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Growth characteristics comparison per planting density on the waxy corn early-planting culture for the paddy field in the southern province

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Abstract

The study was conducted to analyze the growth characteristics comparison per planting density on the waxy corn early-planting culture for the paddy field in the southern province of south Korea. The cultivation period of early-planting culture for the paddy farming of the waxy corn are sown on February 15, 2016years, transplanting March 15 and harvest June 20. And it grew 126 days. The weather change according to the cultivation period of unheated plastic house early-planting culture, it was average temperature 14.6°C and humidity 62.5%. And the temperature was 5.6 degrees Celsius warmer compared with the outside temperature and the humidity was 0.7 percent higher tendency. At the growth per planting density of waxy corn, culm length was average 224cm, the more it is high density culture the more was high trend. Stem diameter and ear length the more it is high density culture the more was lowed trend. The node number of 60×20cm was 12 nodes, fruit seting 5.7 nodes, tasseling number 94 days and silking number 96 days. In the ear characteristics per planting density, the size of ear length, seed setting length, ear width and ear weight the more planting density is high the more lowed that trend. The commodity percentage of planting density 60×35cm was the highest among other treatment as 69.1%. But, marketable yield was the highest planting density of 60×20cm as 4,543 ears/10a, and appeared in order 60×25cm 95% > 60×30cm 93% > 60×35cm 92%. The planting density on the waxy corn early-planting culture for the paddy farming in the southern province, the planting density analyzed to be effective planting of over 25% than normal season culture.

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Keywords : Waxy, early-planting culture, paddy farming, growth characteristics

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