

From Seed to Soccer: Bermudagrass You Can Sink Your Cleats Into

by Brenda Dossey

At one time, "Common" bermudagrass from seed had to be imported from Australia. This changed in the early 1900's, when seed producers in Arizona and California realized they could produce the seed on their own. Today, Southwestern Arizona and the Imperial Valley of California produce over 95 percent of the world's supply of bermudagrass. Due to its drought tolerance, durability, low input maintenance and ease of establishment, bermudagrass has become the primary turfgrass in the Southern U.S., and in the semi-tropical and tropical regions of the world.

Above-ground stolons and underground rhizomes contribute to bermudagrass' rapid cover and aggressive growth characteristics. Bermudagrass is so hardy and durable that the U.S. government purchased the entire seed crop during World War II to grass its runways in North Africa and the South Pacific. The method was so successful that bermudagrass saw duty on runways once again in the Vietnam War.

In the 1980s, researchers in

Oklahoma and New Mexico developed seeded bermudagrass varieties with improved turf characteristics. Funding from the USGA Green Section Research and other sources helped move the research from experimental plots to wide release.

The first variety of bermudagrass developed exclusively for turf, certified

summer green color and improved its turf density.

An application

The ease and economy of establishing quality bermudagrass turf from seed represented a new and exciting concept for turfgrass professionals. Carlos Benavides of Peru saw great

potential in the new Sahara variety. He put it to the test when called upon to manage seed variety selection, installation and maintenance for a soccer stadium in Lima.

Figures two and three dramatically illustrate the effectiveness of his work. Comparing pictures of the stadium before and after seeding, it's hard to believe both could be the same field. This is just one example of the kind of results that a certified turf-type bermudagrass variety makes possible.

The before picture shows a turf that consists of a hodgepodge of various cool- and warm-season grasses

on a very rough surface. To prepare the seedbed, Benavides' crew killed the existing grasses, and proceeded to till, amend and level the soil. They broadcast certified NuMex Sahara with

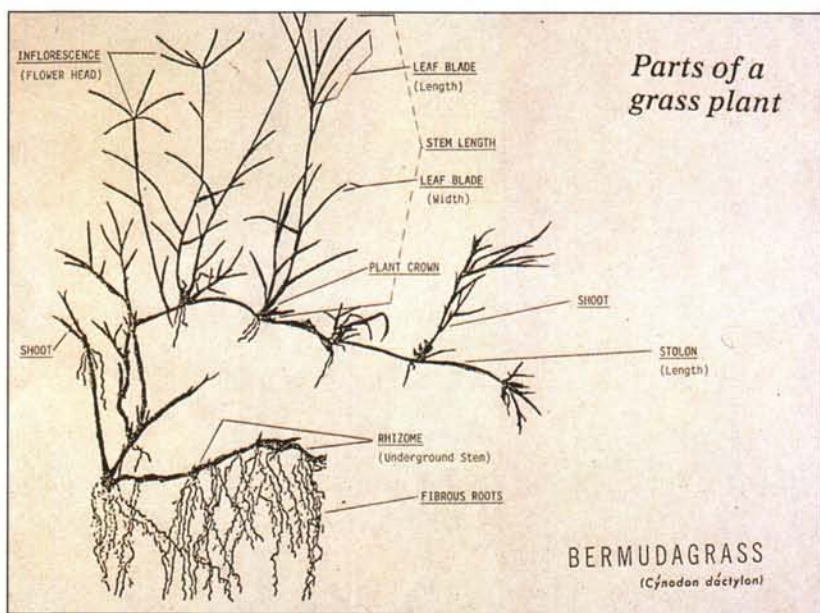


Figure 1: Above ground stolons and underground rhizomes contribute to bermudagrass' rapid cover and aggressive growth characteristics.
Courtesy: Seeds West.

NuMex Sahara, became commercially available in 1989. Sahara improved Common bermudagrass by shortening internodes. Better genetic uniformity in the new variety increased the grass'



Figure 2: Prior to renovation with Sahara bermudagrass, Carlos Benavides' turf consisted of a hodge-podge of various cool- and warm-season grasses on a very rough surface. Courtesy: Seeds West.

hand-held spreaders at a rate of 2 lbs. per 1000 sq.ft. They raked the soil in two directions to ensure seed-to-soil contact.

Sahara seedlings emerged seven days after seeding. The grounds crew waited two more weeks to mow the young grass for the first time. Only 41 days after seeding, the new turf faced its first soccer tournament.

The Sahara variety held up quite well. The turf was rolled after the tournament, and as figure three demonstrates, Mr. Benavides was very happy with its performance.

New and improved varieties

The commercial acceptance of Sahara and similar varieties changed the turfgrass industry's view of seeded bermudagrass. Today, due to its density and durability, many turfgrass professionals promote bermudagrass



Figure 3: Only 41 days after seeding, the new turf faced its first soccer tournament. Mr. Benavides was very happy with its performance. Courtesy: Seeds West.

as an ideal base for all kinds of sports turf. Worldwide usage of bermudagrass seed for turf has grown an estimated 40 percent since 1990.

Interest in establishing bermudagrass turf from seed and acceptance of varieties like NuMex Sahara fueled a demand for the development of more seeded varieties. Turf professionals wanted continued improvement of turf density and overall quality, starting at the level of the seed.

In 1994, a new group of improved turf-type seeded bermudagrasses met these demands. New varieties, such as Sultan and Yuma, featured significant improvements over Common bermudagrass, but also provided increased turf density and improved overall turf quality over NuMex Sahara.

Current trends

The use of bermudagrass for general purpose and sports turf applications continues to increase. The new denser seeded bermudagrasses are earning respect for improved characteristics on golf course fairways and sports fields around the world.

In less than 10 years, seeded turf-type bermudagrass has experienced tremendous advances. Over 15 varieties of seeded turf-type bermudagrass are currently commercially available. Turf professionals now have a range of options when choosing certified seeded bermudagrasses and certified seeded bermudagrass blends for their projects.

What does the future hold for seeded bermudagrass varieties? Turf professionals continue to seek varieties that possess greater turf density and improved overall turf quality, while retaining greater similarity to vegetative bermudagrasses. New varieties of the next century will also attempt to improve cold tolerance for transition zone and shaded area usage.

It may not be possible to predict exactly what the seeded bermudagrass of the future will look like, but one thing is certain: bermudagrass from seed isn't just common anymore. □

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