

BLUE GEM

TEXAS HYBRID BLUEGRASS

(NAI-13-9)

Only a few times in a seedsman's career can he claim to be part of a truly great break-through in turfgrass breeding. In 1967 Adelphi Kentucky Bluegrass was the first man-made hybridized Kentucky bluegrass developed by Dr C. Reed Funk of Rutgers University and marketed by Jonathan Green. It set the standard for future Kentucky bluegrass breeding.

In 1986, Washington Kentucky Bluegrass, owned and marketed by Jonathan Green was the first elite Kentucky bluegrass able to be produced in the drylands production region of eastern Washington state.

Now in 2019 comes another impactful turfgrass breeding breakthrough: "Blue Gem", the first Poa arachnifera x Poa pratensis cross bred from a nursery of over 400 Texas bluegrasses. These breeding candidates were gathered on multiple collection trips to the gulf states from Texas to the Florida panhandle.

SEEDING RATES:

<u>Overseeding:</u> 1 – 2 lbs. per 1,000 sq. ft.

Bare Soil: 2 – 3 lbs. per 1,000 sq. ft.



Blue Gem Texas Hybrid Bluegrass in Rutgers University turf plots at Adelphia, NJ



Texas bluegrass space plant nursery



Blue Gem turf plot



Texas bluegrass space plant nursery

Poa arachnifera is a native grass of the Southern United states from New Mexico to North Carolina down to Florida and Texas that spreads via both rhizomes and stolons and does well both in shade and full sun. Texas bluegrass is naturally heat and drought tolerant and resistant to diseases such us rust. The name "arachinifera" comes from its silky, web-like inflorescence - a fact which has made it difficult to produce as a seeded turfgrass because the seeds could not be consistently harvested and cleaned.

In Blue Gem Texas Hybrid Bluegrass, all of the issues that beset previous attempts to breed a superior Texas Bluegrass have been addressed. No more light-green color, no more poor germination, no more cottony seed heads. Blue Gem Texas Hybrid Bluegrass maintains a stable and consistent 25% poa arachnifera in the final cross.

Blue Gem is a consistent seed yielder and addresses the minimum per acre yield that grass seed farmers demand for seed production. Blue Gem appears in the NTEPs under its experimental number NAI-13-9. The rankings bear out its superiority; it rates in the top 10% of the 89 entries in these important evaluation categories: traffic stress, percent living ground cover in the summer, shade tolerance, dollar and summer patch disease resistance and a dark-green genetic color with a rating of 8.0 on the 1-9 scale in Indiana and in top contention at the other 19 locations submitting data.



Blue Gem Texas Bluegrass Rates Well in the 2018 National Turfgrass Evaluation Program

| Variety | Rating | | |
|------------|--------|--|--|
| Blue Gem | 8.0 | | |
| Midnight | 8.0 | | |
| Blue Devil | 7.3 | | |
| Skye | 6.7 | | |
| Shamrock | 6.7 | | |

Genetic color ratings of Kentucky Bluegrass cultivars IN 1/2018

| Variety | Rating | | |
|------------|--------|--|--|
| Blue Gem | 6.3 | | |
| Orion | 5.7 | | |
| Blue Devil | 5.9 | | |
| Skye | 5.8 | | |
| Shamrock | 5.7 | | |

Quality of Kentucky Bluegrass cultivars grown in Shade IA 1/2018

| Variety | Rating | |
|----------|--------|--|
| Blue Gem | 6.7 | |
| Pivot | 6.5 | |
| Orion | 5.7 | |
| Skye | 5.8 | |
| Shamrock | 5.7 | |

Summer Patch ratings of Kentucky Bluegrass cultivars NC and NJ 1/2018

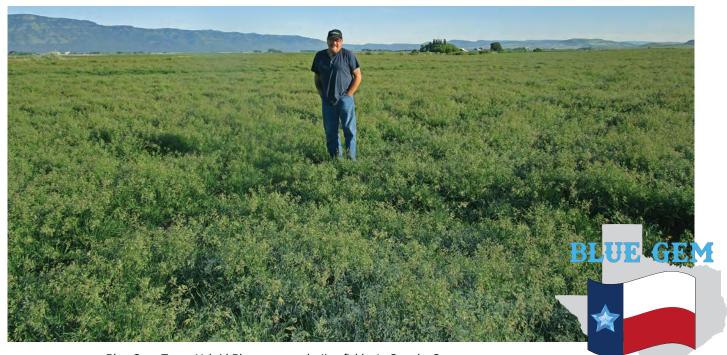
| Variety | Rating | | |
|------------|--------|--|--|
| Blue Gem | 6.1 | | |
| Midnight | 5.6 | | |
| Blue Devil | 5.9 | | |
| Skye | 5.5 | | |
| Shamrock | 5.4 | | |

Wear Tolerance Quality of Kentucky Bluegrass cultivars MA 1/2018

TEXAS BLUEGRASS

| | Turf Quality | | | | | | |
|------------|--------------|-----|-----|-----|-----|-----|------|
| Variety | NC | TN | MI | IA | СТ | NJ | Mean |
| Blue Gem | 4.4 | 5.4 | 5.8 | 5.8 | 7.2 | 5.7 | 6.0 |
| Midnight | 4.4 | 5.1 | 5.6 | 5.6 | 7.0 | 5.7 | 5.6 |
| Skye | 4.5 | 5.3 | 5.7 | 5.7 | 6.9 | 5.5 | 5.6 |
| Blue Devil | 4.3 | 5.2 | 5.6 | 5.5 | 6.7 | 5.3 | 5.4 |
| Prosperity | 4.2 | 5.0 | 5.5 | 5.4 | 7.1 | 4.6 | 5.3 |
| Shamrock | 4.0 | 5.4 | 5.8 | 5.6 | 6.0 | 4.6 | 5.2 |

Turfgrass quality ratings of Kentucky Bluegrass cultivars grown in North Carolina, Tennessee, Michigan, Iowa, Connecticut and New Jersey



Blue Gem Texas Hybrid Bluegrass production field - LaGrande, Oregon Nice, compact growth habit!