Turfgrasses represent a sizeable part of the agriculture industry in Florida. Sod production in 1987 totaled 76,150 acres. Of this, 51,150 acres were in cultivation specifically for sod. Palm Beach County reported over 25,000 acres in production, primarily on the muck-soil region around Lake Okeechobee with a market value exceeding 37 million. Increased urbanization in Florida has kept the demand for sod high, thereby encouraging production in those areas where population growth is occurring most rapidly. However, there is a gradual shift taking place from muck-grown sod to mineral-grown sod on sandy soils in central and panhandle regions of Florida, due to the loss of muck soils by oxidation and locations of northern out-of-state markets.

Demands for landscaping of newly constructed dwellings maintain a market that is still expanding and will do so through the 1990's. The sod producer must have a working knowledge of turfgrass culture and management. Sod production is labor intensive and it requires highly specialized turf equipment for production and harvesting. Capital investment for land, irrigation, and turf equipment is extremely costly.

MARKETING SITUATION

Market areas for sod generally coincide with the locations of heavy population growth and rapid housing development. Currently south and central Florida, especially the areas closest to the coast, are prime market areas, while additional markets are being developed in nearby states. Major metropolitan areas will continue to demand the bulk of the sod produced for landscape plantings where construction is occurring. Competition among sod producers is keen. Since sod grown on muck soil is cheaper to produce and lighter in weight, it can be transported long distances at a very competitive price. Producers are involved with marketing ranging from no activity other than limited advertising as wholesale-in-the-field only, to making direct contact with garden centers, landscape installers, and grounds maintenance personnel.

LABOR AND CAPITAL

While sod production requires constant attention, mechanization allows the labor intensity to be concentrated with relatively few employees. Sod production systems do not normally employ large numbers of people. Data from Alabama indicate a labor requirement of five full-time and two part-time employees for a 250 acre farm.
Sod Production Review

Data from Florida for Floratam sod production lists capital costs of approximately $1800/acre, exclusive of land investment. Production costs would be about $650/acre. Net profit per acre (return to risk), including interest and principal payments on capital expenditures was approximately $350/acre, assuming 100% financing of capital outlay.

SUITABILITY

Soil requirements for sod production are somewhat demanding. Organic or fine textured mineral soils are best due to better water and nutrient holding capacity. Growth characteristics of sod are such that until the crop is matured there will be a high percentage of bare ground and a limited root system requiring frequent irrigation. There is a greater chance that leaching of fertilizers and pesticides will occur.

Warm-season turfgrasses are semi-dormant or completely dormant in the winter time in north and central Florida but crop damage can occur with extremely cold temperatures like those experienced in December, 1983 and January, 1985. There are varietal differences in cold and pest tolerance which should be considered prior to planting.

Irrigation to grow quality sod in a reasonable production time is a necessity. Grass should not be placed under moisture stress. Turfgrass will require approximately 2 inches of water per week during the peak growing period from March to October, but only 0.5 to 1 inch per week for the rest of the year. On sandy soils, this will mean installation of an irrigation system that can deliver 3/4 inch of water every 3 days to prevent moisture stress.

PLANTING SITUATION

In central Florida, St. Augustinegrass is the only warm season turfgrass which is profitable for sod production, while in north Florida, centipedegrass can also be produced. There are several varieties of St. Augustinegrass which are grown including Floratam, Floralawn, Floratine, and Raleigh. Each of these have unique pest tolerance and site adaptability characteristics. Planting material of Floratam and Floratine should be plentiful since these are propagated vegetatively and sod of each is used as a source of sprigs for planting new areas. Raleigh has had limited production in Florida and may be in short supply, especially as a source for new sod planting. Floralawn, which was released in 1985, also has a limited supply.

Planting of new sod production areas will require a good deal of pre-plant site preparation to ensure good rooting. Additionally non-selective weed control would be necessary for perennial weeds which would compete with the turfgrass after planting. Irrigation equipment should be installed or if sub-surface irrigation is used, ditches should be dug and ready prior to planting of any material. It is suggested that new plantings be made in rows on 1 foot centers and closer together if possible. This would require at least 645 foot of sod per acre, and more is suggested. A more common practice is to broadcast the sprigs over the area, disc them into the soil, and roll them to firm the planting bed and to insure good soil contact.

CULTURAL PROGRAM

Sod production is atypical of many other agronomic systems. It requires constant attention to detail. Mowing must commence once a leaf area is sufficiently high enough to require it. This will continue on a year around basis until the sod is harvested. Fertilization practices will vary, but at least four applications of fertilizer should be made per year during the peak growing months. Weed control is a necessity due to the high irrigation requirement, and low percent sod cover. Spot weed control should be practiced to eliminate perennial weed problems. Broadcast weed control will be necessary at least twice per year, possibly more often. Additional production information is available from the Florida Cooperative Extension Service in Bulletin 260, "Basic Guidelines for Sod Production in Florida."