

**GROWTH AND FRUITING HABITS OF DP 555 BG/RR IN  
VARIOUS ROW PATTERNS AND PLANT SPACINGS**

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**Abstract**

A study to evaluate the response of Deltapine 555 BG/RR at three different row patterns (one planted : one skipped, two planted : one skipped, and solid) and three specific plant spacings (3, 6, and 12 inches between plants) was conducted at the Mississippi State University Plant Science Farm in 2003. The variables observed during the season were height and number of mainstem nodes, number of white flowers per plot, and node above white flower. At 48 and 55 days after planting the plants in the 3" spacing were significantly taller than plants in the 6" and 12" plant spacings. Differences in the total number of nodes were observed 55 and 62 DAP with the 12" spacing having more total nodes than the 3" spacing. Row pattern had no effect on plant height or number of nodes. Number of white flowers observed per plot differed 65 DAP as the 3" spacing had a higher bloom count due to the higher number of plants per row. There were interactions between plant spacing and row patterns for node above white flower. Further investigation is required to explain this interaction. Boll size was greater in the 12" plant spacing and 1:1 row pattern compared to the other treatments. Lint percent was affected by all row patterns. Lint percent for the solid, 2:1, and 1:1 was 46.19, 45.18, and 44.38 respectively. Yield data suggests that plant spacing exhibits essentially no effect on seedcotton or lint yield; whereas row pattern had a significant impact on lint yield A<sup>-1</sup>. Lint yield for 1:1, 2:1, and solid were 1643, 1749, and 1744 lbs. A<sup>-1</sup> respectively. These yields are based on a land acre basis. Further data analysis will be done to determine the effects of row pattern and plant spacing on distribution of fruit on the plant. Plants were box mapped before harvest; however, analysis of this data has not been completed.