

Santa Ana—A New Vegetatively Propagated Turf Bermudagrass Developed for California

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Santa Ana, the first vegetatively propagated turf bermudagrass developed specifically for California was released in 1966 by the California Agricultural Experiment Station and distributed to stolon and sod producers for propagation.

This new variety had its beginning in 1956 as one of several hundred seedling selections made in a segregated population from a strain of South African origin (Plant Introduction number 213387). After several years of further selection among these clones, only a few remained. One of these was number RC-145, which formed a dense, smooth, dark green turf. Subsequently RC-145 was tested in many California locations under various conditions and almost always received top ratings. Last year it was named Santa Ana after the well-known California city to identify it as a variety from and for California.

Santa Ana Matched To California Needs

Bermudagrass varieties developed in the East and South are used extensively in California and have been valuable additions to our list of turf varieties. However, there has always been a need for varieties more nearly meeting the peculiar turf requirements of the Pacific Coast region. Santa Ana is our first attempt to achieve this objective.

Although Santa Ana has had wide testing in California, it has been in few trials outside the state. Therefore, its performance and value in other parts of the country are unknown. A thorough test of Santa Ana is recommended before it is produced or sold in these areas.



Greenhouse flats containing vegetatively propagated turf bermudagrasses are being checked, above, by Dr. Victor B. Youngner, in charge of this research at the University of California, Riverside. Laboratory performance is checked closely and followed by field tests.

The smog tolerance exhibited by Santa Ana has excited considerable interest. While smog has long been thought of as a southern California problem it has now become a problem in many metropolitan areas. This characteristic of Santa Ana may, therefore, assume a wider importance in time. Typical injury from smog as seen on Tifway or Tifgreen is a bronze discoloration of the blade tips. Very little of this has been seen on Santa Ana, even after a day of severe smog conditions.

In California, where turf is used the year around, a short winter dormant period is highly desirable. Santa Ana is superior in this respect to Tifway and Ormond, previously our best strains for winter color. This characteristic may be undesirable in colder climates as prolonged growth in the fall and

early spring green-up may reduce its winter hardiness.

As with any bermuda variety, proper management is essential to obtain the shortest possible dormant period. Thatch must be controlled as no bermuda will remain green in cool weather if it has developed a thick thatch. Adequate, readily available nitrogen must be provided to stimulate new growth under the lowered temperatures. We have kept Santa Ana green throughout the entire winter in mild coastal areas by early fall thatch removal and biweekly applications of ammonium nitrate or ammonium sulfate. Heavy nitrogen fertilization in late fall is not recommended, of course, where winters are severe.

Other characteristics of Santa Ana bermuda include high salinity tolerance, a feature of great importance to turf management



Young evaluation plots of salt tolerant selections of creeping bentgrass, above, are under study at the Department of Agronomy, University of California, Riverside. Santa Ana is one of varieties to be included in the California certification program for vegetatively propagated turfgrasses.

in arid climates, and resistance to the Eryophyid mite. This mite has recently become a serious pest of bermuda throughout the Southwest.

Vigor, Wear-Resistance Are Santa Ana Features

Although Santa Ana has a medium-fine texture it is vigorous and highly resistant to wear. It recovers rapidly from any injury such as divots. For these reasons it is especially recommended for golf tees, playgrounds, athletic fields and other heavy use turfs. Homeowners, on the other hand, may find it to be too vigorous for them to maintain easily.

Viable seeds are not normally produced under California conditions although flower heads may appear at times. Flowering, with the resulting steminess, may be kept low by maintaining adequate nitrogen fertility levels. In general, however, Santa Ana is one of the least stemmy of the bermudagrasses we have grown.

Fungus diseases of bermudagrasses have not been serious problems in California so Santa Ana has not been tested for disease tolerance.

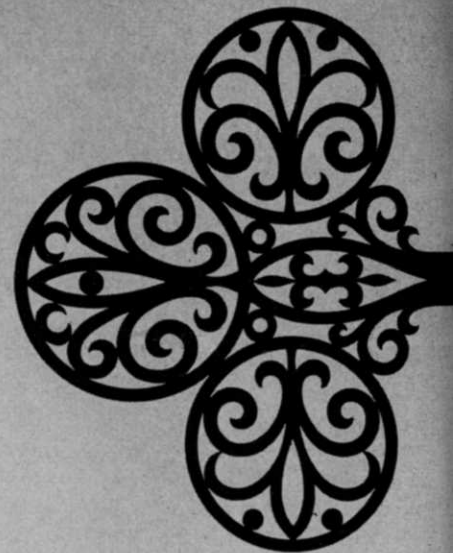
Stolon and sod producers will

not find it necessary to modify their regular growing practices for Santa Ana. Its rapid rate of establishment should give them a marketable product a short time from planting.

Santa Ana will be included in the California certification program for vegetatively propagated turfgrasses. California producers are urged to follow the certification regulations in growing this new variety. However, meeting the certification standards is not a requirement and any grower may obtain planting material upon request.

California stolon and sod producers who obtained propagating material in the summer of 1966 were: Jacobsen Brothers Turf Farms, Tehachapi; Cal-Turf, Camarillo; Dennis Turf-grass Company, North Hollywood; and Duro-Sod Farms, William H. Brown Nurseries, Inc., Alhambra.

Several more nurseries in California and other states have arranged for stolons for 1967 spring planting. Growers wishing to have it for production or testing may obtain small amounts of stolons from the Department of Agronomy, University of California, Riverside, California, 92502.



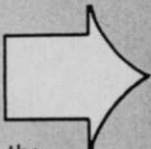
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