

YERYONG`OQ (*Arachis hupogaea* L.) NAV VA NAMUNALARINING MOYDORLIK KO`RSATKICHI HAMDA SELEKSION-GENETIK IZLANISHLARDA FOYDALANISHNING AHAMIYATI

H.M.Hasanov, H.T.Dadaxo`jaye, M.B.Rasulov¹, M.B.Rasulov², M.Olimov,
L.R.Allanazarova

O`simliklar genetik resurslari ilmiy tadqiqot instituti, O`GRITI
Moyli va tolali ekinlar ilmiy tajriba stansiyasi

ANNOTATSIYA

Ushbu maqolada O`simliklar genetik resurslari ilmiy tadqiqot instituti Milliy genbankida saqlanayotgan dunyoning turli mintaqalaridan keltirilgan Yeryong`oq (*Arachis hupogaea* L.) ning nav va namunalari urug`larining moydorlik ko`rsatkichini o`rganish bo`yicha tadqiqot natijalari keltirilgan. St.Toshkent-112 navining belgi ko`rsatkichidan yuqori bo`lgan natijalar jami 13 ta namunada kuzatilgan bo`lib, +1,4% dan +16% gacha yuqori ekanligi aniqlandi. Bular orasida eng diqqatga sazovor K-1316 (+16,0%), K-571 (+14,4%), K-1240 (+12,4%) hamda K-233 (+13,1%) namunalari bo`lib, kelgusida yuqori moy miqdoriga ega yangi navlarni yaratishda boshlang`ich genetik-seleksion izlanishlarga tavsiya etiladi.

Kalit so`zlar: yeryong`oq, vitaminlar, oziq-ovqat sanoati, o`simlik, seleksiya, genetika.

ABSTRACT

This article cites peanuts (*Arachis hupogaea* L.) from different regions of the world, which is stored in the National Genebank of the Scientific Research Institute of Plant Genetic Resources. The results of studies on the oil content of seeds of varieties and samples are presented. The results exceeding the mark of the Tashkent-112 variety were observed in a total of 13 samples, and It was found that they were higher from +1.4% to +16%. Among them, the most notable are samples K-1316 (+16.0%), K-571 (+14.4%), K-1240 (+12.4%) and K-233 (+13.1%), which are recommended for primary genetic breeding studies when creating new varieties with a high fat content in the future.

Keywords: peanuts, vitamins, food industry, plant, breeding, genetics.

KIRISH

Yeryong`oq (*Arachis hupogaea* L.) - ozuqaviylik qiymatining ustun va iste`mol qilinishing turli xil shakllarida bo`lganligi tufayli boshqa moyli ekinlar orasida o`ziga xos o`ringa



ega. U inson iste'mol qilish jarayonida to'yimli energiya hamda oqsilga bo'lgan talabini qondirishda foydalanish mumkin bo'lgan ozuqa moddalarga boy asosiy o'simliklardan biridir. Hozirda, yeryong'oq juda ko'p mamlakatlarda jumladan: keng miqyosda Hindiston, Xitoy, AQSH, Senegal, Indoneziya, Nigeriya, Birma, Braziliya va Argentina mamlakatlarida yetishtirilsa, Gana, Mali, Samali, Sudan, Tailand, Vetnam, Afrika, Uganda va Mozambikda ushbu ekinning yetishtirish maydonlari jadal sur'atlar bilan ortib bormoqda. Yeryong'oq yetishtiriladigan maydonning 97 foizi, yalpi hosilning 94 foizi rivojlanayotgan mamlakatlar ulushiga to'g'ri keladi. O'zbekistonda so'nggi yillarda 5,5-6,0 ming gektar yerga ekib kelinmoqda, ilg'or innovatsion texnologiyalar qo'llanilganda 20-40 s/ga va undan ham yuqori hosil yetishtirilmoqda.

ADABIYOTLAR TAHLILI VA METODOLOGIYA

“O'simliklar bioximiyasi laboratoriyasi va Moyli va tolali ekinlar ilmiy tajriba stansiyasi bilan hamkorlikda” moydorlik tahlillarini o'tkazish maqsadida 2023 hosil yilidan **Yeryong'oq** (*Arachis hupogaea L.*) ning jami 58 ta namunalari jalb etildi.

Olib borilgan laboratoriya tahlil natijalariga ko'ra, *Arachis hupogaea L.* namunalarining moydorlik ko'rsatkichi 33,4%-63,2% oralig'ida ekanligi ma'lum bo'ldi. Buga ko'ra, ushbu ko'rsatkich bo'yicha eng yuqori natija **K-1316** namunasida aniqlanib, mos ravishda **63,2%** ga teng ekanligi aniqlandi. Eng yuqori ko'rsatkichga yaqin natijalar K-233, K-187, K-194, K-571, K-355, K-1225 hamda K-1240 namunalarida qayd etilib, tegishli 60,3%; 52,8%; 61,6%; 58,4%; 52,4% hamda 59,6% teng ekanligini jadval malumotlaridan ko'rishimiz mumkin(1-jadval)

1-jadval

Yeryong'oq (*Arachis hupogaea L.*) 2023 yil hosili namunalarining moydorlik miqdori, %.

№	Namuna nomi	Moydorligi,%			O'rtacha,%	V%	Farqi, ±
		I	II	III			
1	K-1315	48,3	47,1	46,3	47,2±1,4	0,82	
2	K-1043	41,0	36,2	39,0	38,7±1,0	1,97	
3	K-1330	45,6	40,3	43,6	43,2±1,2	2,19	
4	K-164	41,2	36,2	39,2	38,9±1,0	2,05	
5	K-198	47,1	42,2	45,1	44,8±1,1	2,01	
6	K-1541	39,0	36,9	37,0	37,6±1,6	0,97	
7	K-233	62,5	58,0	60,5	60,3±1,2	1,84	13,1

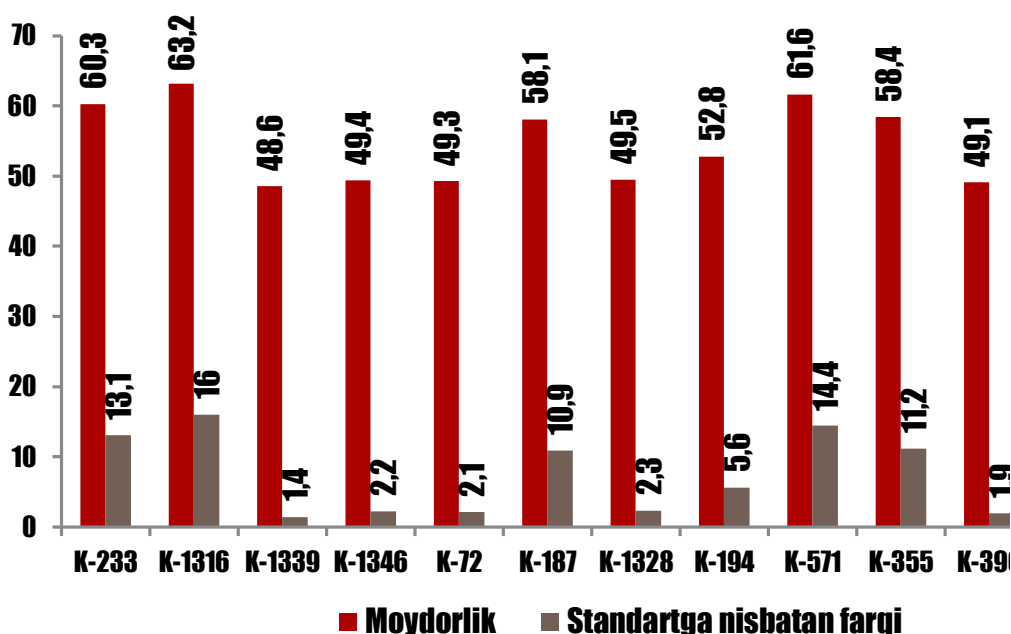
8	K-1316	66,0	59,6	64,0	63,2±1,0	2,67	16,0
9	K-172	37,3	32,7	35,3	35,1±1,6	1,88	
10	K-246	38,8	33,6	36,8	36,4±1,5	2,14	
11	K-691	51,0	45,8	49,0	48,6±1,2	2,14	1,4
12	K-1339	52,2	45,9	50,2	49,4±1,1	2,63	2,2
13	K-1346	42,6	38,1	40,6	40,4±1,0	1,84	
14	K-404	41,8	36,2	39,8	39,3±1,6	2,32	
15	K-1258	37,8	35,0	35,8	36,2±1,4	1,18	
16	K-1184	35,6	31,6	33,6	33,6±1,2	1,63	
17	K-72	51,0	48,0	49,0	49,3±1,1	1,25	2,1
18	K-187	60,3	55,7	58,3	58,1±1,0	1,88	10,9
19	K-351	35,6	30,9	33,6	33,4±1,0	1,93	
20	K-175	44,5	41,1	42,5	42,7±1,6	1,40	
21	K-185	47,6	43,6	45,6	45,6±1,8	1,63	
22	K-1427	45,3	39,6	43,3	42,7±1,4	2,36	
23	K-1256	39,5	36,3	37,5	37,8±1,2	1,32	
24	K-1328	52,4	45,6	50,4	49,5±1,3	2,85	2,3
25	K-722	48,2	41,2	46,2	45,2±1,5	2,94	
26	K-195	42,1	37,0	40,1	39,7±1,0	2,10	
27	K-129	46,5	39,2	44,5	43,4±1,6	3,08	
28	K-218	39,2	36,1	37,2	37,5±1,5	1,28	
29	K-194	55,3	49,8	53,3	52,8±1,1	2,27	5,6
30	K-571	63,2	60,3	61,2	61,6±1,3	1,21	14,4
31	K-355	61,0	55,2	59,0	58,4±1,2	2,41	11,2
32	K-1115	44,9	40,0	42,9	42,6±1,5	2,01	
33	K-467	46,5	38,5	44,5	43,2±1,4	3,40	
34	K-818	47,2	39,9	45,2	44,1±1,6	3,08	
35	K-911	41,6	37,6	40,0	39,7±1,0	1,64	
36	K-1232	39,8	35,8	38,2	37,9±1,6	1,64	
37	K-160	38,1	34,1	39,1	37,1±1,6	2,16	
38	K-396	51,6	47,6	48,2	49,1±1,5	1,76	1,9
39	K-1225	53,0	56,0	48,2	52,4±1,8	3,21	5,2
40	K-1335	38,2	32,0	35,5	35,2±1,6	2,54	
41	K-1268	48,0	44,0	41,2	44,4±1,0	2,79	
42	K-1240	61,3	57,3	60,3	59,6±1,6	1,70	12,4
43	K-403	44,1	40,1	43,8	42,7±1,2	1,82	
44	K-1538	38,6	34,6	37,0	36,7±1,0	1,64	
45	K-272	37,9	33,9	36,4	36,1±1,6	1,65	
46	K-159	42,7	38,7	41,2	40,9±1,5	1,65	

47	K-3	41,0	37,0	40,0	39,3±1,4	1,70	
48	K-1238	44,2	40,2	41,9	42,1±1,6	1,64	
49	K-1544	39,2	35,2	38,0	37,5±1,6	1,68	
50	K-1172	45,7	41,7	44,6	44,0±1,3	1,69	
51	K-339	38,0	34,0	38,2	36,7±1,2	1,93	
52	K-1227	37,2	33,2	35,2	35,2±1,2	1,63	
53	K-287	39,9	35,9	38,9	38,2±1,0	1,70	
54	K-1329	38,3	34,3	37,2	36,6±1,8	1,69	
55	K-173	41,0	37,0	39,0	39,0±1,7	1,63	
56	K-556	48,2	44,2	45,6	46,0±1,5	1,66	-1,2
57	K-1293	47,2	43,2	48,1	46,2±1,2	2,13	-1,0
58	St. Toshkent-112						

Shuningdek, ushbu belgi ko'rsatkich bo'yicha eng past natija K-351 namunasida kuzatilib, 33,4%, unga yaqin natijalarni esa mos ravishda K-172 (35,1%), K-246 (36,4), K-1258 (36,2%), K-1184(33,6%) kabi namunalarda ko'rishimiz mumkin.

Shunga qaramasdan namunalar orasida etiborga molik, sezilarli natijalar qayd etilgan namunalar ham aniqlanib, ularning moydorligi 43,2% dan 49,4% gacha ekanligi aniqlandi.

St.Toshkent-112 navining belgi ko'rsatkichidan yuqori bo'lgan natijalar jami 13 ta namunada kuzatilgan bo'lib, +1,4% dan +16% gacha yuqori ekanligi aniqlandi. Bular orasida eng diqqatga sazovor K-1316 (+16,0%), K-571 (+14,4%), K-1240 (+12,4%) hamda K-233 (+13,1%) namunalari bo'lib, kelgusida yuqori moy miqdoriga ega yangi navlarni yaratishda boshlang'ich genetik-seleksion izlanishlarga tavsiya etiladi (1-rasm).



1-rasm. Yuqori moydorlikka ega yeryong'oq (*Arachis hypogaea* L.) namunalari, %.**XULOSA**

Umuman olganda, tahlil natijalaridan ko'rinib turibdiki, jahon genofondida saqlanayotgan *Arachis hypogaea* L. namunalari orasida kelajakda oziq-ovqat havfsizligini taminlashda yuqori hosilli va sifat ko'rsatkichlariga ega navlar yaratishda seleksion-genetik izlanishlarda foydalanish mumkin ekanligi aniqlandi.

REFERENCES

- 1.Amanova M., Rustamov A., Atanazarova L., Xudayqulov J. Yeryong'oq ekinini yetishtirish agrotexnikasi bo'yicha tavsiyanomal. -Toshkent: NISIM Ch.K., 2016.
2. El-Beltagi, H.S., et al. (2011). Environmental effects on oil composition in flax. *African Journal of Biotechnology*.
3. Zubr, J. (1997). Oil content in European flax varieties. *Industrial Crops and Products*.
- 4.Diederichsen, A., & Fu, Y.B. (2008). Global flax germplasm collection diversity. *Genetic Resources and Crop Evolution*.
- 5.Shinde BM, Limaye AS, Deore GB, Laware SL Physiological responses of groundnut (*Arachis hypogaea* L.) varieties to drought stress. *Asian J Exp Biol* (2010) *Sci SPL*: 65-68.
- 6.Arya S.S., Salve A.R., Chauhan S. Peanuts as functional food: a review.// *Journal Food Sci Technol*. 53, 2016. P. 31-41.
- 7.<https://www.thespruce.com/peanut-plant-profile-4797389>.
- 8.<https://www.agro.uz/ru/yer-yong-oq/#1635091535272-193d7865-e69a>