Table 4 The quantitative distribution of the key traits of the domestic bred varieties in Northern Xinjiang

|  | I | II | III | IV | V |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Boll number each plant | $3.3 \sim 4.5$ | 4.7~5.7 | 6.2~7.2 | 7.8~8.2 | 9.5~9.7 |
| Variety number | 6 | 11 | 15 | 4 | 2 |
| Rate (\%) | 15.8 | 28.9 | 39.5 | 10.5 | 5.3 |
| Name | 2, 5, 23, 27, 31, 37 | $\begin{aligned} & 1,4,10,12,18, \\ & 22,26,30,34,35, \\ & 39 \end{aligned}$ | $\begin{aligned} & 3,7,9,11,14,15 \\ & 16,17,20,21,24 \\ & 25,28,29,36 \end{aligned}$ | 6, 13, 19, 33 | 8, 32 |
| Boll weigh | 5~5.7 | 5.9~6.4 | 6.5~7.1 | 7.4~7.6 | 8~8.4 |
| Variety number | 6 | 7 | 19 | 4 | 2 |
| Rate (\%) | 15.8 | 18.4 | 50 | 10.5 | 5.3 |
| Name | 1, 2, 3, 5, 18, 36 | $\begin{aligned} & 9,10,11,13,15, \\ & 19,22 \end{aligned}$ | $\begin{aligned} & 4,6,7,8,12,14, \\ & 16,17,21,23,25, \\ & 27,28,30,32,33, \\ & 34,35,37 \end{aligned}$ | 20, 29, 31, 39 | 24, 26 |
| Lint | 35.2~36.3 | 36.8~39.2 | 39.3~40.9 | 41.8~43.1 | 44.2~45.2 |
| Variety number | 5 | 16 | 8 | 7 | 2 |
| Rate (\%) | 13.2 | 42.1 | 21.1 | 18.4 | 5.3 |
| Name | 20, 29, 30, 31, 32 | $\begin{aligned} & 1,2,3,5,8,15, \\ & 17,21,22,24,27, \\ & 28,33,34,37,39 \end{aligned}$ | $\begin{aligned} & 4,10,11,13,16, \\ & 23,35,36 \end{aligned}$ | $\begin{aligned} & 6,7,9,12,18,19 \text {, } \\ & 26 \end{aligned}$ | 14, 25 |
| Boll weight | 9.7~10.4 | 10.5~11.4 | 11.5~12.5 | 12.6~13.1 | 13.9 |
| Variety number | 7 | 14 | 12 | 4 | 1 |
| Rate (\%) | 18.4 | 36.8 | 31.6 | 10.5 | 2.6 |
| Name | $\begin{aligned} & 2,5,6,9,13,21 \\ & 36 \end{aligned}$ | $\begin{aligned} & 1,7,8,10,11,17, \\ & 20,22,23,25,26, \\ & 30,34,35 \end{aligned}$ | $\begin{aligned} & 3,12,14,15,16, \\ & 18,19, \\ & 27,28,31,37,39 \end{aligned}$ | 4, 24, 29, 32 | 33 |
| Fibre length | 27.7~28.8 | 28.9~30.8 | 31.5~32.6 | 33.4~34.6 | - |
| Variety number | 5 | 19 | 6 | 8 | - |
| Rate (\%) | 13.2 | 50 | 15.8 | 21.1 | - |
| Name | 5, 6, 7, 18, 19 | $\begin{aligned} & 1,2,3,4,8,9,10, \\ & 11,12,13,14,15, \\ & 17,23,32,33,34, \\ & 36,37 \end{aligned}$ | $\begin{aligned} & 21,22,25,26,30, \\ & 35 \end{aligned}$ | $\begin{aligned} & 16,20,24,27,28, \\ & 29,31,39 \end{aligned}$ | - |
| Micronaire | 3.2~3.6 | 3.7~4 | 4.1~4.5 | 4.6~5 | 5.1~5.2 |
| Variety number | 3 | 7 | 14 | 12 | 2 |
| Rate (\%) | 7.9 | 18.4 | 36.8 | 31.6 | 5.3 |
| Name | 29, 30, 31 | $\begin{aligned} & 5,16,17,20,22, \\ & 24,39 \end{aligned}$ | $\begin{aligned} & 7,8,9,12,14,23, \\ & 25,27,28,32,33, \\ & 34,36,37 \end{aligned}$ | $\begin{aligned} & 1,3,4,6,11,13 \\ & 15 \\ & 18,19,21,26,35 \end{aligned}$ | 2, 10 |
| Strength | 26~27.1 | 27.4~29.6 | 30~32.5 | 33.8~35.3 | 35.9~37.2 |
| Variety number | 2 | 16 | 14 | 3 | 3 |
| Rate (\%) | 5.3 | 42.1 | 36.8 | 7.9 | 7.9 |
| Name | 8, 18 | $\begin{aligned} & 1,2,3,4,5,6,7 \\ & 9,10,11,12,13, \\ & 14,15,19,23 \end{aligned}$ | $\begin{aligned} & 17,21,22,25,26, \\ & 28,30,31,32,33, \\ & 34,35,36,37 \end{aligned}$ | 16, 27, 39 | 20, 24, 29 |

Note: The digital code in variety column presented the serial number of Xinluzao

