Forage evaluation at the University of Florida/IFAS Southwest Florida Research and Education Center (SWFREC) at Immokalee started more than 40 years ago. Successful forage grass varieties have been from Cynodon, Paspalum, Digitaria, Hemanthria, and Bunchgrass (Syn. Urochloa). Seed seeding of annual grasses [oats (Avena sativa L.), rye (Secale cereale L.), and ryegrass (Lolium multiflorum L.m.)] into herbicide-treated established bahiagrass (P. notatum Flugge) pastures was not an economical way of extending grazing season on winter-dormant bahiagrass. Over-seeded annual grasses established slowly, required more nitrogen fertilizer, and produced lower yields. On clean-tilled soil, annual grasses could provide high quality forage for winter grazing. However, irrigation and high fertilizer application rates were required to achieve their full potential. Irrigation had no significant effect on winter forage production of perennial tropical grasses, even though moisture was limited, because of the greater limitation on forage production from temperature that was below critical. Forage research at Immokalee has made substantial contributions to the economic viability of the cow-calf industry in southwest Florida.

### Conditions at Immokalee

- **Location:** 26° 27’ N, 81° 26’ W
- **Avg. Daily temperature:** 13°C (Oct. – Mar., cool season/winter); 32°C (Apr. – Sept., summer)
- **Annual Rainfall:** 1200 mm (75% in Apr. – Sept.)
- **Soil:** Poorly drained, infertile Spodosol

### Summary & Conclusion

Forage dry matter yields and quality of evaluated entries have varied among studies depending on management and varieties. ‘Floralta’ limpograss was the highest yielding and most persistent grass cultivar, and showed the greatest adaptation, with satisfactory digestibility (Table 1). The stargrasses and bermudagrasses were as productive as other grasses (Table 2), but were neither as consistent nor as responsive to N fertilization as the others. As a result, ‘Floralta’ limpograss is widely grown for late summer grazing and forage stockpiling for winter grazing whereas the stargrasses and bermudagrasses are not currently widely planted, in the Immokalee area. Ryegrass planted on clean-tilled (Table 3), dedicated land is a major source of winter forage, and is sometimes used in conjunction with stockpiled limpograss in the winter.

### References

