SJIF Impact Factor 2021: 8.013| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 6 | Issue: 11 | November 2021 - Peer Reviewed Journal

CROSSBREEDING INTROGRESSIVE HYBRID FORMS WITH POLYPLOID SPECIES

G.Sh. Gulomov[1], B.A. Sirojiddinov[2]
[1,2]*Andijan state university*

ABSTRACT
This article presents the results of research on germination of bolls and seeds of F_0 hybrids formed by using experimental polyploid method of inter-species hybridization of polyploid species with introgressive hybrids. The studies highlighted the usefulness of the convergent hybrids obtained as a valuable source for the creation of unique forms, for future selection and genetic research.
KEYWORDS: *cotton, species, experimental polyploidy, germination of the boll, germination of full seeds in bolls.*

INTRODUCTION

Today, increasing genetic variability of valuable economic traits of cultural crops using primary sources that are genetically resistant to various stress factors, diseases and pests and using wild ancestors of agricultural crops is one of the pressing challenges in the world. The use of different genome species is particularly important for enriching the genotypes of cotton genes that combine unique characteristics, resistant to disease and pests, and adapt to different environments, using inter-species hybridization and experimental polyploidy techniques.

Results of researches of domestic and foreign scientists devoted to inter-species hybridization of tetraploid and diploid species of Gossypium L. family and to obtaining valuable sources of resistance to valuable economic and agricultural diseases (gommosis, fusarium wilt), pests using experimental polyploidy methods. applied [1, 5]. New rare hybrid forms have been obtained from genomic hybridization that combine their karyoplasm with fertility and the ability to withstand biotic and abiotic effects of the environment by Sirojidinov B.A., Rizaeva S.M., Abdullaev A.A [2].

Highly effective for the yield of seeds new recombinant forms of new artificial hybrid mycotoxins *Verticillium dahliae, Fusarium oxysporum f.sp.vasinfectum*, which are obtained based on experimental polyploidy were separated from micromycetes [4].

G.herbaceum L. and G.arboreum L. species have been used as donor species in introgressive breeding to improve the resistance of tetraploid species, especially to disease and insects [3].

Such introgressive hybrid forms as *G.hirsutum ssp. euhirsutum (AD1 genome)" Bukhara-6","Omad","Genofond-2 " sorts, G.mustelinumMiers ex Watt, [F5 Kelajak x (ssp. nanking (white fiber) x G.nelsonii)], [F5 Namangan 77 x (ssp. give me the stupid. indicum x G.australe)], {F4b1s Namangan 77 x [Namangan 77 x (ssp. give me the stupid. indicum x G.australe)]}, {F4b1s Namangan 77 x [Namangan 77 x (ssp. give me the stupid. indicum x G.australe)]}, {f4b1s kelajak x [Kelajak x (ssp. nanking (white fiber) x G.nelsonii)]}, {F4B1S [kelajak x (ssp. nanking (white fiber) x G.nelsonii)] X kelajak}* were used as the initial source in the research.

According to the results of hybridizing of G.hirsutum ssp. "Bukhara-6" samples with introgressive forms during the research work, Boll germination of 75,0-90,9% was observed while full seed germination was of 74,5-97,2% 7 was observed, (Table 1).

90,0-90,9 per cent boll germination was observed in the hybrid combination of Buxoro-6 x [F5 Kelajak x (ssp. nanking (white fiber) x G.nelsonii)], {f4b1s Kelajak x [Kelajak x (ssp. nanking (white fiber) x G.nelsonii)]}.

SJIF Impact Factor 2021: 8.013| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 6 | Issue: 11 | November 2021 - Peer Reviewed Journal

Table 1
Degree of seed and boll germination in inter-species F0 hybrids of introgressive hybridizing forms with samples of polyploid species

Inter-species hybrid combinations	Quantity of cross breedings, pcs	Qyantity of germinate Hybrid bolls, psc	Germination of hybrid bolls,%	Quantity of germinated seeds, pieces		germination of full seeds in hybrid bolls of F_0 generation,per cnet			
				Full	empty	$\bar{X} \pm S\bar{X}$	M±m	S	V%
1	2	3	4	5	6	7	8	9	10
[F_5Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)] xBukhara-6	14	11	78,6	338	34	79,3±14,1	71,3-84,5	30,5	44,6
Bukhara -6x [F_5 Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)]	11	10	90,9	271	32	80,1±3,65	63,6-90,6	11,5	14,4
[F_5Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)] x Bukhara-6	10	8	80,0	260	27	84,6±4,91	63,6-97,6	15,5	18,3
Bukhara-6x [F_5Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)]	9	8	89,0	237	22	77,2±1,56	70,3-85,6	7,7	10,0
{F_4B_1C Namangan 77 x [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)]} xBukhara-6	15	12	80,0	386	38	83,6±3,23	66,7-97,0	10,2	12,2
Bukhara-6x{F_4B_1C Namangan 77 x [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)]}	11	9	82,0	278	25	97,2±2,06	82,2-97,2	2,7	7,3
{F_4B_1C [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)] x Namangan 77} xBukhara-6	12	9	75,0	283	29	82,7 ±2,18	74,2-90,9	6,8	8,3
Bukhara 6x {F_4B_1C [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)] x Namangan 77}	13	11	84,6	338	43	88,1±0,37	86,4-88,9	1,2	1,3
{F_4B_1C Kelajak x [Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)]} x Bukhara-6	10	9	90,0	273	26	74,5±5,47	62,5-94,3	17,3	23,1
Bukhara -6x{F_4B_1C Kelajak x [Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)]}	12	9	75,0	281	29	83,5± 3,00	73,8-94,4	7,94	9,5

SJIF Impact Factor 2021: 8.013| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 6 | Issue: 11 | November 2021 - Peer Reviewed Journal

{F_4B_1C [Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)] x Kelajak }x Bukhara-6	9	8	89,0	234	23	75,6±3,19	70,4-85,7	7,8	10,0
Bukhara-6 x{F_4B_1C [Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)] x Kelajak }	14	11	78,6	318	24	92,9±1,45	86,2-97,5	4,6	4,8
[Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)] xOmad	12	10	83,3	285	29	94,2±2,25	81,8-95	6,5	7,1
Omadx [F_5 Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)]	8	7	87,5	208	35	82,8±2,52	59,2-77,4	5,6	8,9
[F_5Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)] x Omad	11	9	82,0	269	33	78,7±2,45	69,2-87,5	7,7	9,8
Omadx [F_5Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)]	10	9	90,0	270	32	94,7±2,8	77,9-94,7	7,6	8,7
{F_4B_1C Namangan 77 x [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)]} xOmad	14	11	78,6	325	28	88,2±1,57	82,9-92,8	4,9	5,6
Omadx{F_4B_1C Namangan 77 x [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)]}	11	9	82,0	274	28	81,5±3,09	67,7-88,9	7,2	12
{F_4B_1C [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)] x Namangan 77} xOmad	10	8	80,0	269	26	91,4±2,54	74,4-91,7	6,8	8,0
Omadx {F_4B_1C [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)] x Namangan 77}	10	9	90,0	271	25	89,8±2,42	81,8-95	6,4	7,0
{F_4B_1C Kelajak x [Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)] x Namangan 77} x Omad	13	10	77,0	279	39	80,7±2,97	66,7-93,7	9,4	11,6

SJIF Impact Factor 2021: 8.013| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 6 | Issue: 11 | November 2021 - Peer Reviewed Journal

Omad x{F_4B_1C Kelajak x [Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)] x Namangan 77}	12	10	83,3	293	22	91,3 ±0,72	89,2-93,7	2,26	2,5
{F_4B_1C Kelajak x [Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)]} x Omad	9	8	89,0	238	35	75,5±3,18	70,4-85,5	7,2	9,6
{F_4B_1C [Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)] x Kelajak }x Omad	10	9	90,0	269	25	62,1±7,31	62,5-94,1	17,3	23,1
[F_5 Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)] xGenofond-2	12	10	83,3	292	25	88,1±5,9	56,2-90,9	13,8	18,5
Genofond-2x [F_5 Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)]	11	9	82,0	279	29	67,7±3,79	67,7-88,9	9,9	12,3
[F_5Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)] xGenofond-2	9	8	89,0	237	23	75,6±3,19	70,4-85,7	7,8	10,0
Genofond-2xF_5Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)]	13	11	84,6	336	30	87,6±2,97	71,2-89,8	6,4	12
{F_4B_1C Namangan 77 x [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)]}x Genofond-2	10	8	80,0	260	27	84,6±4,91	63,6-97,6	15,5	18,3
Genofond-2x{F_4B_1C Namangan 77 x [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)]}	14	11	78,6	323	25	80,0±2,1	80,0-93,5	5,7	6,7
{F_4B_1C [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)] x Namangan 77} xGenofond-2	11	10	90,9	271	32	80,1±3,65	63,6-90,6	11,5	14,4
Genofond-2x{F_4B_1C [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)] x Namangan 77}	13	10	77,0	318	38	73,6±0,32	71,8-75,7	1,0	1,4

SJIF Impact Factor 2021: 8.013| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 6 | Issue: 11 | November 2021 - Peer Reviewed Journal

{F_4B_1C Kelajak x [Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)]} xGenofond-2	12	10	83,3	286	29	86,0±2,30	77,8-96,7	7,3	8,5
Genofond-2x{F_4B_1C Kelajak x [Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)]}	11	9	82,0	277	26	89,7±2,42	73,2-97,0	7,6	8,5
{F_4B_1C [Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)] x Kelajak } xGenofond-2	12	10	83,3	288	27	90,7±2,0	81,3-95	6,4	7,0
Genofond-2x{F_4B_1C [Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)] x Kelajak }	13	11	84,6	338	40	84,5±4,81	69,7-89,2	7,1	4,5
[Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)] x*G.mustelinum*	15	12	80,0	386	38	83,6±3,23	66,7-97,0	10,2	12,2
*G.mustelinum*x[F_5 Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)]	12	9	75,0	285	30	83,2±2,27	76,3-90,6	7,2	8,6
[F_5 Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)] x *G.mustelinum*	10	9	90,0	271	32	87,2±2,4	77,8-94,7	7,6	8,7
{F_4B_1C Namangan 77 x [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)]}x *G.mustelinum*	12	9	75,0	283	29	82,7 ±2,18	74,2-90,9	6,8	8,3
*G.mustelinum*x{F_4B_1C Namangan 77 x [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)]}	10	9	90,0	273	26	74,5±5,47	62,5-94,3	17,3	13,1
G.mustelinum x [F_5 Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)]	11	9	82,0	274	28	89,6±2,79	72,7-87,9	8,8	7,6
*G.mustelinum*x{F_4B_1C [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)]}	9	8	89,0	237	23	75,6±3,19	70,4-85,7	7,8	10,0

SJIF Impact Factor 2021: 8.013| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 6 | Issue: 11 | November 2021 - Peer Reviewed Journal

{F_4B_1C Kelajak x [Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)]} x*G.mustelinum*	9	8	89,0	238	35	75,5±3,18	70,4-85,4	7,2	9,5
*G.mustelinum*x{F_4B_1C Kelajak x [Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)]}	12	10	83,3	286	29	86,0±2,30	77,8-96,7	7,3	8,6
{F_4B_1C [Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)] x Kelajak } x*G.mustelinum*	11	9	82,0	277	26	89,7±2,42	73,2-97,0	7,6	8,4
*G.mustelinum*x{F_4B_1C [Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)] x Kelajak Kelajak }	13	11	84,6	335	39	89,8±13,1	69,7-100,0	3,5	14,8

SJIF Impact Factor 2021: 8.013| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 6 | Issue: 11 | November 2021 - Peer Reviewed Journal

80.1-82.7 per cent of full seeds germination was observed were at %, with a high variation factor comprised 11.5-17,3%. Relatively low boll germination was observed in hybrid combination of *F5K future x (ssp. Nanking (white fiber) x G.nelsonii)] xBukhara-6, {F4B1S [Namangan 77 x (ssp. Obtusifolium var. Indicum x G.australe)] x Namangan 77} xBukhara-6, Bukhara-6x {F4B1S Future x [Future x (ssp. Nanking (white fiber) x G.nelsonii)]}, Bukhara-6 x {F4B1S [Future x (white fiber) x G.nelsonii)] x Future} F0* the (75.0- 78.6%). In F_0 hybrid combination of *Bukhara-6x {F4B1S Namangan 77 x [Namangan 77 x (ssp. Obtusifolium var. Indicum x G.australe)]}* boll germination of 82.0 per cent and higher full seeds germination (97.2%)) level was observed. In F_0 hybrid combination of *[F_5 Namangan 77 x (ssp. obtusifolium var. indicum x G.australe)] x Bukhara-6, Bukhara-6x [F_5 Namangan 77 x (ssp. obtusifolium var. indicum x G.australe)], {F_4B_1C Namangan 77 x [Namangan 77 x (ssp. obtusifolium var. indicum x G.australe)]} xBukhara-6, Bukhara-6x {F_4B_1C [Namangan 77 x (ssp. obtusifolium var. indicum x G.australe)] x Namangan 77}, {F_4B_1C [Kelajak x(ssp. nanking (white fiber) x G.nelsonii)] x Kelajak}xBukhara-6 80,0-89,0* per cent boll germination was observed. Germination of full seeds in bolls comprised 75,6-88,1 per cent.

According to the results of hybridizing *G.hirsutumssp. euhirsutum "Omad"* varieties with introgressive hybrids, germinatiion of boll was observed at 77.0-90.0 per cent, and germination of full seeds was observed at 62.1-94.7 percent.

In F_0 hybrid combinations of *Omadx [F_5 Namangan 77 x (ssp. obtusifolium var. indicum x G.australe)] Omadx {F_4B_1C [Namangan 77 x (ssp. obtusifolium var. indicum x G.australe)] x Namangan 77}* higher germination of boll was observed. Germination of full seeds in the boll was high (90,0 percent) and in some cases 89,8-94,7 per cent. In F_0 hybrid combinations of *{F_4B_1C [Kelajak x(ssp. nanking (white fiber) x G.nelsonii)] x Kelajak}x Omad. In the hybrid combination of {F_4B_1C Kelajak x [Kelajak x(ssp. nanking(white fiber) x G.nelsonii)]} x Omad* F_0 germination of boll comprised 89,0-90,0 percent. 62,1-75,5 percent germination of full seeds in the boll was observed.

In hybrid F_0 combinations of *[F_5 Namangan 77 x (ssp. obtusifolium var. indicum x G.australe)] x Omad, Omadx {F_4B_1C Namangan 77 x [Namangan 77 x (ssp. obtusifolium var. indicum x G.australe)]}, Omad x{F_4B_1C Kelajak x [Kelajak x(ssp. nanking (white fiber) x G.nelsonii)] x Namangan 77}*, 78,7-82,8 per cent boll germination and 82,0-87,5 per cent full seeds germination were observed.

In F_0 hybrid combination *[F_5 Kelajak x(ssp. nanking (white fiber) x G.nelsonii)] xOmad, Omad x{F_4B_1C Kelajak x [Kelajak x(ssp. nanking (white fiber) x G.nelsonii)] x Namangan 77} 83,3* per cent of boll germination and 91,3-94,2 percent full seeds germination were observed.

In F_0 hybrid combination of{F_4B_1C Namangan 77 x [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)]} xOmad, {F_4B_1C [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)] x Namangan 77} 78,6-80,0 boll germination and 88,2-91,4 percent full seeds germination were observed.

In F_0 hybrid combination *{F_4B_1C Kelajak x [Kelajak x(ssp. nanking (white fiber) x G.nelsonii)] x Namangan 77} x Omad* 77,0 per cent boll germination and 80,7 percent full seeds germination were observed.

According to the results of hybridizing *of G.hirsutumssp. euhirsutum* "Genofond 2" samples with introgressive hybrids, germination of bolls was observed at 77.0-90.9 per cent, and full seeds at 67.7-90.7 per cent.

In F_0 hybrid combination *[F_5 Namangan 77 x (ssp. obtusifolium var. indicum x G.australe)] xGenofond-2, {F_4B_1C [Namangan 77 x (ssp. obtusifolium var. indicum x G.australe)] x Namangan 77} xGenofond-2, observed generation of bolls at 89,0-90,9 per cent and full seeds germination at 75,6-80,1 per cent were observed. In F_0 hybrid combination of Genofond-2x [F_5Kelajak x(ssp. nanking (white fiber) x G.nelsonii)]*, germination of bolls at 82,0 and germination of full seed at 67,7 per cent were observed).

In F_0 hybrid combination *[F_5Kelajak x(ssp. nanking (white fiber) x G.nelsonii)] xGenofond-2, Genofond-2 x F_5 Namangan 77 x (ssp. obtusifolium var. indicum x G.australe)], {F_4B_1C Namangan 77 x [Namangan 77 x (ssp. obtusifolium var. indicum x G.australe)]} x Genofond-2, {F_4B_1C Kelajak x [Kelajak x(ssp. nanking (white fiber) x G.nelsonii)]} xGenofond-2, Genofond-2x {F_4B_1C Kelajak x [Kelajak x(ssp. nanking (white fiber) x G.nelsonii)]}, {F_4B_1C [Kelajak x(ssp. nanking (white fiber) x G.nelsonii)] x Kelajak} xGenofond-2, Genofond-2x {F_4B_1C [Kelajak x(ssp. nanking (white fiber) x G.nelsonii)] x Kelajak}*, germination of boll was relatively low 82,0-84,6 per cent.

Genofond-2 x {F_4B_1C Namangan 77 x [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)]}, Genofond-2 x {F_4B_1C [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)] x Namangan 77} F_0 In hybrid combinations, observed the germination of boll 77,0-78,6%. It consist of full fertility seeds of boll were at 73,6-80,0%.

According to the results of hybridization of *G.mustelinum* varieties with introgressive hybrids, germination of boll was observed at 75.0-90.0percent, and full seeds at 67.7-89.8percent.

In F_0 hybrid combination *G.mustelinum* x {F_4B_1C [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)]}, {F_4B_1C Kelajak x [Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)]} x *G.mustelinum*, germination of boll at 89,0 per cent was

SJIF Impact Factor 2021: 8.013| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 6 | Issue: 11 | November 2021 - Peer Reviewed Journal

observed and germination of full seeds in bolls at 75,5-75,6 per cent (relatively low).

In F_0 hybrid combination *G.mustelinum* x [F_5 Kelajak x(*ssp. nanking* (white fiber) x *G.nelsonii*)], {F_4B_1C Namangan 77 x [Namangan 77 x (*ssp. obtusifolium var. indicum* x *G.australe*)]} x *G.mustelinum*, germination of full seeds was relatively low (75,0per cent). It consisted 82,7-83,2 per cent of full seeds germination.

In F_0 hybrid combination *[F_5Kelajak x(ssp. nanking (white fiber) x G.nelsonii)] x G.mustelinum,G.mustelinum x {F_4B_1C Kelajak x [Kelajak x(ssp. nanking (white fiber) x G.nelsonii)]}, {F_4B_1C [Kelajak x(ssp. nanking (white fiber) x G.nelsonii)] x Kelajak} x G.mustelinum, G.mustelinum x [F_5 Namangan 77 x (ssp. obtusifolium var. indicum x G.australe)], G.mustelinum x {F_4B_1C [Kelajak x(ssp. nanking (white fiber) x G.nelsonii)] x Kelajak}*, germination of boll at 80,0-84,6 per cent and germination of full seeds at 83,6-89,8 per cent was observed.

Thus, new artificial complex (convergent) forms obtained on the basis of hybridizing derived from inter-genomic hybridizing combine productivity and resistance to biotic and abiotic effects in their karyoplasm and can be used as valuable starting point for genetic-selection programs for the creation of new intensive varieties of cotton plant.

REFERENCES

1. *Abdullayev A.A. The Importance of Cotton Genofond // Bulletin of Agricultural Science of Uzbekistan. - Tashkent, 2003. - № 2 (12) - P. 52-56.*
2. *Sirojiddinov B.A., Rizayeva S.M., Abdullayev A. Morphobiological characterization of cotton plants hybrids of hexaploid (2n = 78) of different genomes // News NUU.- Tashkent, 2016.- № 3/2.- P. 80-85.*
3. *Ansingkar A.S., Khade P.P., Borikar S.T. and Bhosle S.S. Altering G. hirsutum cotton at cellular level to impart multiple sucking pest resistance through interspecific hybridization. // In: B.M.Khadi, I.S.Katageri, S.S.Patil, H.M. Vamadevaiah, B.R. Patil and S.M. Manjula (Eds), Proceedings of International symposium on "Strategies for Sustainable Cotton Production- AGlobal Vision" 1, Crop Improvement, University of Agricultural Sciences, Dharwad, Karnataka (India), 2004. - P. 101-103.*
4. *Sirojidinov B.A., Abdullayev A., Sherimbetov A.G., Narimanov A.A., Omonov B.A. (2018) Tolerance of new introgressive hybrid and backcross forms pathogenic micromitisms (Verticillium dahliae Kleb and Fusarium oxysporum f.sp. vasinfectum)// American Journal of Plant Sciences.9, 1308-1320*
5. *Yik Choi - Pheng, Birchfield Wray. Resistant germplasm in Gossypium L spesies and related plants to Rotylenchulus reniformis // «J. Nematol.»1984. - Vol. 16. - № 2. - P. 146-153.*