

17 - 21, [15]

19, - 48.

- 7, - 14.

88 [10]

113, - 18

131.

(*Acanthoscelides obtectus* Sa.)

(1924)

(1914)

50 - XX - 1970

1969

[1] [16]

40

(*Trogoderma granarium* Ev.)

XX-

XX1

[4].

[14] 10, - 22 - 20

[5].

2010

[6].

65

[7].

1991

[3],

[8],

9],

[13]

[11].

(39 4), 5 - 39 (34 - 43), - 16 (14 2) - 9 (8 1).

- 131, 65),

) (420 /) (0,15, 0,3 / ² 10⁰ 15% 10 ,
 15% - 5 .
 : 15⁰ 10
 : 5-15⁰ 15 , -
 400 5⁰ - 15 . -
 20 / .

[8,9].

[13].

1

(13,9

11

),

[2].

12%,
18%).

(15-

22

30⁰ .

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10841-64.

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 , ,
 .
 50 , 50

420 /) 0,15; 0,3 / ².

15-20

()

:
 , 500 . . . 0,4
 / ² , 0,8 / ² -
 , 2,5%
 . . - 0,2; 0,4 / ² , 57% . . -
 0,8, 1,6 / ² , 50% . . - 0,4
 / ² , 050 . . - 0,4; 0,8 / ²
 (420 /) 0,15, 0,3 / ²

2-3

2-3

: , 500
 0,4,
 0,8 / ²,
 , 2,5% . . - 0,2; 0,4 / ²,
 , 57% . . - 0,8, 1,6 / ²,
 , 50% . . - 0,4 / ²,
 050 . . - 0,4; 0,8 / ² (

30

10

$(5,0-12,0 / ^3)$,
 $(12,0 / ^3)$,
 56% $(12,0 / ^3)$
 $(12,0 / ^3)$.

3 5

()

$(0,4 / ^2)$, $0,050 \dots (0,4 / ^2)$, 57%
 $(420 /) (0,15 / ^2)$
 $150-200$
 $1 ^2$.

)

500

$(0,04 / ^2)$
 $20 / ^2$.

1-

1	2	3	4	5	6
	<p>1 30 .</p> <p>- .</p> <p>-</p> <p>1</p>	<p>20 / 5 / ,</p>			
	<p>1 10</p>		<p>, . .</p> <p>, .</p> <p>, .</p>	<p>5-12 / ³</p> <p>12 / ³</p> <p>12 / ³</p> <p>12 / ³</p>	
-	<p>, , , ,</p>	<p>, .</p> <p>.</p>			
1	2	3	4	5	6

			<p> ,500 ,050 57% 420 \) </p>	<p> $3-5 / ^3$ 0,4 / 2 0, 0,4 / 2 0,4 / 2 0,15 \ </p> <p>2</p>	<p> 200 / 3 200 / 2 </p>
			<p> ,500 ,050 57% (420 \) </p>	<p> 0,8 / 2 0,8 / 2 0,8 / 2 0,3 / 2 </p>	<p> 400 / 2 400 / 2 400 / 2 150 / 2 </p>
		2-10			<p>400 / 2</p>
-		10			<p>400-600 / 2</p>

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125. 4. . . . // . 1.2004. - 30 –
- 33 // 5. . . . 1964 . 10. – . - 98. .
6. . . . // . –
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1970. 24 .
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- . 1999. 384 .
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16.
. // . 1972.
X1. - 153 – 155.

65

: , (,) , (,) , () , .

SUMMARY

According the studies results on pests of grain reserves and its products in the South-East, North, West and East of the country and their analysis in the south and center of the country, at the present time storage pests in Kazakhstan is not more than 65 species.

Reducing the number of species composition of storage pests to half may be explained by the complex of factors: optimization, the continuing diversification of crops, improving of storage (construction new storage models) , a sharp weakening of the bonds between warehouses and reservations (reduced by two-thirds of livestock, poultry, respectively, and of harvested hay, straw and concentrates) , improved the protection of stocks (private property) , and the inclusion of the storage pest of small rare species.

The protection system of the stocks of grain and its products, including quarantine, preventive measures and destroyers is presented.