

weeks, then that should be the mowing frequency. Established bermudagrass and zoysiagrass sod fields typically are mowed every 3 days, while centipedegrass, St. Augustinegrass and bahiagrass are mowed once every 7 to 10 days.

Table 4. Mowing height, frequency, and mower type suggested for grasses grown for sod production in Florida.

Grass	Mowing Height	Height before Remowing	Frequency	Mower Type
----- (inches) -----				(days)
Bahiagrass	3	4	7	Rotary/Flail
Bermudagrass	½-1	¾-1½	3	Reel
Centipedegrass	1-1½	1½-2	10	Rotary/Reel
St. Augustine-grass*	2	3	7	Rotary/Reel
Zoysiagrass	¾-1	1-1½	10	Reel

*Semi-dwarf varieties such as Seville, Jade, and Delmar should be mowed between 1 and 2 inches.

Grass clippings may or may not be picked up. If removed, sweepers and vacuums are used. The purpose of removing clippings is to prevent them from filtering down into the turf stand and turning brown. When the sod is delivered, the presence of these brown clippings may cause the sod to appear to have less density than it really has. Clipping disposal is a major problem. With restrictions on burning, dumping in landfills, and problems with odor, disposal is a problem to many producers. If clippings are removed, it is suggested that the removal begin during the 1 or 2 months before harvest. This timing will help prevent the browning effect clippings may impose and prevent having disposal problems throughout the entire growing life cycle.

Pest Management

Preplant fumigation with materials such as methyl bromide or metam-sodium (Vapam) may be required when sod farms are established on land previously used for row crop farming. Fumigating will reduce perennial weed species such as bermudagrass, nutsedge, torpedograss, and sprangletop. Soil sterilization will also reduce nematode populations which are difficult to control once the grass is established. In California, it is recommended that the sod field be fumigated at least every 5 years to help control weeds, nematodes, and other pests (2).

Methyl bromide is expensive (approximately \$1,000/acre) due to the plastic cover required to

ensure activity and may only be applied by a certified applicator. This material provides better pest control and the treated area can be planted within 48 hours after the cover is removed.

Metam-sodium does not require a cover, but a certain amount of efficacy is sacrificed. If a cover is not used, metam-sodium, once applied, requires incorporation into the soil. Incorporation is achieved by rolling, irrigation, and/or tilling the material to the depth of desired control (usually 6 to 8 inches). Poor performance will result if this incorporation is not performed. A minimum waiting period of 14 to 21 days is required before planting in metam-sodium-treated soil.

Weed Control

If preplant fumigation is not feasible, the use of a nonselective herbicide such as glyphosate is required on weed infested fields. Weed infested sod will reduce the salability of the product. Three applications of glyphosate spaced 4 to 6 weeks apart are necessary for postemergence control of perennial weeds such as bermudagrass or torpedograss. These should begin in spring after temperatures are consistently warm and weeds are actively growing. If spray applications cannot be made prior to field establishment, spot treatments of competitive weeds such as bermudagrass will be required.

Weeds can be introduced into a field in many ways. Irrigation water from open canals, ditches, or ponds often contains weeds. Soil introduced during soil preparation, such as a landplane pulling untreated soil into a field, leaves weeds. Birds, wind, soil erosion, and man also deposit weed seeds. Good housekeeping by keeping ditches and fence rows clean and by washing equipment before entering a weed-free field does benefit the sod producer.

Once the grass is established, weed management involves proper mowing, cultural practices to promote turf competition, and use of herbicides. Many upright growing broadleaf weeds can be controlled effectively through the use of continuous mowing. These include ragweed, pigweed, cocklebur, and morningglory. Mow these prior to seedhead emergence to help prevent reinfestation from seed.

Grassy weeds which are a problem in sod production include annual bluegrass, crabgrass, goosegrass, vaseygrass, signalgrass, sprangletop, torpedograss, and bermudagrass. Broadleaf weeds include purslane, betony, pusley, pennywort (dollarweed), oxalis, and spurge. Purple, yellow,