New limpograss cultivars will be released by UF-IFAS in 2014

Ken Quesenberry, Joe Vendramini, Lynn Sollenberger, Marcelo Wallau, Carlos Acuna, and Ann Blount

Limpograss [*Hemarthria altissima* (Poir.) Stapf & C.E. Hubbard] was first introduced in Florida in 1964 and three accessions were widely evaluated for pasture use. These clonal lines were ultimately released as the cultivars 'Redalta', 'Greenalta', and 'Bigalta'. Each of this group had some production limitation, either related to low nutritive value (Redalta and Greenalta) or poor persistence under regular defoliation (Bigalta). Fifty additional accessions were introduced to Florida between 1964 and 1971. They were evaluated in clipping and grazing trials, and from this group 'Floralta' was released in 1984.

Floralta has received wide acceptance for use in southern Florida and is estimated to be planted on over 400,000 acres. Reasons for the widespread adoption and use of Floralta limpograss on extensive beef cattle operations include superior winter forage production and greater digestibility, especially at mature growth stages, than bahiagrass and bermudagrass. The extended winter grazing season of Floralta, particularly in years with limited freeze events has allowed south Florida producers to reduce their reliance on conserved forages and costly supplements. Nevertheless, due to the widespread use of one single cultivar, there are concerns related to genetic vulnerability of limpograss in Florida.

In 2004, the Florida Cattlemen's Association Research and Education Committee identified the development of new limpograss cultivars as one of their highest priorities. The traits of greatest interest to be incorporated into the new cultivars were the persistence under grazing of Floralta and greater nutritive value of Bigalta.

In the spring of 2005, the Agronomy Department responded to the Florida Cattlemen's Association's request and crosses were made between Floralta and Bigalta in the greenhouse in Gainesville. From these crosses 51 hybrid plants were generated (39 having Bigalta as the female parent and 12 having Floralta as the female parent). The hybrids were planted at the Agronomy Forage Research Unit at Hague (near

Gainesville), the Range Cattle Research and Education Center in Ona, FL, and the North Florida Research and Education Center in Marianna, FL in October 2006. In late March 2009, after 2 years of clipping evaluations, eight superior plants were selected for grazing evaluation in Gainesville and Ona. At Gainesville, entries 4F and 10 had similar forage dry matter harvested as Floralta in 2010, but in 2011 after 2 years of grazing they outyielded Floralta by 35 and 31%. Entry 4F had greater digestibility than Floralta, and entry 10 was similar to Floralta. At Ona, entry 10 had the greatest total annual herbage yield, followed by Floralta, which had greater yield than the other entries. Floralta and entry 10 had greater digestibility than the other entries. In Gainesville, a stockpiling study was conducted and 4F outyielded all other entries, while Entry 10 also had greater forage harvested than Floralta. Entry 4F had greater digestibility than Floralta in all three lengths of stockpiling period (8, 12, or 16 weeks) and entry 10 was at least similar to that of Floralta. These data suggest that Entry 4F may be particularly well suited for use in stockpiling because of its high dry matter harvested and digestibility.

Due to superior traits, the researchers involved in the limpograss breeding and selection process recommended that UF-IFAS release 4F and 10 as the new limpograss cultivars. This recommendation was accepted by the UF-IFAS Cultivar Release Committee. Entry 10 will be called **UF – Gilbert Tucker (Gibgrass),** in recognition of the contributions of Mr. Gilbert Tucker to the Florida cattle industry. Entry 4F will be called **UF – KenHy,** in recognition of the contribution that Dr. Ken Quesenberry has made as a forage breeder to the Florida livestock industry. The planting material of the new cultivars will be distributed to a small group of producers selected by the Florida Cattlemen's Association in 2014. Those producers will be responsible to multiply the planting material and release it to a greater number of producers in 2015. Please note that only the group selected by the Florida Cattlemen's Association will have access to the planting material in 2014. This procedure was developed to insure that the new cultivars will be multiplied rapidly and properly.

On August 7th 2014, the official limpograss release event will be held at the Range Cattle Research and Education Center, Ona, FL from 10:00 a.m. to 1:00 p.m.

Registration information and the detailed program can be found at http://limpograss-release-080714.eventbrite.com or by calling Andrea Dunlap at 863-735-1314.