

Analyses on Main Indexes of Cotton Fibre Quality and Discussion on the Sub-regions in Henan Province

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Abstract: According to the data obtained in 2002 from National Regional Test on Cotton Varieties in the valley of Yellow River and from Henan Supervisor Center of Cotton Quality, the main indexes of cotton fibre quality such as Len, Str, Mic were studied. The cotton area of Henan province is supposed to divide into four sub-regions: East, Southeast, Southwest and North subregion. In the east sub-region, transplanting of nursing seedlings and covering with plastic film are main planting methods. In the southeast area in Henan, with the thick and fertilizing sowing-layer, the agronomic weather is almost the same as that of the east sub-region. The main cropping pattern is annually direct-sowing only one time a year. The other cropping pattern is intercropping cotton with wheat. The southwest is a basin between the Nanyang and Xiangyang regions, where the amount of heat is more sufficient than that in other sub-regions, and application of plastic film is acknowledged in more fields. The north sub-region is located in the Huabei plain, where temperature environment is worse than that in other areas. The cottonseeds are directly sown to the cotton fields or the early maturing varieties are inter-grown between the wheat rows. The results from National Regional Test of Cotton Varieties in Yellow River are similar to the results from Henan Supervisor

Center of Cotton Quality. Among the four sub-regions, there are significant differences. The analysis of the national cotton varieties showed: the cotton fibre quality of the east area in Henan is the best, and the north area in Henan is a bit better than the other areas. The fibre length in the east area is 30.30 mm, which is 1.34 mm longer than that of the north area but the Mic value is 1.23 less, while the Mic value in the north area is 0.51 less than that in the southeast Henan. The analysis of Henan Supervisor Center of Cotton Quality showed: the east area is the best, the north area is not good, and the fibre of the southwest area is the thickest. In general, the cotton fibre quality in Henan is at the middle degree. To increase the cotton fibre quality in Henan, Mic is not the main problem in most areas, but we shall strive to simultaneously increase and mutually maintain the ideal values of the Len and Str instead.

key words: cotton; fibre; quality; Henan