  
 8  
 100-  
 ” ” 2007 . 2008 .

		2007 .	2008 .
1.	10	9,00	8,44
2.	10	8,70	8,70
	-		
	-		
3.	20	18,00	17,20
4.	20	16,00	17,20
5.	40	35,00	36,00
:	100	86,70	87,54

” ” 2008 .  
 0,56





100-

**3.3.**

2007 . 2008 .

5 . 9 .

” ” 2007 . 2008 .

2007 . -

” ” 2007 . - 2,20%,

” 4,24%.

” 1,52% - ”

”) ( 3,56% - ”

0,31% ( ” ”) 0,15% ( ” ”).

1%.

0,03%

” .

0,01%

( ” ”) 0,03% ( ” ”).

9

2007 . 2008 .

	2007 .	2008 .
1. , %	15,27	15,05
2. , %	9,58	9,25
3. , %	9,02	8,78
4. , %	0,56	0,44
5. ) , %	0,64	0,66
6. , %	0,15	0,16

2008 . ( . 9)



3,56% 3,88%  
 0,01%  
 2007 . ( . 9).  
 10

2007 . 2008 .

	2007 .	2008 .
1. , %	17,47	17,18
2. , %	13,14	10,52
3. , %	12,90	10,27
4. , %	0,25	0,24
5. ( ) , %	0,67	0,73
6. , %	0,14	0,13

2008 . ( . 10).  
 0,29%  
 2008 .  
 2,62%, 2,63% 0,01%  
 0,06% - 0,01%  
 [3, 4]  
 14,30%, - 3,03%  
 [1] 15,00%,  
 2,33%. [10],  
 16,96%,  
 0,37%  
 [3, 4]  
 9,90%,  
 1,93%. [1]

9,40%, - 2,43%  
 [10] 12,11%.  
 ( 0,28%) [3, 4]  
 ” ” 0,48%, -  
 0,22% [1] 0,45% -  
 [10] - 0,25% . 0,63%,  
 ” 0,07% ” -  
 ” ” 2007 . . 11.  
 ” ” 2,04%, ” ” 4,24%.  
 ” ” 2,04% 2,21%.  
 ” ” 0,16%  
 ” ” 0,15% ” -  
 ” .  
 -  
 mg % ( .11).  
 -  
 2007 . 2008 . ” ” 11

	2007 .	2008 .
1. , %	19,51	18,27
2. , %	11,10	10,94
3. , %	10,69	10,44
4. , %	0,41	0,47
5. , % ( )	0,51	0,60
6. , %	0,12	0,17
7. , mg %	10,68	9,21



## 2007 . 2008 .

	2007 .	2008 .
1. , %	14,59	14,79
2. , %	8,38	9,04
3. , %	7,75	8,38
4. , %	0,59	0,63
5. % ( )	1,59	1,63
6. , %	0,26	0,30

” ” 2008 . -  
0,20%

0,66% ( -  
) , 0,63% ( ) , 0,04% ( ) 0,04% -  
) , 0,04% ( ) 0,04% -  
( ) .

” ” .  
” ” 2007 . ( .13)  
- 3,25% -  
” ( .12). ,  
0,65%, 1,14% 0,10% ,  
” ” .  
0,14% - 0,29% -  
” ” 2007 .

## 2007 . 2008 .

	2007 .	2008 .
1. , %	17,84	16,28
2. , %	9,03	9,75
3. , %	8,98	9,69
4. , %	0,05	0,06
5. , % ( )	1,45	1,52
6. , %	0,55	0,37











18. , 1. : . , 1963, . 115-127.
19. , . , 1962, . 387.
20. ,, , ,, , . .// , , 1980, 3, . 18-21.
21. , ,, , ,, , . .// , . 7, 1982, . 32-37.
22. , ,, , . V , 1972, 1, . 29-30.
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25. 11812:1991.
26. 6996:1993. ( “ ”).
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## A STUDY OF THE QUALITY OF CHERRIES AND MORELLO CHERRIES

Chief Assist. Prof. Dr Sabka Pashova

### Abstract

There is put forward a modern improved methodology for the complex assessment of the quality of fresh fruit, featuring the following new points: *morphological description of fruits* - determining the class - quality of fruits; organoleptic grading of the fruits on a scale of 1-100 - assessing the quality of fruits *on the basis of the suggested marginal values for the individual grades*. The achieved results are complemented by the values, obtained for the physical and chemical indicators and provide generalized information on the composition, the nutritional and biological value of the fruit under study. The above methodology is applied in studying the quality of three sorts of cherry ("*Ranna ot Vil*", "*Lionska ranna*" and "*Droganova zhalta*") and two sorts of morello cherry ("*Oblachinska*" and "*Rekseler*") vintage 2007 and 2008.



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	.....	402
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