Evaluation of Plant Morphology, Floral Development and Pollen Longevity of Roundup Ready Creeping Bentgrass. (C05-fei175002-Oral)

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Abstract:

The goal of this research was to study if Roundup ready creeping bentgrass is essentially the same as nontransformed controls except for the Roundup resistance trait. Data collected in this study include: first head date, days for anthesis initiation and duration, inflorescence length, number of florets per inflorescence, pollen size, longevity and the number of seeds per three inflorescences through open and self pollination. There was no significant difference between the primary transformants ASR365, ASR368 and their control B99061R, for all parameters measured. The primary transformants ASR333 and ASR801 were not significantly different from their control, C99056L, for the following characters: first head date, anthesis duration, inflorescence length, pollen size, number of florets per inflorescence and number of seeds set per three inflorescences through open pollination. Compared with the control, C99056L, pollen longevity of ASR801 was significantly lower, but was not significantly different from conventional cultivars. ASR333 required more days than the control for anthesis initiation, but it did not differ significantly from conventional cultivars.

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