Aeschynomene Evenia

By Rob Kalmbacher
University of Florida, Range Cattle REC

Aeschynomene evenia is a short-lived perennial legume that will live through a mild winter in south Florida. It tolerates water logged soil and is very competitive with bahiagrass. Unlike common aeschynomene (A. americana or joint vetch), evenia will flower and make seed from late June until frost. The nutritive value of evenia leaves is similar to americana, but evenia is less palatable to cattle than americana. It is also more "woody" than americana.

At the Range Cattle REC, two bahiagrass pastures were burned and over-seeded with 20 lb/A of evenia in February 1996. Pastures were not disked or fertilized. On July 3, these two bahiagrass pastures containing evenia were set-stocked (not rotated) with 1.2 yearling steers/A. At 28-day intervals over a 112 day period (July 3-Oct. 23), average daily gain (ADG) of the steers and yield of available forage was measured on the bahiagrass + evenia pastures and compared to ADG and available forage on unfertilized bahiagrass pastures stocked at 1.2 yearlings, but without evenia.

Evenia forage that was available to grazing steers ranged from 390 Ib/A at the start on July 3 to 1,800 Ib/A at the end of the trial on Oct. 23. When steers began grazing in July, evenia was about 12 inches tall with an average 3.5 plants/sq. ft. and it made up about 14 percent of available forage in the bahiagrass + evenia pasture. Steers readily grazed evenia and kept the plant from becoming too aggressive by maintaining the plant under 24 to 30 inches tall. Evenia was flowering and setting seed during the 112-day trial, and it is expected that these pastures will not need to be reseeded in 1997. When evenia yields were at their greatest (Sep. 25), evenia made up about 75 percent of the available forage in the bahiagrass & evenia pasture. Available forage in the bahiagrass pasture without evenia ranged from 2,100 to 2,600 lb/A and averaged 2,370 lb/ A.
Average daily gain of steers over the 112-day period was not different between bahiagrass + evenia (1.5 lb/head/day) vs. bahiagrass alone (1.2 lb/head/day). These steer gains were unusually good and reflect a dry summer for the Range Cattle REC. It is expected that weight gains of cattle would be improved by the presence of evenia in August and September during a typical rainy summer which leads to a decline in nutritive value of bahiagrass. This idea will be tested when the study is repeated in 1997 and 1998.

When seeded in February in a burned bahiagrass pasture, evenia established before the dry April-May season and provided grazing from June to October. It was competitive with bahiagrass, and did not dominate the bahiagrass because steers began grazing when evenia was 12 inches tall. Evenia can be a desirable legume on flatwoods pastures with little fertilizer input.