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Бапта Қазақстанның (Coleoptera: Cucujidae, Silvanidae, Laemophloeidae) қоңыз-қашары қаралған. Табылған түрлердің тізімі және олардың биологиясының мәліметі бойынша, шаруашылық мәні және таралуы келтірілген. Дәл осы кездеге Қазақстан үшін жинағы 3 үй-іші, 10 туу және 15 қоңыз түрлері атап өтілген. Оңтүстік-шығыс Қазақстан үшін 2 түрі тұңғыш рет көрсетіледі. Олардың ішінен ең үлкен шаруашылық мәніне Silvanidae және шикізаттың зиян келтірушілері мен қорлардың қауіпті Laemophloeidae үй-ішілерінің өкілдерін алады.

In the article the flat bark beetles (Coleoptera: Cucujidae, Silvanidae, Laemophloeidae) in Kazakhstan are reviewed. Is a list of species found and the data on their biology, economic importance and distribution. Total in Kazakhstan at the moment marked 3 families, 10 genera and 15 species of flat bark beetles. 2 species in to the south-east Kazakhstan indicated for the first time. Of these, the greatest economic importance of the family Silvanidae and Laemophloeidae - as dangerous polyphagous pests of raw materials and stores.

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EFFECT OF SELECTION FOR HIGH BODY WEIGHT ON SOME REPRODUCTIVE TRAITS IN JAPANESE QUAIL.

ВЛИЯНИЕ СЕЛЕКЦИИ ПО ВЫСОКОЙ МАССЕ ТЕЛА НА НЕКОТОРЫЕ РЕПРОДУКТИВНЫЕ ПРИЗНАКИ ЯПОНСКИХ ПЕРЕПЕЛОВ.

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Abstract: A selection experiment continued for four generations (G_0 , G_1 , G_2 and G_3) through the hatching season 2009-2010 using Japanese quail in Jol-Ayak farm, Almaty, Kazakhstan to study the effect of selection for high body weight at four weeks of age on some reproductive traits such as fertility % (F%), hatchability % (H%) and hatchability from fertile eggs % (H/F%). Two lines were used in this experiment, the first one was selected for high body weight at four weeks of age (A) and the second one was used as control line (C). The selection for high body weight (HBW) at 4 weeks of age had a positive effect on the selected trait and significant differences ($P \leq 0.05$) were observed between lines. On the other hand, fertility %, hatchability % and hatchability from fertile eggs %, in the selected line were lower than the control line, but no significant differences were observed between lines in these traits. These results suggest that, live body weight in Japanese quail can be increased without decreases in F%, H% and H/F%, significantly.

Introduction: The Japanese quail, originally domesticated around the 11th century as a pet song bird (Howes

1964; Crawford 1990), has gained in value as a food animal since 1910 (Wakasugi 1984). Countries having shortage in animal protein supply may consider using all available protein resources for human nutrition (Singh et al., 1981). Production of animal protein from commercial rearing of Japanese quail has been recently initiated in Egypt and Kazakhstan. Fertility rate and hatchability of all eggs set or fertile eggs, in poultry are influenced by many factors including male/female ratio, genetic, age of parents, nutrition, storage conditions and period of eggs, quality and weight of eggs, and incubation conditions. Genetic progress in body weight for Japanese quail is accomplished by continuous selection for the trait (Marks, 1971, Anthony et al., 1986). The present study was conducted to study the effect of selection for high body weight at four weeks of age on some reproductive traits such as fertility (F%), hatchability (H%) and hatchability from fertile eggs (H/F%).

Materials and methods: At hatch time quails were wing-banded and all chicks were brooded in wood brooders with wood chaff litter. The starting brooder temperature was 35°C during the first two days, then the brooder temperature decreased gradually from 2-3°C every week to reach 20-22°C at almost 42 days of age, and exposed to 24 hours of constant light during the first 3 weeks of age, then quails were moved to cages in laying house, kept under 17 hours light a day. All quails were kept under the same managerial hygienic and environmental conditions. The quails were weighed at 1, 2, 3, 4, 5, 6, 7 and 8 weeks of age and live body weight was recorded, fertility %, hatchability % and hatchability from fertile eggs %, were recorded also. Water was available all time and all the experimental quails were fed ad libitum on a starter ration contained 24.02 % crude protein and 2715.11 ME/Kg. to 4 weeks of age then layer ration 19.80 % crude protein and 2646.60 ME/Kg. Individual selection method was applied to select line A for high body weight at 4 weeks, and control line was kept under random mating. Recorded data were subjected to statistical analysis using SPSS (Statistical Package for Social Science) program version 18, (2009).

Results and discussion: Results reported that, selection for HBW at four weeks of age had a positive effect on body weight at different weeks of age. Means of live body weight at 4 weeks of were 138.67, 109.97, 159.71 and 129.22 in line (A) compared with 136.39, 100.95, 145.40 and 117.11 in control line at G₀, G₁, G₂ and G₃ respectively. Live body weight means at 8 weeks of age as a correlated response for selection were 248.27, 256.03, 276.74 and 261.02 g in the selected line (line A) for G₀, G₁, G₂ and G₃ of selection, respectively. On the other hand, body weights at 8 weeks of age in the control line (line C) were 252.77, 243.16, 253.98 and 243.45 g for G₀, G₁, G₂ and G₃, respectively. Significant differences were observed (P≤0.05) between birds in the selected and control lines at all ages. The same trend obtained by Damme and Aumann, (1992), Marks, (1996), Shalan (1998); Aboul-Seoud (2008) and Farrag et al., (2008). These results were expected due to the finding that selection for high body weight increased body weight. Female's live body weight means in all lines and all generations were heavier than that of males.

Results in table (1) showed the means of F%, H% and H/F %. According to these results fertility %, hatchability % and hatchability from fertile eggs %, in the selected line were lower than the control line, except in the third generation of selection fertility in the selected line was higher than the control line. The analysis of variance of fertility reflected no significant differences between generations, lines (Table, 2). It was clear that selection for high body weight did not affect fertility in quail eggs significantly. In the opposite trend, Marks (1996) and Harfoush (2004) reported that selection for high body weight at 4-weeks of age had negative effect on fertility percentage. The percentages of hatchability were reported (Table, 1). Differences between the selected and control lines were not significant at (P≤0.05). Also, no significant differences were observed due to generation effect as shown in Table, 2. Marks (1996), they reported that, hatchability % in selected lines were lower than control lines.

Table (1): Numbers of birds and means of some reproductive traits in selected and control lines (Mean ± S.E.)

Line	G	N	% Fertility	% Hatchability	% Hatchability from Fertile eggs
Selected	G ₀	32	87.92 ± 3.732	67.00 ± 3.941	75.48 ± 3.498
	G ₁	32	83.16 ± 3.023	63.31 ± 4.600	75.40 ± 4.321
	G ₂	31	90.73 ± 2.142	69.40 ± 3.363	76.97 ± 3.470
	G ₃	32	87.55 ± 4.854	70.52 ± 5.965	81.55 ± 5.230
	T	127	87.31 ± 1.793	67.54 ± 2.280	77.28 ± 2.070
Control	G ₀	32	81.83 ± 5.712	60.16 ± 5.277	72.83 ± 3.547
	G ₁	33	86.94 ± 3.354	72.86 ± 3.761	81.54 ± 3.205
	G ₂	33	92.59 ± 2.073	76.07 ± 3.064	81.85 ± 2.686
	G ₃	32	82.55 ± 5.567	71.66 ± 6.120	86.16 ± 4.585
	T	130	86.04 ± 2.210	70.25 ± 2.371	80.77 ± 1.791

The results of this study indicated that selection for high body weight at four weeks of age resulted in correlated changes in meat production and studied reproductive traits. If aim of selection is to increase body weight, it must be investigated for various production traits connected with it. Because, any change in body weight should be directly reflected in other correlated traits in the quails. It was pointed out in the results that selection for HBW was caused less fertility %, hatchability % and hatchability from fertile eggs %, but not significantly.

Table (2): Analysis of variance of some reproductive traits according to generation effect by line and according to line effect by generation.

Analysis of variance between generations by line for studied traits						
Line	S.O.V	M.S. of traits				
		d.f.	% Fertility	% Hatchability	d.f.	% Hatchability from Fertile eggs
A	Bet. Gen.	3	490.648 ^{NS}	375.088 ^{NS}	3	477.601 ^{NS}
	Error	123	340.832	436.183	121	401.405
C	Bet. Gen.	3	892.536 ^{NS}	1198.305 ^{NS}	3	55849385.077 ^{NS}
	Error	126	513	466.096	120	81500344.25
Analysis of variance between lines by generation for studied traits						
G	S.O.V	M.S. of traits				
		d.f.	% Fertility	% Hatchability	d.f.	% Hatchability from Fertile eggs
0	Bet. Lines	1	1334.412 ^{NS}	423.495 ^{NS}	1	88631502.807 ^{NS}
	Error	62	600.911	413.456	58	77485659.68
1	Bet. Lines	1	321.391 ^{NS}	541.559 ^{NS}	1	81527328.183 ^{NS}
	Error	63	247.646	296.606	63	83902752.9
2	Bet. Lines	1	58.036 ^{NS}	278.336 ^{NS}	1	154.850 ^{NS}
	Error	62	167.007	187.628	62	202.745
3	Bet. Lines	1	247.150 ^{NS}	105.293 ^{NS}	1	496.490 ^{NS}
	Error	62	699.156	910.084	58	614.062
Total	Bet. Lines	1	167.302 ^{NS}	226.555 ^{NS}	1	82117968.664 ^{NS}
	Error	255	434.156	459.211	247	40273844

S.O.V. = source of variance

^{NS} = not significant differences

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Это научный эксперимент был проведен в птицефабрике «Жол-Аяк», Алмата, Казахстан. Опыт продолжался в течение четырех поколений (G_0 , G_1 , G_2 и G_3) в 2009-2010 гг. Целью эксперимента являлось изучение влияния селекции по высокой массе тела (НВW) на некоторых репродуктивных признаков (оплодотворенность %, выводимость% и выводимость из оплодотворенных яиц %). Результаты показали, что: отбор по НВW была усовершенствована веса тела в селекционной линии (А) по сравнению с контрольной линии (С). Значительные различия ($P \leq 0,05$) наблюдается между линиями. С другой стороны, оплодотворенность %, выводимость % и выводимость из оплодотворенных яиц %, в отобранной линии были ниже, чем контрольная линия, но никаких существенных различий не наблюдалось между линиями в эти признаки. Эти результаты показывают, что, живая масса в японских перепелов может быть увеличена без снижения оплодотворенность %, выводимость % и выводимость из оплодотворенных яиц %, так что это является хорошим источником животного белка на поставку питания в развивающихся стран.

Эксперименттік жұмыс «Жол-Аяк» құс фабрикасында 2009-2010 жылдары 4-ұрпаққа дейін (G_0 , G_1 , G_2 және G_3) жүргізілді.

Жұмыстың негізгі мақсаты – жоғары тірілей салмақ алу үшін селекцияның тигізген әсерін, шағылысу, инкубатордан шығу пайыздары және шағылысқан жұмыртқадан балапан шығу пайызы бойынша анықтадық. НВW белгісі бойынша іріктеу жүргізе отырып, дене салмағы (А) селекциялық іздерінің (С) селекциялық іздерінен артықшылығын анықтадық.

Жапондық бөденелердің тірілей салмағын шағылыстыру, шығу және шағылысқан жұмыртқаның пайыздық көрсеткіштерін төмендетпей отырып, арттыруға болатындығы дәлелденді. Бөдене еті енді дамып келе жатқан елдер үшін жануарлар белогының көзі болып табылады.

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ЖЕРГІЛІКТІ ҚАЗАҚ ЖЫЛҚЫСЫН ЖАҚСARTУДЫҢ ГЕНЕТИКАЛЫҚ НЕГІЗДЕРІ

BASIS OF GENETIC IMPROVEMENT OF LOCAL BREEDS KAZAKH HORSES

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Мұғалжар тұқымы жергілікті қазақ жылқысын таза тұқым өсіру әдісімен жетілдіре отырып, іріктеу мен жұптау жұмыстарын тиянақты жүргізу арқылы шығарылды. (Қазақстан Республикасы ауылшаруашылық министрлігінің 1998 жылғы 30 желтоқсандағы №156 бұйрығымен). Тұқымды шығару әдістемелері ұрпақтардың шаруашылыққа пайдалы қасиеттері мен биологиялық ерекшеліктерінің зерттелуіне қарай белгіленіп қолданылды. Мал шаруашылығының тиімділігін дамыту жылқы шаруашылығында да ет және сүт өнімін алу бағытындағы жаңа жылқы тұқымын шығаруға ықпалын тигізді. Соған сәйкес, асылдандыру жұмыстарының әдістерін жақсарту және олардың тиімді жолдарын пайдалану қажет болды. Іріктеу жұмыстарында еске алынатын белгілердің тұқымқуалаушылығын келешекте зерттелуі, оның ішінде шаруашылыққа пайдалы қасиеттердің тұқым қуалаушының әртүрлігіне байланысты себептері - асылдандыру жұмыстарын жетілдіру негіздерінің бірі болып табылады. Қасиеттердің тұқым қуалаушылығы мен олардың қатынасты