

"GIZA 95" A LONG STAPLE EGYPTIAN COTTON VARIETY FOR MIDDLE AND UPPER EGYPT

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Abstract

Giza95 is a new long staple Egyptian cotton variety. It has been introduced by the Cotton Breeding Research Section through artificial hybridization between the variety Giza80 and the genotype [(Giza83xGiza75) x5844] followed by the pedigree method of selection. The variety Giza 95 has 6.90% higher seed cotton yield (SCY) and 16.32% higher lint yield (LY) than the commercial variety Giza 90. It slightly surpassed Giza 90 for boll weight (BW) and lint percentage (L %). Fiber quality traits for the new variety Giza 95 was nearly in the same range of long staple cotton category of Middle Egypt.

INTRODUCTION

All the Egyptian cotton varieties are belonging to *G.barbadence.L*, The history of cotton growing in modern Egypt began in the reign of great Mohamed Aly; he brought some Indian seed to be sown in the country. Ashmouny variety is considered the origin of most Egyptian cotton varieties. Since its growing in 1860 until 1960 it was the father of modern Egyptian cottons which led to very famous varieties i.e Mit-Afifi (1882), Sakllardise (1904). In 1906 Sakel variety first appeared winning a high reputation over all the other Egyptian cotton varieties.

Cotton Research Board was established in 1919 (Cotton Research Institute). During that time, Sakel variety covered the cotton areas in Delta, While Ashmouni variety covered the area of southern region of Egypt. Therefore, it is evident that the two varieties, Sakel and Ashmouni are sources of great importance for most Egyptian cotton varieties which had been developed latter.

In 1921 the varietal hybridization was carried out between Ashmouni and Sakel varieties, the first hybrid were produced under the name of Giza12. Most of Egyptian commercial varieties were produced directly by hybridization except Dendera which was one of few varieties selected by using individual plant selection (Al-Didi 1972).

Egyptian cotton varieties have been introduced by Cotton Breeding Section such as Giza76 and Giza77 (El-Moghaze *et al.*, 1984), Giza81

(Megahed *et al.*, 1986), Giza86 (Hikal *et al.*, 1996), Giza88 and Giza90 (Awad *et al.* 2004).

MATERIAL AND METHODS

Breeding and developing cotton varieties in cotton breeding section are still fully depending on hybridization followed by the pedigree method as mentioned by Hays *et al.*, (1955).

Hybridization between the two parental Giza80 variety and [(Giza83xGiza75) x 5844] genotype had been carried out in 1999 season at Sids Experimental Station. The F1 hybrid seeds were sown in the second season. Beginning with the F2 till the F8 generations selection had been practiced at Sids Experimental Station. The selected families from F5 generation of the hybrid were evaluated through preliminary (A) and advanced comparative yield trial (B) in Sids Experimental Station and at different locations (El-Fayoum, El-Mania, Assiut and Sohage) governorates where long varieties are grown.

A randomized complete block design with six replications was used in each experiment with five rows in each plot; the row was four meters long 60cm a part and 20cm between hills, the hills were thinned to two plants. The yield was obtained from the three middle rows of plot while the first and fifth rows were used for picking 50 boll samples in order to estimate boll weight.

In the later generations progenies of the promising mother families, selected from the breeding field were grown in an isolated field to maintain the genetic purity of the selected strains of the new variety. The selected new strains and nuclei were included and tested in a comparative yield trial. Some economic characters were determined through the present study, such as seed cotton yield (SCY), lint cotton yield (LY), lint percentage (L%), boll weight (BW) (weight of 50 bolls in grams) and some fiber quality, i.e. Micronaire reading (Mic), Upper half mean length (U.H.M) and Yarn strength (Y.St). All fiber and yarn tests were conducted according to ASTM designation (1998).

The analysis of variance was calculating by using the method mentioned by Sendecor (1965) and Le.Clerg.*et al.*, (1962).

RESULTS AND DISSCUTION

In 1999 season, the hybridization had been carried out between the two parents Giza80 and the genotype [(Giza83xGiza45) x5844] at Giza Experimental Station, whereas the F1 hybrid seed was planted in the second season in the breeding field at Sids Experimental Station.

Table 1. Mean performance of yield components and fiber quality of maternal families of Giza 95 variety and commercial varieties (Giza 90 and Giza 80) from 2007 to 2011 seasons.

Season	Strain	Parent	Origin	Yield K/F		L%	BW (gm)	Mic	LUR %	UHM (m.m)	Y.St	Maturity
				SCY	LY							
2007	H ₆ 173/2005	H5 150/2004	[G83x(G75x5844)]xG80	11.69	14.37	39.0	124	4.2	85.1	29.1	1890	91
	H ₆ 175/2005	H5 151/2004		11.04	13.77	39.6	125	4.0	85.5	29.9	2025	91
	Giza90		G83xDandera	9.44	11.30	37.8	124	4.1	85.4	29.6	1955	91
	Giza 80		G66xG73	8.90	11.07	39.4	119	4.3	86.5	31.1	2215	93
2008	H ₇ 202/2006	H6 173/2005	[G83x(G75x5844)]xG80	12.16	15.06	39.4	151	4.3	85.2	29.6	2165	91
	H ₇ 204/2006	H6 173/2005		12.05	15.02	39.6	149	4.2	85.5	29.1	2100	90
	H ₇ 206/2006	H6 175/2005		12.43	15.88	40.6	147	4.0	86.2	29.9	2300	89
	Giza90		G83xDandera	10.69	12.96	38.5	149	4.1	86.0	29.3	2210	89
	Giza 80		G66xG73	9.43	11.56	39.4	150	4.2	85.5	30.5	2375	91
2009	Families Mixed		[G83x(G75x5844)]xG80	12.14	14.86	39.0	146	4.4	84.4	30.3	2310	93
	Giza90		G83xDandera	9.95	11.85	37.8	145	4.3	85.4	30.0	2255	93
	Giza 80		G66xG73	8.40	10.39	39.3	153	4.4	86.4	31.4	2415	92
2010	Families Mixed		[G83x(G75x5844)]xG80	10.3	12.82	39.6	142	4.2	83.7	29.4	2165	90
	Giza90		G83xDandera	8.99	10.98	38.8	145	4.1	84.2	29.2	2160	92
	Giza 80		G66xG73	7.88	9.78	39.6	147	4.2	85.4	30.9	2275	91
2011	Breeder		[G83x(G75x5844)]xG80	11.47	14.48	39.9	152	4.0	85.5	29.4	2120	90
	Giza90		G83xDandera	11.89	14.35	38.7	150	3.9	85.0	29.8	2285	89
	Giza 80		G66xG73	10.93	13.51	39.7	148	4.1	86.2	30.5	2285	91

Selection through pedigree method had been applied from F₂ generation to advanced generations in the breeding field. From F₅ generation, the selected promising strains were evaluated through trials A and B. The outcome results of the preliminary trial A and the advanced trial B for yield evaluation at Sids Research Station and different locations of Middle and Upper Egypt, indicated that the selected mother families F7 202/2006, F7 204/2006 and F7206 /2006 had excelled other cultivated varieties.

Table (1) indicated that the the selected families F7 202/2006, F7 204/2006 and F7 206/2006 have excelled the commercial varieties Giza90 and Giza80 in seed cotton yield (SCY) by 1.5 k/f and 2.9 k/f respectively. On the other hand mean of lint yield (LY) for the families selected are higher compared with Giza90 and Giza80 varieties by 2.36 k/f and 3.67 k/f respectively. Lint percentage (L %) and boll weight traits for these families were equal to or higher than the two parents Giza90 and Giza80. Fiber quality for these families fall within the range of long staple cotton characters.

Due to the results of the selected maternal families F7 202/2006, F7 204/2006 and F7206 /2006 obtained from the preliminary trial A and advanced trial B at Sids Experimental Station and different locations in Middle and Upper Egypt. These families had been isolated and selfed. Seeds propagation began in 2009 in isolated field at Sids Experimental Station. On the other hand, the bulk seeds of the isolated families were mixed and grown in Trial B, the results showed that the mixed families exceeded Giza90 and Giza80 in seed cotton yield (SCY) by 2.19 k/f and 3.74 k/f and in lint yield (LY) by 3.01 k/f and 4.47 k/f. On the other hand the fiber quality traits were in the same range of long staple cotton varieties (Table 1).

In 2008 season, 50 plants of the progeny lines were selected and cultivated at Sids Experimental Station in isolated field (distance 1.0 Km far from other cotton field in all directions in order to avoid cross pollination). Selfed seeds for every selected plant were grown as individual plants on wide spaces, in the same field. The natural seeds of every plant were also grown as bulk family. These plants represent the three mother families of Giza95.

In 2009 season forming 50 selfed nuclei/2009 and their natural seeds were propagated, twenty of these nuclei were selected according to yielding ability and fiber quality. Their natural seeds were used in yield trials to compare their yield with that of the previous foundation seed of the strain Giza95/2010.

A randomized complete block design with four replications was used in yield trial with five rows in each plot. The yield was obtained from the three Middle rows of each plot. Seven nuclei were selected according to the superiority of their yield and

fiber quality in yield trials (Table 2). The nuclei seeds were mixed to form in breeder seed of the strain Giza 95/2010 (breeder 1).

Table 2. comparison between the selected nuclei/2010 of Giza95 variety.

No	Strain	Yield K/F		L%	BW (gm)	Mic	LUR%	UHM (m.m)	Y.St
		SCY K/F	LY K/F						
1	Nuclei2/2010	6.64	8.39	40.11	138	3.4	81.4	30.8	36.0
2	Nuclei5/2010	7.02	8.85	40.03	132	3.3	82.2	30.5	33.0
3	Nuclei7/2010	7.31	9.17	39.87	132	3.6	81.0	30.8	35.3
4	Nuclei9/2010	7.27	9.22	40.27	148	3.3	83.0	30.4	34.8
5	Nuclei10/2010	6.76	8.41	39.48	134	3.2	83.4	30.5	34.7
6	Nuclei15/2010	7.30	9.31	40.51	145	3.3	83.4	30.5	35.0
7	Nuclei19/2010	7.01	9.25	41.90	138	3.4	84.0	30.0	36.6

In 2010 season, nineteen nuclei had been selected from 50 nuclei/2010 forming nuclei/2011 that was tested in a yield trial along with the previous foundation seed Giza95/2011 (breeder seed 2) (Table 3). Eight nuclei were selected and compared with the breeder seed 1 of the strain Giza95/2010 in 2011 season. The results of the nuclei selected showed that the seed cotton yield (SCY) ranged from 9.89 to 12.10 k/f, lint yield (LY) ranged from 12.45 to 15.14 k/f, lint percentage (L%) ranged from 39.3% to 40.9% and boll weight (BW) ranged from 150gm to 168gm for 50 bolls. On the other hand the fiber quality for these nuclei falls within the range of long staple cotton category (Table 3).

Table 3. comparison between the selected nuclei/2011 of Giza95 and breeder seed of the strain G.95/2010 in 2010 season.

No	Strain	Yield K/F		L%	BW (gm)	Mic	LUR%	UHM (m.m)	Y.St
		SCY K/F	LY K/F						
1	Nuclei2/2011	10.25	12.69	39.3	156	4.3	85.1	30.9	2025
2	Nuclei5/2011	10.60	13.33	39.9	167	4.1	83.9	30.5	2180
3	Nuclei7/2011	11.58	14.72	40.4	150	4.3	85.3	31.2	1985
4	Nuclei8/2011	11.05	13.74	39.5	163	4.1	85.6	31.3	2335
5	Nuclei12/2011	12.10	15.14	38.6	166	4.2	86.8	30.8	2345
6	Nuclei13/2011	10.40	13.05	39.9	162	4.3	85.8	30.8	2025
7	Nuclei15/2011	9.89	12.45	40.0	168	4.3	83.7	29.8	1990
8	Nuclei17/2011	11.32	14.56	40.9	153	4.1	84.5	30.0	1930
9	G95/2010	10.67	13.59	40.4	162	4.1	84.7	30.6	2060

In 2012 season eighteen nuclei of the variety Giza95 had been selected from 50 nucleoli/2011 forming nuclei/2012 (breeder seed 3) and tested in yield trial with breeder seed strains (Giza95/2010 and Giza95/2011) Table 4. The results showed that the yield traits i.e. seed cotton yield (SCY), lint yield (LY), lint percentage and boll weight (BW) were equal to or higher than means of

nuclei Giza95/2010 and Giza95/2011, on the other hand the nuclei 1/2012, 2/2012 and 8/2012 showed low seed cotton yield (SCY) and lint yield (LY) compared with the nuclei Giza95/2010 Giza95/2011 Table 4.

Table 4. comparison between the selected nuclei/2012 of Giza95 and breeder seeds of the strain G.95/2010 and G.95/2011 in 2012 season.

No	Strain	Yield K/F		L%	BW (gm)	Mic	LUR%	UHM (m.m)	Y.St
		SCY K/F	LY K/F						
1	Nuclei1/2012	8.78	10.91	39.4	138	4.6	82.4	30.7	2100
2	Nuclei2/2012	10.92	13.53	39.3	149	3.7	82.3	29.1	2450
3	Nuclei7/2012	10.58	12.90	38.8	148	4.2	81.1	29.3	2265
4	Nuclei9/2012	10.07	12.20	38.4	144	4.1	83.7	29.7	2210
5	Nuclei10/2012	11.95	14.70	39.0	147	4.1	82.3	29.1	2215
6	Nuclei12/2012	11.27	14.00	39.3	152	4.1	80.5	27.5	00
7	Nuclei13/2012	11.72	14.40	39.1	152	4.2	81.0	28.4	2120
8	Nuclei16/2012	9.69	12.00	39.4	153	4.1	82.8	29.1	2030
9	Nuclei18/2012	10.27	12.90	39.9	145	3.9	82.8	29.6	2270
10	G95/2010	10.61	13.20	39.4	158	4.2	82.9	29.6	2080
11	G95/2011	10.93	13.60	39.7	146	4.5	82.2	29.5	2090

In 2013 season seventeen nuclei selected from fifty selfed nucleoli/2012 were grown in isolated field compared with the three breeder seed (Giza95/2010, Giza95/2011 and Giza95/2012) in yield trial, nine nuclei/2013 had been selected and their seeds were mixed to form the breeder seed of strain Giza95/2013 (breeder 4) Table 5.

Table 5. comparison between the selected nuclei/2013 of Giza95 with breeder seeds of the strains G.95/2010, G.95/2011 and G.95/2012 in 2013 season.

No	Strain	Yield K/F		L%	BW (gm)	Mic	LUR%	UHM (m.m)	Y.St
		SCY K/F	LY K/F						
1	Nuclei1/2013	9.49	12.36	41.3	166	4.3	83.4	30.7	2455
2	Nuclei2/2013	9.57	11.93	39.6	171	4.3	84.8	30.0	2430
3	Nuclei7/2013	10.97	14.03	40.6	154	4.5	84.2	30.3	2315
4	Nuclei9/2013	10.34	13.59	41.7	171	---	---	---	---
5	Nuclei10/2013	9.02	12.2	43.0	152	4.4	84.0	29.4	2270
6	Nuclei12/2013	8.93	11.3	41.9	158	4.5	86.3	31.9	2540
7	Nuclei13/2013	9.07	12.1	42.5	172	4.4	84.2	29.4	2415
8	Nuclei16/2013	8.98	11.9	42.1	168	4.0	84.1	30.7	2460
9	Nuclei18/2013	8.68	11.6	42.4	156	4.4	86.0	31.6	2370
10	G95/2012	10.72	14.1	41.7	171	4.3	84.1	29.7	2200
11	G95/2011	10.00	13.1	41.5	164	4.5	85.0	29.7	2490
12	G95/2010	9.35	12.3	41.9	165	4.2	85.0	28.8	2215

In 2014 season there were 18 nuclei of the variety Giza95 that had been cultivated in a yield trial to compare them with the previous breeder seed (breeder seed 3 and breeder seed 4). From results of the yield trial eight, nuclei were selected as shown in Table (6) to form the breeder seed of strain Giza95/2014 (breeder 5).

Table 6. comparison between the selected nuclei/2014 of Giza95 with breeder seeds of the strains G.95/2012 and G.95/2013 in 2014 season.

No	Strain	Yield K/F		L%	BW (gm)	Mic	LUR%	UHM (m.m)	Y.St
		SCY K/F	LY K/F						
1	Nuclei1/2014	9.15	11.90	41.3	163	4.1	84.1	30.7	2235
2	Nuclei1/2014	8.64	11.14	40.9	148	4.1	83.6	30.0	2195
3	Nuclei1/2014	9.36	12.10	41.0	148	4.0	84.5	30.9	2145
4	Nuclei1/2014	10.75	14.00	41.3	152	4.4	82.3	29.6	2155
5	Nuclei1/2014	8.55	10.85	40.3	145	4.3	82.8	30.0	2185
6	Nuclei1/2014	8.45	11.08	42.5	168	4.1	81.0	29.6	---
7	Nuclei1/2014	9.28	12.05	41.1	154	4.2	79.8	31.1	---
8	Nuclei1/2014	8.43	11.14	42.0	164	4.0	85.9	31.1	---
9	Nuclei1/2014	9.34	12.31	41.8	160	4.2	82.1	28.5	---
10	G95/2013	8.05	10.47	41.3	156	4.2	82.2	29.1	---
11	G95/2012	9.49	11.75	39.3	159	4.2	83.0	29.5	---

In 2015 season, eighteen nuclei were selected from fifty selfed nucleoli grown in 2014 season and planted in a yield trial compared with breeder 4 and breeder 5 according to their yield characters and fiber qualities. Table (7) showed the results of ten nuclei selected to form the breeder seed of strain Giza95/2015 (breeder 6). The following selection limits had been considered.

1. Seed cotton yield (SCY) ranging from 7.18 to 8.94 K/f.
2. Lint yield (LY) ranged from 9.33 to 11.58 K/f.
3. Lint percentage (L %) over 41%.
4. Weight of 50 bolls (BW) ranged from 145 to 168 gm.
5. Micronair reading ranging from 4.0 to 4.4 unit.
6. Upper half mean length (UHM) ranging from 28.5 to 30.9 mm.
7. Yarn strength (Y.St) ought to be 2200 unit.

Table 7. comparison between the selected nuclei/2015 of Giza95 with breeder seeds of the strains G.95/2013 and G.95/2014 in 2015 season.

No	Strain	Yield K/F		L%	BW (gm)	Mic	LUR%	UHM (m.m)	Y.St
		SCY K/F	LY K/F						
1	Nuclei1/2015	7.18	9.33	41.3	149	4.9	82.6	29.8	2425
2	Nuclei1/2015	8.94	11.58	41.1	150	4.6	85.8	29.7	2425
3	Nuclei1/2015	8.94	11.57	41.1	156	5.1	83.8	27.6	2200
4	Nuclei1/2015	7.62	9.87	41.1	158	4.8	83.2	28.8	2345
5	Nuclei1/2015	8.45	11.13	41.8	152	5.0	82.6	30.3	2520
6	Nuclei1/2015	8.78	11.45	41.4	155	5.0	83.0	29.2	2490
7	Nuclei1/2015	8.41	11.00	41.5	164	4.7	84.8	31.4	2595
8	Nuclei1/2015	8.11	10.64	41.7	160	4.9	83.5	28.7	2350
9	Nuclei1/2015	8.34	10.98	71.8	158	4.9	84.0	28.6	2258
10	Nuclei1/2015	8.06	10.53	41.5	154	4.8	83.4	28.9	2380
11	G95/2014	8.18	10.78	41.8	159	4.8	82.5	29.1	2370
12	G95/2013	8.01	10.35	41.0	161	4.8	81.7	28.8	2325

Evaluation of the new variety Giza 95

Comparison studies between the new variety Giza95 and the commercial variety Giza 90 were made. The data were extracted from the trial B which had been grown at different locations representing Middle and Upper Egypt from 2011 to 2016 seasons.

Table 8 indicated that Giza 95 variety is higher in seed and lint cotton yield (SCY and LY) by 0.66 k/f (6.90%) and 1.9 k/f (16.32%) than the commercial variety Giza 90. With respect to boll weight, Table (8) showed that Giza 95 slightly surpassed Giza 90 for average weight of 50 bolls. As for lint percentage, the new variety Giza 95 exceeded Giza 90 by 1.3% for lint percentage. Fiber quality traits for Giza 95 is nearly within the range of the long staple cotton ofin southern Egypt.

Table 8. Comparative study between Giza 95 variety and the commercial variety Giza 90 for yield components and fiber quality at different locations from 2011 to 2016 seasons

season	variety	Characters						
		SCY	LY	L%	BW	Mic	UHM(m m)	Y.St
2011	G95	11.74	14.48	39.9	152	4.0	29.4	2120
	G90	11.89	14.35	38.7	150	3.9	29.8	2285
2012	G95	8.6	10.4	38.8	147	4.1	30.0	2175
	G90	8.5	10.2	38.9	149	4.0	29.6	2195
2013	G95	9.57	12.23	40.2	157	4.2	28.1	1950
	G90	9.18	11.23	38.0	150	3.9	29.2	2002
2014	G95	10.02	12.64	40.6	147	4.1	30.6	2080
	G90	8.78	10.70	39.2	146	4.3	31.1	2175
2015	G95	10.99	13.92	40.1	158	4.2	29.5	2225
	G90	9.29	11.36	38.7	152	4.3	28.9	2150
2016	G95	10.7	13.3	39.8	149	3.9	31.1	1980
	G90	10.0	12.00	38.0	150	3.8	30.1	2035
Means	G95	10.27	12.83	39.9	151	4.1	29.8	2090
	G90	9.61	11.64	38.6	149	4.0	29.8	2140

CONCLUSION

It could be concluded that the new variety Giza 95 is higher in seed cotton yield (SCY) and lint yield (LY) than the cultivated variety Giza 90 and had the same characteristics of long staple cotton grown in southern Egypt.

REFERENCES

1. Al-Didi, M.A. 1972. History of Egyptian cotton varieties. *Egypt. Cott. Gaz.*, 58:33-56
2. American Society for Testing Materials, ASTM, 1998. Standards on testing materials, Designations (D-1445-14495).
3. Awad, H.Y., M.M. Awaad, S.A.S. Mohamed, H.H. El-Adly, T.M. El-Ameen, A.A. Mohamed and A.E.M. Eissa. 2004. Giza 90, A new long staple Egyptian cotton variety for Middle and Upper Egypt. *Egypt. J. Agric. Res.*, 82 (3). 2004.
4. El-Helow, Sayda S., Hanam, A.M, A.A.M. Awad and M.A.M. Allam. 2003. Breeding potential of promising hybrid Giza 84 x (G.74 x G.68) of the extra long staple cotton. *Egypt. J. Agric. Res.*, 81 (2); 647-657.
5. El-Moghazi, M.A.A. Sallam and A.A. El-Gohary 1984b. Introduction of extra long Staple Egyptian cotton variety, "Giza77". *Agric. Res. Rev, Egypt*, 62:13-22.
6. Haikal, I.M, Y.T. Atta, M.A. Rahoumah, M.A. Megahed, S.A. El-Shaarawy and M.A. Raafat 1996. The new long staple Egyptian cotton variety Giza86. *Egypt. J. Appl. Sci.* 11 (3), 130-138.
7. Hays, H.K, E.R. Immer and D.C. Smith. 1955. *Methods of plant breeding*. 2nd ed. Mc. Graw- Hill Book CO. Inc. New York.
8. LeClerg, E.L., W.H. Leonard and A. G. Clark 1962. *Field Plot Techniques*. Burgess Publishing Co.
9. Megahed, M.A, Y.T. Atta, I.M. Haikal. 1986. Testing Giza81 cotton cultivar for yield and quality. *Agric. Res. Rev*, 64(5): 789-802.
10. Senedecor, G.W. 1965. *Statistical method*. Iowa state Univ. press, Ames, Iowa U. S .A.

أستباط الصنف جيزة ٩٥ من طبقة الأقطان المصريه طويلة التيله المنزرعه فى مصر الوسطى والعليا

حسن حسين العدلى - أنور عيسى مسعود عيسى - حسين صلاح خليفة - أبو القاسم عبد الراضى
- خالد محمد عبده بكر - صلاح الدين رشاد نصر سعيد - أحمد مصطفى محمد سليمان - حسين
يحيى عوض - محمد محمود عواد - سلطان عطيه سيد - فتحى سيد حسين

معهد بحوث القطن - مركز البحوث الزراعية - الجيزة

الصنف جيزة ٩٥ من أصناف القطن الجديدة التى تنتمى الى طبقة الأقطان طويلة التيلة
والتي تزرع فى مصر الوسطى قد أستتبط من خلال قسم بحوث تربية القطن بالتهجين الصناعى بين
الصنف جيزة ٨٠ والتركيب الوراثى [(جيزة٨٣×جيزة٧٥)×٥٨٤٤].

تم عزل هذا الهجين عام ٢٠٠٨ بمحطة البحوث الزراعية بسدس - محافظة بنى
سويف ونتيجة للانتخاب المستمر للعائلات المنعزلة تم الحصول على اللبنة الاولى لأنتاج هذا الصنف
موسم ٢٠١٠.

يتميز الصنف جيزة ٩٥ بتفوقه فى محصول القطن الزهر والشعر عن الصنف جيزة ٩٠
بمعدل ٦,٩% و ١٦,٣٢% على التوالى وأيضاً يتراوح وزن ٥٠ لوزة للصنف جيزة ٩٥ حوالى
١٥١ جم بينما كانت ١٤٩ جم للصنف جيزة ٩٠.

أظهر الصنف الحديث جيزة ٩٥ معدل تصافى حليج اعلى من الصنف المنزرع جيزة ٩٠
بنسبة ١,٣% حيث كان معدل الحليج ٣٩,٩% و ٣٨,٦% للصنف جيزة ٩٥ و الصنف جيزة ٩٠
على التوالى.

أوضحت النتائج أن صفات التيله للصنف جيزة ٩٥ (الطول - المتانه - النعومه) تقع ضمن
طبقة الاقطان الطويله المنزرعه فى جنوب مصر والتي تلائم صناعة الغزل والنسيج المحليه وعليه
يعتبر هذا الصنف (جيزة ٩٥) ملائم للزراعة بالوجه القبلى.