

Table 1 The performance of the quality traits and the genetic diversity index of the domestic bred varieties in Northern Xinjiang

Quality Trait	Phenotype	Diversity index (H')
Stick pigment	No, few, many	0.849 6
Leaf color during the blooming stage	Light green, green, dark green	0.787 7
Nip-angle of branch and stem	Small, medium, large	1.017 2
Plant architecture	Piping type, tower type, loose type	0.839 3
Crack and imperfect	Light, relatively light, medium, relatively dark, dark	1.328 7
Stick hair	No, few, medium, relatively many, many	1.362 5
Corolla size	Small, medium, large	1.053 9
Erythema of corolla base	No, small, large	1.015 9
Necking height	Lower than stamen, correspond to stamen, higher than stamen	1.093 7
Boll type	Circle, oval, long oval, cone	1.190 9
Boll size	Small, relatively small, medium, relatively large, large	1.310 4
Boll strength	Short, relatively short, medium, relatively long, long	1.173 2