International Journal of Research
Available at
https://journals.pen2print.org/index.php/ijr/
e-ISSN: 2348-6848
p-ISSN: 2348-795X
Volume 06 Issue 13
December 2019

# The Effect Of The Hot Dry To Length Of The Fiber In Some Cotton Sorts And Ranges

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**Abstract:** *One of the most important indicators of the quality of cotton fiber is its length. The cost of fiber depends on its length. Because from these kind of fiber prepared the elegant yarns. For the most delicate fiber yarn. The length of the cotton fiber, according to variety or reference feature and the cultivation of crops can be from 10 mm up to 50 mm.*

*Keywords: garmsel, a cotton grade, a fiber exit, a tier a plant, grade signs, agrotechnological an action*

At present time there are lots of scientific and practical works on cotton Sorts with high fiber quality have been preparing by the scientists of leading cotton producing countries.

Hot dry happens across the southern and central part of the country, that are Surkhandarya, Kashkadarya, Bukhara and Navoi provinces' large cotton cultivated areas in summer season period, even though cotton tropical plant it negatively effects to the quality of the cotton fiber.

One of the most important indicators of the quality of cotton fiber is its length. The cost of fiber depends on its length. Because from these kind of fiber prepared the elegant yarns. For the most delicate fiber yarn. The length of the cotton fiber, according to variety or reference feature and the cultivation of crops can be from 10 mm up to 50 mm.

According to X.Ashurbekov and et al (1995), M.Qodirova and et al (2013), the length of the cotton fiber depends on features of the ridges, hereditary traits that passes down from generation to generation, the agro technics which holds during the experience in the farming area and fertilizer regime.

According to the data results of analysis in 2012-2014 on length of cotton fiber, these index were stated the in Bukhara-6 variety 31,88-33,0 mm. The higher indexes were stated in Istiklol-14 (33,24-34,4 mm), Omad (33,0-34,4 mm) Bukhara-8 (33,2-33,7 mm), Umid (33,5-35,9 mm), Paytug' (33,5-34,7), Termiz-256 (33,1-34,4 mm). Template grade indicators were stated in Kupaysin (32,9-33,9 mm), Charos (31,7-33,0 mm) and Jarkurg'on (32,5-35,8).

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Table

The length of the fiber cotton sorts and ranges in tier (in mm *index*)

| № | Sorts and ranges | 2012 year | | | | | | 2013 year | | | | | | 2014 year | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Plant tiers | | | Average | Tempate grade indicator difference, *mm* | | Plant tiers | | | Average | Tempate grade indicator difference, *mm* | | Plant tiers | | | Average | Tempate grade indicator difference, *mm* | |
| | | **I** | **II** | **III** | | Bukhara-6 | Bukhara-102 | I | II | III | | Bukhara-6 | Bukhara-102 | I | II | III | | Bukhara-6 | Bukhara-102 |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** |
| **Regionalized Sorts** | | | | | | | | | | | | | | | | | | | |
| 1 | Bukhara-6 | 33,3 | 31,7 | 30,4 | 31,8 | | | 34,0 | 32,0 | 32,5 | 32,8 | | | 33,6 | 34,3 | 31,2 | 33,0 | | |
| 2 | Bukhara-102 | 33,0 | 33,8 | 30,7 | 32,5 | | | 33,1 | 30,6 | 31,9 | 31,9 | | | 33,0 | 32,8 | 32,4 | 32,7 | | |
| 3 | Bukhara-8 | 33,7 | 33,6 | 33,8 | 33,7 | +1,9 | +1,2 | 32,9 | 32,8 | 33,8 | 32,9 | +0,1 | +1,0 | 34,1 | 34,1 | 33,3 | 33,8 | 0,8 | +1,1 |
| 4 | Ibrat | 32,2 | 34,9 | 32,5 | 33,2 | +1,4 | +0,7 | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | Omad | 33,6 | 33,9 | 35,7 | 34,4 | +2,6 | +1,9 | 34,2 | 33,6 | 33,6 | 33,8 | +1,0 | +1,9 | 33,0 | 33,2 | 32,2 | 32,8 | -0,2 | +0,1 |
| 6 | C-6541 | 32,5 | 30,7 | 30,5 | 31,2 | -0,6 | -1,3 | 30,7 | 30,5 | 32,1 | 31,1 | -1,7 | -0,8 | 33,3 | 31,8 | 31,6 | 32,2 | -0,8 | -0,5 |
| 7 | Namangan-34 | 34,1 | 34,5 | 32,3 | 33,6 | +1,8 | +1,1 | 31,6 | 33,1 | 32,2 | 32,3 | -0,5 | -0,4 | 31,9 | 32,6 | 31,6 | 32,0 | -1,0 | -0,7 |
| 8 | Sulton | 29,6 | 32,9 | 33,3 | 31,9 | +0,1 | -0,6 | 30,6 | 31,7 | 30,6 | 31,0 | -1,8 | -0,9 | 32,5 | 31,2 | 33,7 | 32,5 | -0,5 | -0,2 |
| 9 | Andijan-37 | 33,7 | 32,7 | 32,4 | 32,9 | +1,1 | +0,4 | 33,2 | 34,6 | 32,2 | 33,5 | +0,7 | +1,6 | 32,0 | 32,1 | 32,6 | 32,2 | -0,8 | -0,5 |
| 10 | Beshqahrama | 32,3 | 31,1 | 30,5 | 31,3 | -0,5 | -1,2 | 31,5 | 31,5 | 32,1 | 31,3 | -1,5 | -0,6 | 32,3 | 32,9 | 30,2 | 31,8 | -1,2 | -0,9 |

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https://journals.pen2print.org/index.php/ijr/
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| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | Kupaysin | 34,7 | 34,7 | 32,5 | 33,9 | +2,1 | +1,4 | 30,8 | 34,6 | 33,8 | 33,1 | +0,3 | +1,2 | 34,3 | 32,9 | 30,3 | 32,5 | -0,5 | -0,2 |
| 12 | C-6775 | 32,5 | 33,0 | 30,6 | 32,0 | +0,2 | -0,5 | 30,7 | 30,7 | 31,0 | 30,7 | -2,1 | -1,2 | 32,8 | 31,0 | 32,5 | 32,1 | -0,9 | -0,6 |
| 13 | C-8284 | 30,9 | 32,3 | 30,9 | 31,4 | -0,4 | -1,1 | 31,7 | 31,2 | 31,1 | 31,5 | -1,3 | -0,4 | 32,7 | 31,7 | 32,0 | 32,1 | -0,9 | -0,6 |
| 14 | Namangan-77 | 31,2 | 31,3 | 32,9 | 31,8 | ±0,0 | -0,7 | - | - | - | - | - | - | 33,2 | 30,9 | 31,2 | 31,8 | -1,2 | -0,9 |

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next

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Perspective Sorts** | | | | | | | | | | | | | | | | | | | |
| 15 | C-8286 | 33,5 | 33,7 | 30,9 | 32,7 | +0,9 | +0,2 | 31,4 | 32,6 | 31,4 | 31,8 | -1,0 | -0,1 | 32,1 | 31,0 | 31,0 | 31,4 | -1,6 | -1,3 |
| 16 | C-2510 B | 35,2 | 34,4 | 36,1 | 35,2 | +3,4 | +2,7 | - | - | - | - | - | - | - | - | - | - | - | - |
| 17 | C-8290 | 31,3 | 29,3 | 30,9 | 30,5 | -1,3 | -2,0 | 31,7 | 31,2 | 30,0 | 31,0 | -1,2 | -0,3 | 31,2 | 32,3 | 32,0 | 31,8 | -1,2 | -0,9 |
| 18 | Jarqurg'on | 34,4 | 36,9 | 36,2 | 35,8 | +4,0 | +3,3 | 32,2 | 32,5 | 35,1 | 33,3 | +0,5 | +1,4 | 31,6 | 31,9 | 34,0 | 32,5 | -0,5 | -0,2 |
| 19 | Istiqlol-14 | 32,4 | 35,4 | 34,5 | 34,1 | +2,3 | +1,6 | 32,1 | 34,2 | 33,7 | 33,3 | +0,5 | +1,4 | 33,8 | 33,6 | 33,7 | 33,7 | +0,7 | +1,0 |
| 20 | Kelajak | 35,5 | 38,5 | 35,0 | 36,3 | +4,5 | +3,8 | 32,0 | 32,2 | 33,0 | 32,4 | -0,4 | +0,5 | 31,6 | 33,7 | 30,2 | 31,8 | -1,2 | -0,9 |
| 21 | UZFA-703 | 35,1 | 34,2 | 32,0 | 33,8 | +2,0 | +1,3 | 33,0 | 32,9 | 32,1 | 32,7 | -0,1 | +0,8 | 32,7 | 32,0 | 30,2 | 31,6 | -1,4 | -1,1 |
| 22 | Pakhtakor-1 | 31,1 | 31,0 | 31,6 | 31,2 | -0,6 | -1,3 | 31,5 | 31,4 | 30,8 | 31,3 | -1,5 | -0,6 | 31,5 | 32,4 | 32,7 | 32,2 | -0,8 | -0,3 |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** |
| **Sorts which are being tested in State Sorts test** | | | | | | | | | | | | | | | | | | | |
| 23 | Navrus | 31,1 | 33,1 | 31,5 | 31,9 | +0,1 | -0,6 | 30,3 | 30,8 | 32,3 | 31,1 | -1,7 | -0,8 | 33,1 | 30,9 | 32,8 | 32,3 | -0,7 | -0,4 |
| 24 | Beshariq-96 | 30,5 | 33,7 | 30,7 | 31,6 | -0,2 | -0,9 | 32,2 | 30,5 | 33,1 | 32,0 | -0,8 | +0,1 | 33,0 | 33,8 | 30,6 | 32,5 | -0,5 | -0,2 |
| 25 | Buston | 30,2 | 30,7 | 31,9 | 30,9 | -0,9 | -1,6 | 32,1 | 32,2 | 32,1 | 32,1 | -0,7 | +0,2 | 33,5 | 33,5 | 31,3 | 32,8 | -0,2 | +0,1 |
| 26 | OZPITI-102 | 33,0 | 33,1 | 30,4 | 32,2 | +0,4 | -0,3 | 30,8 | 31,1 | 32,2 | 31,5 | -1,3 | -0,4 | 33,7 | 32,2 | 32,3 | 32,7 | -0,3 | ±0,0 |
| 27 | Barhayot | 32,6 | 31,4 | 33,7 | 32,5 | +0,7 | ±0,0 | 32,5 | 32,6 | 31,8 | 32,4 | -0,4 | +0,5 | 32,5 | 33,7 | 30,9 | 32,4 | -0,6 | -0,3 |
| 28 | C-9082 | 28,7 | 27,9 | 29,6 | 28,7 | -3,1 | -3,8 | 30,8 | 30,0 | 31,0 | 30,6 | -2,2 | -1,3 | 32,1 | 31,9 | 30,7 | 31,6 | -1,4 | -1,1 |
| 29 | Charos | 32,5 | 30,6 | 32,1 | 31,7 | -0,1 | -0,8 | 33,6 | 32,6 | 31,9 | 32,5 | -0,3 | +0,6 | 32,6 | 32,8 | 33,2 | 32,9 | -1,1 | +0,2 |
| 30 | Umid | 36,4 | 36,1 | 35,3 | 35,9 | +4,1 | +3,4 | 33,6 | 33,2 | 34,1 | 33,6 | +0,8 | +1,7 | 33,1 | 33,2 | 33,0 | 33,1 | +0,1 | +0,4 |
| **New Sorts** | | | | | | | | | | | | | | | | | | | |
| 31 | Paytug' | 34,9 | 34,9 | 34,3 | 34,7 | +2,9 | +2,2 | 33,7 | 34,6 | 32,4 | 33,6 | +0,8 | +1,7 | 33,3 | 34,1 | 33,1 | 33,5 | +0,5 | +0,8 |
| 32 | Termiz-256 | 32,2 | 32,3 | 31,2 | 31,9 | +0,1 | -0,6 | 34,6 | 34,3 | 34,3 | 34,4 | +1,6 | +2,5 | 33,1 | 32,9 | 33,3 | 33,1 | +0,1 | +0,4 |

International Journal of Research
Available at https://journals.pen2print.org/index.php/ijr/
e-ISSN: 2348-6848
p-ISSN: 2348-795X
Volume 06 Issue 13
December 2019

| New ranges | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 | L-425 | 34,5 | 32,5 | 31,6 | 32,9 | +1,1 | +0,4 | 32,3 | 32,5 | 30,3 | 31,7 | -1,1 | -0,2 | 34,7 | 33,3 | 33,0 | 33,7 | +0,7 | +1,0 |
| 34 | L-588 | 31,6 | 33,8 | 30,3 | 31,9 | +0,1 | -0,6 | 32,5 | 32,4 | 34,0 | 32,4 | -0,4 | +0,5 | 32,5 | 32,7 | 31,1 | 32,1 | -0,9 | -0,6 |
| 35 | L-7276 | 33,8 | 33,7 | 33,4 | 33,6 | +1,8 | +1,1 | 35,6 | 33,0 | 32,6 | 33,7 | +0,9 | +1,8 | 33,2 | 33,1 | 33,8 | 33,4 | +0,4 | +0,7 |
| | $X_{average}$ | | | | 32,7 | | | | | | 32,3 | | | | | | 32,5 | | |
| | HCP $_{(05)}$ | | | | 2,8 | | | | | | 2,2 | | | | | | 2,4 | | |

Other sorts which are being tested on the basis of these figures were less than the template grade indicator (standard explanations). The results obtained on the basis of the length of the cotton fiber are not achieved significant results in this area and it shows that it needs attention to length of cotton fiber together with complex valuable economic signs in future.

According to the analysis among the sorts the O‘ZPITI-102 (32,6-33,9 mm), Beshqahraman (32,6-34,1 мм) were identified that equal with the template grade indicator (standard explanations).

The hot dry effects to quality of cotton fiber were identified. According to examples from the plant sort 2 tier among early season sorts Omad, Umid, C-6541, Namangan-34, Andijan-37, C-8284, Buston, among midseason sorts Jarqurg’on, Kelajak, Bukhara-102, ЎзФА-703, Pakhtakor-1 and among other sorts the percentage (amount) of fiber significantly decreased up to 0,7-3,5 % because of 4-8 m/sec hot dry wind and very hot dry weather were identified.

The high fiber indexes were identified among the ranges were settled in 2014 C-8284 (33.7 mm), Buston (32.5,7 mm). During the analysis the other settled sorts and ranges were bit higher and equal with the template grade indicator. During the analysis of the length of fiber on plant tier, during the hot dry weather period harvested fiber length in boll in Namangan-34, C-6775, Beshariq-96, O‘ZPITI-102, Sulton, C-8286, C-9086, Istiqlol-14, Buston, Barhayot, Paytug‘ sorts the index of cotton fiber harvested from 2 tier were higher compared to 1 and 3 tiers.

In a word, during the hot dry weather period harvested fiber length in boll in Navruz, Bukhara-8, C-6541, C-8290, O‘ZPITI-102, C-9082 sorts and ranges the index of cotton fiber length harvested from 2 tier were lower compared to 1 and 3 tiers.

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e-ISSN: 2348-6848
p-ISSN: 2348-795X
Volume 06 Issue 13
December 2019

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