



USGA Turfgrasses Help Make NFL Natural Fields Safer

Grass is a big deal in football – a really big deal. Nearly every day of the week, untold millions of people watch players step out onto lush, green fields painted with white.



Turfgrass research at land-grant universities is coming up with better types of grass for golf course fairways that stands up to the stresses of NFL football.

All aspects of the game are tough. Even growing and maintaining a real turfgrass field has its challenges, like freezing temperatures, rain, and damage from tackles and foot traffic. So what type of grass can hold up to all that? Turfgrass breeders throughout the land-grant university cooperative extension system, as well as USDA researchers

from Agricultural Research Service, are working to answer that question. USDA's National Institute of Food and Agriculture (NIFA) supports their research with Hatch Act funding.

The USGA has cooperated with the USDA and land-grant universities developing turfgrass varieties for the golf course since 1921. Many of the improved cultivars used for fairways are often adapted to football fields. Many of these USGA supported projects have received multi-million dollar grants from NIFA to develop and improve turfgrass varieties.

At the game's highest level, 17 of 32 National Football League (NFL) teams play on real grass instead of synthetic materials. Just like golf courses, those teams employ a turf or field manager to grow, improve, and maintain their turfgrass.

The first two priorities for a turf manager are to make the field safe and playable. The NFL has tight standards for a field's ability to absorb shock and

tests the fields before every game. Anything too hard or soft is dangerous for players and can increase the frequency and seriousness of injury.

Not your average lawn grass, sports turfgrass needs to be strong, dense, and able to withstand changes in temperature. Horticultural scientists test these characteristics at land-grant universities across the country. Kentucky bluegrass, Bermudagrass, and tall fescue are grass species best suited for sports turf.

The varieties that land-grant universities develop are sometimes patented. For example, the Kansas City Chiefs, Washington Redskins, Tennessee Titans, and Cleveland Browns use a Bermudagrass hybrid called “Latitude 36,” developed and patented by the Oklahoma State University (OSU) Extension Service. Latitude 36 is known to have excellent traffic tolerance and recuperation rate, improved cold hardiness, and excellent color, texture, density, and uniformity.

Latitude 36 was initially developed for golf course fairways with a research grant from the USGA. Developing cold-hardy, fine-textured Bermudagrass cultivars for fairways led to national recognition and adoption by the NFL and other athletic organizations. The wide acceptance by golf and other professional sports is an indication that the researchers did their jobs well, said Dennis Martin, OSU Cooperative Extension turfgrass specialist. “It’s very important that the intended audience is confident enough to install and use Latitude 36. That means that not only did we do our job and assess the market correctly, but also that the market is accepting the product,” Martin said.

Another golf fairway variety supported by the USGA, “Tifway 419,” developed at the University of Georgia’s Coastal Plain Agricultural Experiment Center, grows on the fields of the Jacksonville Jaguars, the Tampa Bay Buccaneers and the Arizona Cardinals.

Adapted from: [Alexandra Wilson, National Institute of Food and Agriculture](#)

Additional Information:

[Land-Grant Universities Make NFL Natural Turf Grass Better and Safer](#)

[NFL’s Washington Redskins Select USGA-Funded ‘Latitude 36’ Bermudagrass for Home Field](#)

