

Turf Bermudagrass Quality of Experimental Selections under Drought Stress

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This experiment is part of the current USDA SCRI warm-season grass breeding project (2019-2023). The objective of this trial is to evaluate drought resistance of new turf bermudagrass selections without irrigation after full establishment. The experiment consists of 36 entries from NCSU, OSU, UGA, and UF, along with Tahoma 31 (T31), Tifway (TWY), and TifTuf (TUF) as commercial standards. The field nursery was planted in a RCBD with 3 reps on June 24, 2020. Each plot size is 4.3' x 5.7' (1.3m x 1.7m). From January through September, 2021, no irrigation was provided except 0.25" water after each of fertilizer applications. Visual turfgrass quality ratings of top 20 experimental selections and 3 standards in 2021 are presented below.

2021	Rain-fall (inch)	Warm-season grass ET (inch)	Water Balance (inch)
May	4.31	2.61	+1.70
June	4.99	3.88	+1.11
July	2.20	4.08	-1.88
Aug.	1.75	4.01	-2.26
Sept.	0.21	3.69	-3.48
Oct.	4.29	2.24	+2.05
Total	17.75	20.51	-2.76

Data source: mesonet.org

Visual turfgrass quality ratings in summer 2021

