

# **Forage Production of Native Warm-Season Grass Varieties in Beltsville, MD**

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Many native warm-season grass varieties are available with potential to provide valuable summer forage in rotational grazing systems. To better utilize these grasses, more forage productivity data is needed for specific growing regions. The objective of this study is to determine the total and seasonal yield of warm-season grass species and varieties when grown in Maryland in a simulated rotational grazing system. Forage production information will help farmers to optimize production in a sustainable manner that will conserve natural resources and benefit their profitability. Included in this study are a total of 36 varieties of eastern gamagrass, switchgrass, big bluestem, indiagrass, little bluestem, Florida paspalum, and coastal panicgrass. Varieties were planted in June 2005 at the NRCS, Norman A. Berg National Plant Materials Center located at Beltsville, Maryland. Experimental design was a randomized complete block with four replications. Cuttings were made using a Carter flail-type harvester and cut to a height of 8 inches. Plots were harvested beginning in 2007 and will continue through 2012. The eastern gamagrass varieties 'Meadowcrest', 'Highlander', 'Pete' and 'Verl' and 'Carthage' switchgrass were the varieties with the highest 4-year average yields. 'Carthage' switchgrass, 'Atlantic' coastal panicgrass and 'Kanlow' switchgrass came into production quickly and exhibited consistently high yields even through dry conditions. Florida paspalum exhibited excellent stand establishment and initial yields, especially considering it is an unimproved collection, however it declined sharply after 2009 indicating poor persistence.

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