# Variety is the Spice of Life: We are Finding it Everywhere in Bermuda and Zoysia. (C01-santen161318-Poster)

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### Abstract:

Bermuda (Cynodon spp) and Zoysia (Zoysia spp) are major warm season turfgrasses widely adapted in the southern US. Cultivar differentiation within these mostly vegetatively propagated species based on morphology can sometimes be difficult. Using AFLP markers, phenetic relationships and gene diversity were estimated in different collections of 44 bermudagrass and 24 zoysiagrass accessions. In Bermuda, four primer combinations generated a total of 221 amplification products. The average number of scorable fragments was 55 per primer pair. The polymorphisms obtained per primer pair ranged from 20 to 62 percent with average of 49. In Zoysia, 186 amplification products were detected of which 112 were polymorphic. The polymorphisms obtained ranged from 55 to 66 percent with average of 60. The phenetic tree constructed using single matching and UPGMA, separated the 44 bermudagrasses into two main clusters while a single genotype behaved like an outgroup in the zoysiagrass. Gene diversity, estimated according to Nei, was 0.39 and 0.20 for Bermuda and Zoysia, respectively. Gene diversity was also estimated within the main clusters.

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