



## Zoysiagrass

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### Background and Introduction

Zoysiagrasses are warm-season turfgrasses that are represented by more genera than the cool-season grasses, but many of these have only one species that is sustainable for use as a turfgrass. Zoysiagrasses are considered to be a low- input or low maintenance turfgrass. They are heat tolerant and have few disease or pest problems in California. Zoysia has its origin in the Orient. It was named for an 18<sup>th</sup> century Austrian botanist, named Karl von Zois and was introduced into the United States in 1895.

### Varieties

In California the turfgrass is used in mild winter and warm summer areas. There are several varieties, the very fine leaved Korean velvetgrass (*Zoysia tenuifolia*), usually used as a meadow-like ground cover. Japanese lawngrass (*Z. japonica*), which is a relatively coarse bladed turfgrass used in lawns, although it grows slowly it takes longer to recover from damage, it is well-adapted to use on lawns and provides an excellent playing surface on golf course fairways and tees. It can also be found in parks, school grounds, and athletic fields. It has good shade tolerance and stands up well to traffic and droughty conditions. Another variety is Manilagrass (*Z. matrella*) that is used for low-input lawns in Asia. Two other varieties which are of minor use are the highly salt tolerant (*Z. sinica*) and (*Z. macrostachya*). These species of Zoysiagrass can be hybridized so the grasses may be considered to be a family of related grasses. “Emerald” Zoysiagrass is a hybrid between Korean velvetgrass and Japanese lawngrass.

“El Toro” Zoysiagrass which was released from a University of California plant improvement program has a much faster establishment rate, better late season color and rapid spring greenup. Two varieties Victoria and De Anza were produced by the University California by hybridizing El Toro and demonstrated superior ability to retain color through winter in Riverside California and establishment rate plus better quality in color, texture, density, uniformity, and pest resistance.

### Establishment

Zoysiagrass has stolons and rhizomes. Its ligule is a fringe of hairs like bermudagrass, but it has a rolled vernation. The internodes of the stolons are uniform in length. The nodes on the stolons generally are covered by a tan, husk-like structure. It has stiff leaf blades that may have fine hairs protruding from both inner and outer leaf surfaces. Its seedhead is a single spike.

Zoysia produces seed, but germination of the seed is poor. It is usually established by sprigs, stolonizing, plugging, sodding, or strip sodding.



### Care and Maintenance

Warm-season grasses generally produce deeper root systems than cool-season grasses. Zoysiagrass has a higher degree of wax accumulation and were associated with low ET rates. This makes Zoysiagrass heat tolerant so the watering needs are low to medium.

Zoysia is relatively free of disease problems, although rust, leaf spot, brown patch, and dollar spot have been reported. Insect damage is also rare on Zoysia, but it may be attacked by billbugs, white grubs, sod webworms.

Fertilizer should be applied twice a year. Follow the link to the [UC Guide to Healthy Lawns](#) site.

### Literature Cited:

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