Basic Plant Management Techniques — Part 1

Best management practices reduce organic materials in landscape plantings. This section looks at two turf irrigation options.

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Following proper management practices can significantly reduce the production of organic materials in landscape plantings. Implementing recommended irrigation, fertilization, and other cultural practices can reduce the vegetative growth of turfgrass and woody plants without sacrificing aesthetic appeal or performance. Employing the techniques described in this publication will enable landscape managers to achieve both of these goals.

Turfgrass irrigation management
Proper turfgrass irrigation management is important to optimize plant health and to reduce unnecessary production of organic matter. Scheduling irrigation based on water requirements of the turfgrass is one of the most important management practices available to promote healthy and attractive turfgrass plantings able to withstand traffic and other stresses. Irrigation scheduling involves applying the right amount of water over the correct amount of time, based on the evapotranspiration (ET) rate of the plant. (Evapotranspiration is the combined water loss from the soil surface and through the plant.)

Too much water can result in diseased turfgrass and unsafe, flooded parks and playing fields, while too little water can lead to a thin stand of poorly growing turfgrass with low vigor, poor recuperative ability and appearance and unsafe playing conditions for sports such as soccer and football.

There are two effective methods of scheduling turfgrass irrigation. While both methods result in effective irrigation and minimal water waste, Method One is especially targeted to those with limited time and resources who are interested in increasing turfgrass quality while decreasing an overabundance of clippings that make grasscycling difficult.

Method Two is targeted toward personnel with greater time and resources who are interested in fine-tuning their irrigation scheduling practices to an even greater extent and is based on results of a more precise ‘can test’ than Method One. It offers the option of using real-time reference evapotranspiration (ET0) information available through the California Irrigation Management Information System (CIMIS), discusses the use of tensiometers, and describes how to mathematically determine the distribution uniformity (DU), application...