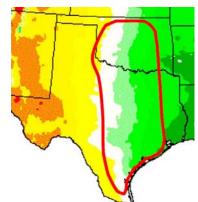
Grasslands Flecha



Tall Fescue



Where to Plant:

- Areas with 20" + annual rainfall.
- Irrigate Flecha in drier areas.
- Flecha works best in areas with wet winters and dry, hot summers.
- Choose ground that is moisture retentive, fertile, clay or loam soils.
- Do not plant in low fertility, sandy, or droughty soils.

To successfully establish Flecha:

- Eliminate rescuegrass, cheat grass, and annual ryegrass weeds prior to drilling Flecha seed in autumn.
- Spray glyphosate first in April-May, and repeat in late September.

Benefits of Flecha:

- Improved animal performance and **more pounds of beef** per acre.
- Lower costs per pound of beef produced.
- Better survival than summer-active Continental (KY31-type) tall fescue.
- No fescue toxicosis.
- Reduces annual planting of forage cereals and cool-season annual grasses.



The Recipe for Success

Preparing Ground

SPRING

- Close graze or harvest other winter forage for hay.
- Spray glyphosate in April-May to kill cheat grass, rescuegrass, ryegrass, cereals, or toxic fescue before blooming stage.
- Soil test. Apply lime if needed.

If planting in clean-tilled seedbed,

cultipack before and after drilling

Flecha seed to firm the seedbed.

Seeding rate: 15 lbs/ac in either

Drill Flecha seed 1/4" deep.

tilled or no-tilled seed-bed.

• If 100% weed free ground, firm

management, drill 10 lbs/ac.

Planting dates: September in

Plant after night air temps are

seedbed and excellent seedling

northern Oklahoma to November in

below 60°F, and soil temps warmer

than 55°F, and 6 weeks before first

If 100% weed free ground, no-till

drill Flecha into dry soils BEFORE

or clovers depending on location

Don't graze seedling pasture.

Companion Species: annual medics

Establishing Flecha

FALL (continued)

southern Texas.

first fall rain.

and soil type.

WINTER

frost.

FALL

- Store seed in cool, dry place to keep endophyte viable.
- Incorporate P, K & S according to soil test, prior to planting.
- Spray glyphosate in late September (after rainfall) to kill emerged grass weeds.

SPRING

- Spray and kill broadleaf weeds.
- Apply N fertilizer as recommended (60 lb N/ ac)
- Flash graze plants at 6" height.
- Graze for short periods, or make early hay (cut at early boot stage).
- Maintain pasture height 3" to 8"

SUMMER

- Leave 4" of foliage to shade plants through summer heat.
- Defer grazing or flash graze summer annual grass weeds for short periods.
- Mow rank growth, seed heads, and low quality forage to allow annual legumes to re-seed.

Year 2 and Following: Managing Mature Pasture

FALL

- Apply fertilizer according to soil test.
- Allow pasture to grow to 8" height before grazing.

WINTER

- Maintain pasture height 2" to 8" by rotational or continuous grazing.
- Remove animals when ground is wet.

SPRING

- Apply fertilizer as recommended (60 lb N/ac, and P, K & S according to soil test).
- Keep pasture leafy and short by heavy and continuous grazing at 2" cover.

USER GUIDE

TEXAS and OKLAHOMA



Grasslands Flecha is a summer-dormant tall fescue that is extremely drought tolerant and persistent. It turns dormant during hot and dry summers, but recovers quickly in autumn to produce large amounts of forage during autumn and spring. It is ideally suited to regions with consistently dry and hot summers, where very persistent pastures are required.

Flecha was bred from persistent tall fescue plants collected in the Mediterranean region. These Mediterraneantype tall fescues are different from standard tall fescues ("Continental-type" or "summer-active" or "Kentucky-31 type") because they exhibit increased growth in mild winters and dormancy in dry, hot summers.

How does Flecha survive drought?

In late-spring (usually June) when soils become dry and reach a certain temperature, Flecha plants become dormant. Plants stop growing, and leaves and tillers dry out, so that by July they are completely desiccated and appear to have died. They remain dormant in summer while soil temperatures remain high, and do not grow even after heavy rain. In cool, moist summers, or where soils do not dry out sufficiently, Flecha will not go dormant.

In early autumn (usually August) when soils cool and receive some moisture, Flecha plants start growing again. Autumn growth is usually rapid and within a month, pastures are healthy and strong again.

Flecha in the southern Great Plains

In the southern Great Plains, the important winter forage crops are dual-use (forage and grain) wheat and oats. Unpredictable autumn rains often delay planting of wheat and oats, resulting in a lack of forage for cattle to graze into the winter. Grazing Flecha perennial pastures in October - November and again in March - May complements grazing forage from wheat and oats during winter and early spring, and while perennial warm-season grass pastures are dormant in early spring.

Flecha contributes to environmental sustainability of grassland ecosystems by reducing soil erosion, conserving soil water during drought, improving soil physical and chemical properties, and providing habitat for wildlife.

Grazing Flecha Pastures

Rotational or controlled grazing is recommended for Flecha to:

- Increase consumption of grass by livestock
- Reduce spoiling and wastage of forage
- Increase forage growth
- Extend the life of the Flecha pasture

Mature Flecha pastures also perform well under continuous grazing.

Key Features

- A perennial cool-season grass
- Adapted to the climate of Texas & Oklahoma
- High forage growth in spring and autumn
- Will produce forage in mild winter conditions
- Strong summer-dormancy
- Extremely drought tolerant
- Soft leaves and palatable forage
- Resistant to leaf rust diseases
- Recommended grazing by cattle and sheep
- Do not graze horses on Flecha MaxQ[®]

