

Table 3 The differences of phenotype traits of the domestic bred varieties in Northern Xinjiang

| Traits | The first period (1981–1990) | | | The second period (1991–2000) | | | The third period (2001–2008) | | |
|-----------------------------------|------------------------------|--------------------|-------|-------------------------------|--------------------|-------|------------------------------|--------------------|-------|
| | Mean | Variation range | CV | Mean | Variation range | CV | Mean | Variation range | CV |
| Growth period (day) | 130 | 121~137 | 6.30 | 125 | 119~133 | 2.93 | 126 | 120~135 | 2.83 |
| Cotyledon node height (cm) | 5.2 | 4.6~5.6 | 10.52 | 5.8 | 5~7.8 | 15.19 | 6.3 | 4.9~7.7 | 11.30 |
| Plant height (cm) | 52.6 | 45.8~56.7 | 11.27 | 62.4 | 49.2~78.8 | 16.60 | 78.9 | 60.7~92.8 | 10.79 |
| Boll branch | 8.8 | 8.3~9.3 | 5.74 | 8.4 | 6.8~9.8 | 11.95 | 9.3 | 6.8~12 | 11.51 |
| Boll number each plant | 5.4 | 4.5~7 | 25.73 | 6.4 | 4.5~9.7 | 26.15 | 6.1 | 3.3~9.5 | 24.32 |
| Boll weight (g) | 5.4 | 5~5.6 | 6.42 | 6.4 | 5.6~7 | 6.81 | 6.9 | 5.4~8.4 | 9.48 |
| Lint (%) | 38.4 | 37.4~39.2 | 2.39 | 40.7 | 38.3~42.7 | 4.16 | 39.0 | 35.2~45.2 | 6.83 |
| Seed weight (g) | 10.7 | 9.7~11.8 | 9.94 | 11.0 | 9.9~12.6 | 8.27 | 11.6 | 9.9~13.9 | 8.93 |
| Top-half plant mean heigh (mm) | 29.4 | 29.3~29.5 | 0.34 | 29.4 | 28.3~30.1 | 2.45 | 31.6 | 27.7~34.6 | 6.73 |
| Trim index (%) | 84.0 | 83.1~85.5 | 1.56 | 84.4 | 82.1~86.3 | 1.56 | 85.2 | 81.4~86.9 | 1.59 |
| Micronaire | 4.9 | 4.7~5.2 | 5.40 | 4.5 | 4.0~5.1 | 7.20 | 4.2 | 3.2~5 | 10.80 |
| Span length (%) | 6.4 | 6.4~6.5 | 0.90 | 6.4 | 6.2~6.5 | 1.39 | 6.4 | 6.3~6.6 | 1.24 |
| Strength (cN/tex) | 27.8 | 27.4~28.1 | 1.36 | 28.6 | 27.1~29.5 | 3.02 | 31.3 | 26~37.2 | 8.89 |