Considerations When Selecting a Turf Cultivar Wayne Hanna¹, Paul Raymer², and Brian Schwartz¹ University of Georgia, ¹Tifton Campus and ²Griffin Campus

Selecting the right turf cultivar to plant is an important decision, especially if it is a perennial turf such as bermudagrass or seashore paspalum. Most commercial turf cultivars have one or more desirable characteristics: color, rate of spread, density, salt tolerance, shade tolerance, etc. Most cultivars will produce desirable turf under certain environmental and management conditions, i.e. no pests, low wear, few freezing days, high mowing height, etc. Most cultivars can be marketed with advertising. However, you want a cultivar that will produce desirable turf under diverse environmental conditions and under the management conditions intended at your location. This type of information is most reliable when it comes from scientifically conducted tests over time and at numerous locations with diverse management and environmental conditions. You are not going to find the perfect turf cultivar, but with some research of the literature and talking with a <u>number</u> of people who have used a cultivar, you can narrow down the selection of the best cultivar for your situation.

It is a good idea to ask questions and expect informative answers. A "I do not know" is better than a vague misleading answer. Some questions to ask follow:

- Is it adapted in my area?
- Has it been tested in my area or at least tested at my latitude? How long has it been tested? Under what conditions has it been tested? Has the testing location specifically received money from the cultivar developer? What were the results?
- Are others growing it? How long have people grown it successfully? How have successful and unsuccessful growers managed the grass-planting dates, soil conditions, fertility, mowing height and frequency, north and south exposure, amount of wear, etc.? An important point to understand is that a good turf manager can make an average grass cultivar look great, while a poor turf manager can make a great cultivar look bad.

You need to make a decision based on <u>reliable data</u> and <u>not only testimonials</u>. Testimonials are okay only if they are supported by reliable research data. Do not make your decision based on the pretty photographs in the brochure. When the statements are made that "it is greener", "it has better quality", "it is more cold tolerant", etc., you should ask the question "compared to what"? As a customer, you need to separate the 'fluff' from the 'facts'. You need to request unbiased long-term research data which gives you results from years (and not months or weeks) which demonstrates stability over time. You need data from growing conditions similar to your growing conditions.

Selecting Bermudagrass Cultivars

Common bermudagrass, *Cynodon dactylon*, is a very cosmopolitan species and grows under diverse environmental conditions (temperature, moisture, soil, etc.) around the world. This species varies greatly in texture, produces aggressive and invasive rhizomes,

has 2n = 4x = 36 chromosomes, and has the potential to set seed and produce pollen. Seeded cultivars over time will produce a 'mosiac' or non-uniform turf. Improved common bermudagrass is sometimes referred to as 'hybrid' bermudagrass. While the statement may be true, the turf quality of 'hybrid bermudagrass' versus 'interspecific hybrid' bermudagrass can vary greatly.

When people write and talk about high quality 'hybrid' turf bermudagrasses such as TifSport, TifGrand and TifEagle, they mean 'interspecific hybrid' turf bermudagrasses that result from crossing *C. transvaalensis* × *C. dactylon*. These hybrids combine the quality characteristics of *C. transvaalensis* with the toughness of *C. dactylon*. These interspecific hybrids have 2n = 3x = 27 chromosomes, small non-invasive rhizomes, and produce no pollen or seed. For this reason they produce a very desirable uniform turf over time if managed properly.

Selecting Seashore Paspalum Cultivars

Even though the use of seashore paspalum as a turfgrass is relatively new, there seem to be many varieties to choose from. However, most of the varieties marketed today have been collected from natural habitats, vegetatively increased, and then marketed with little or no attention given to evaluation of their performance as a turfgrass. Selecting cultivars with proven performance over a diversity of environmental conditions provides greater assurance that the variety is likely to perform in your situation.

Avoid the use of "local varieties". These are most likely plant materials that have descended from varieties introduced to the area years earlier. These local varieties have been improperly propagated with little or no regard to maintaining varietal purity. In most cases, these local varieties are no longer clonal (a single genotype), but are now mixtures of many plant types. Most often the loss of varietal purity results in diminished appearance, poor performance, and often the loss of the very turf characteristics that made the original variety desirable.

Selecting varieties that have been thoroughly evaluated before their release and properly propagated using recognized quality assurance procedures will help to ensure quality, uniformity, and performance.

Plant Certified Turfgrass

Just like there are good and poor turfgrass managers, there are good and poor sod growers. Turfgrasses such as TifSport, TifEagle, TifGrand, SeaIsle 1, SeaIsle 2000, and SeaIsle Supremecan only be purchased as Certified grasses. This means that the sod farm is routinely inspected for offtypes, weeds, etc. If a problem is discovered during inspection, the sod farmer cannot dig grass from that sod field until the problem is corrected. It is a good idea to look at the sod field where the sod you purchased will be dug. Then it is wise to visit the farm again to see that the grass is being dug from the area you inspected. A <u>Certification certificate</u> should accompany each load of turfgrass arriving at your facility.

Conclusion

There are no 'magic bullets' when it comes to selecting a turfgrass. Turf cultivars are biological plants that grow in biological systems. Biological plants and systems respond to temperature, water, light, shade, soil conditions, etc. Weigh the 'pros' and 'cons' – there is no perfect grass. Look at the grass where it is being grown. Evaluate the research data and consider the experiences of others. Make a decision and manage the grass to the best of your abilities.