

# Genetic Parameters of Bahiagrass Half-Sib Families

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Bahiagrass (*Paspalum notatum* Flüggé) is a perennial grass adapted to warm tropical and subtropical regions. It is commonly used as a low input turfgrass in the southeastern United States, particularly in Florida. Current commercial cultivars were developed as forages; therefore, improvement for turfgrass traits is needed. Limited information is available describing the variation in bahiagrass for traits such as density, color, and seed head variables. Obtaining estimates of variation and genetic parameters will be useful to understand the potential to improve bahiagrass variation and broad-sense heritability. Both were estimated in a population of half-sib families selected for turfgrass characteristics in a replicated trial utilizing a randomized complete block design with two repetitions. The difference among families was significant ( $P \leq 0.05$ ) in leaf length and width, chlorophyll level, seed head height, raceme length, spikelet number, raceme number per seed head, and flowering window. The stem diameter of the flowering culm had low heritability, whereas heritability estimates ranged from moderate to high on the other variables. The relative values of the family variances and associated moderate heritability for most traits indicate that genetic components are contributing to the observed variation and that selection and breeding will be effective to make changes for most measured traits.