Turfgrass Series
Vegetative methods for turfgrass propagation

Greg Wiecko
Western Pacific Tropical Research Center
College of Natural & Applied Sciences, University of Guam
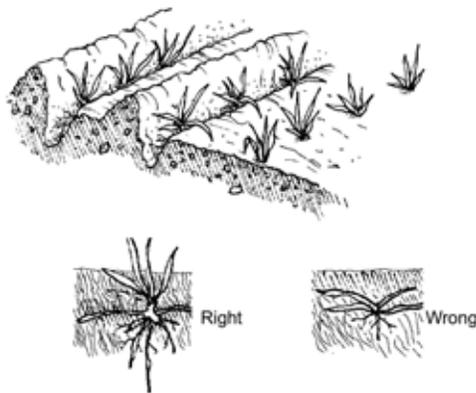
Most turfgrasses on Guam can be propagated vege-tatively by choosing one of three popular methods: sodding, sprigging, or plugging.

Sod

Sod is established turf that is harvested with roots and soil attached to it and transplanted from its place of origin to grow in another place. Almost all turf-grasses can be sodded. It is the most expensive method of turf establishment but produces lawn within hours rather than weeks or months. On Guam sodding is seldom performed and will not be ex-tensively discussed here. However, in other tropical locations is quite popular.

Sprigging

Far more common on Guam is sprigging. It involves placing sprigs (grass runners) every 3 to 5 inches in narrow furrows dug 10-12 inches apart (Figure 1). After planting sprigs 1 to 2 inches deep, leaving a portion exposed to light, soil should be slightly com-pacted to insure a good soil-plant contact.

Augustine grass or centipede grass. A stolon should be placed in the furrow and manually covered by soil such that 15-25 % extends above the surface. Sprigs can also be broadcasted over the soil and top-dressed with ½ inch of soil but desiccation losses could be significant, so it requires at least 2 to 3 times more planting material.

Plugging

Only grasses that produce aggressive runners can be established by plugging. Because almost all turfgrass-es on Guam belong to this category, plugging can be easily used in establishing local lawns. Plugging, sometimes called spot sodding, is the planting of small pieces of sod spaced apart over a large area (Figure 2). The small pieces of sod, called plugs, are commonly formed by cutting of sod strips into small square pieces. Plugs are usually about 2 × 2 inch (or less) and are placed in a grid pattern on 6- to 12- inch centers. Small holes are punched in the soil with a stick made of wood or metal, and each plug is placed in a hole and pressed down, usually with the planter's foot.

Figure 1. Sprigging is performed mainly on smaller areas, often with species having larger stolons.

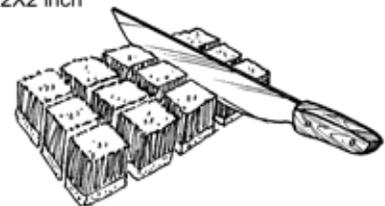Sprigging is performed mainly on smaller areas and often with species having larger stolons, such as St.

Figure 2. Plugging can be used with grasses that produce aggressive runners.

Major advantages of plugging are low costs of planting material and minimal losses. Major disadvantages are high labor intensity and the possibility of weed invasion during the period before the plugs spread to fill the empty space. Another disadvantage is slow establishment. Unlike seeding or sprigging, plugging is often accomplished over an extended period of time. Sometimes, because of the lack of planting material, residential lawns on Guam are gradually established by the continuous transplanting of sod pieces from recently established areas to the new areas. In many cases only 1 ft^2 of sod is needed to produce a 50 ft^2 area. If the size of the plugs is reduced, or spaces between increased, as it often is, 1 ft^2 of sod can cover as much as 100 ft^2 of soil.