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SEASONAL GUIDE · SOUTHEAST

Southeast Super El Niño Protection Guide

Prepare today. Protect through winter. Position for a stronger spring.

Wet, cloudy, cool winters drain carbohydrate reserves and starve roots of oxygen. Build the root zone in fall, hold it through winter, and recover fast in spring.

- **Fall:** granular foundation at aerification; prime the biology.
- **Winter:** low-growth nutrition and consistent liquids with every protection spray.
- **Spring:** restart biology and rebuild reserves at green-up.

Build your foundation today. Follow the science.

3
phases: fall, winter, spring

Southeast Super El Niño

Turf and horticultural protection guide

Above-average rain, more cloud cover and cooler periods: saturated soils, less sunlight, higher disease pressure and more turf stress. Keep the soil working and build resilience through it.

1 · The biggest plant-health risks

Root-zone saturation
Prolonged moisture and cool soils reduce oxygen, weaken roots and slow recovery.

Traffic injury
Wet soils and low growth increase damage from carts, play and equipment.

Low light
Cloud cover limits photosynthesis and drains carbohydrate reserves.

Ultradwarf decline
Low sunlight, cool temperatures and aggressive mowing can thin greens.

Disease pressure
Large patch, spring dead spot, Pythium, dollar spot and other cool-weather diseases.

Overseeding
Excess moisture brings disease, weak rooting and traffic damage.

Nutrient loss
Heavy rain leaches nutrients while demand drops with low growth.

Nitrogen
High N makes succulent growth and more disease risk. Keep it controlled.

Winter weeds
Warm, wet spells shorten herbicide persistence and increase Poa germination.

Spring transition
Damage often shows at green-up, when soils are still cool.

2 · The recommended winter program

Fall preparation

September – October

- Improve soil structure and drainage
- Build root mass and carbohydrate reserves
- Reduce excess nitrogen
- Begin the biological program

Granular: Sigma 4-4-4 Bio, medium rate 545 lb / acre (12.5 lb / 1,000 ft²) at aerification or renovation

Liquids: Weekly rates with each spray to prime the system

Winter protection

November – February

- Keep soil biology and function going
- Low-growth, high-benefit nutrition
- Support stress tolerance
- Manage traffic and mechanical stress

Granular: Sigma 0-2-13 Bio (no nitrogen) where K is low: 300 lb / acre (6.9 lb / 1,000 ft²)

Liquids: Every 14 days with winter protection sprays: 2× weekly rates

Spring recovery

March – April

- Reactivate soil biology
- Restore carbohydrate reserves
- Support root and shoot growth
- Watch for disease at green-up

Granular: Sigma 4-4-4 Bio, low rate 300 lb / acre (6.9 lb / 1,000 ft²) to start recovery

Liquids: Weekly to 14 days as growth resumes

3 · Weekly liquid foundation

Bio	Molasses	Microalgae	Biochar 5m	Seaweed	K-Ferm
Dormant inoculum	Short-term food: sugars	Mid-range food: lipids, proteins	Long-term home	Long-term food: carbon, translocator	Bioactive K uptake
11 oz / A / wk	**11 oz / A / wk**	**22 oz / A / wk**	**22 oz / A / wk**	**22–44 oz / A / wk**	**22–44 oz / A / wk**

Tank-mix with the scheduled fungicide, PGR or nutrient spray; multiply the weekly rate by the weeks between sprays. Water in within 36 hours.

Applies to: golf courses, sports turf, landscapes and horticulture.

Every property is different. Call the Sigma rep finder at (765) 251-9036 or email info@sigma-agri.com to tailor the program to your site.

Nitrogen note. Keep winter N low and controlled; the liquid foundation supplies little N-P-K by design.

Sigma Foundation Program products are not pesticides and do not replace fungicide, insecticide or nematicide programs; they are applied as a companion in the same tank. Always jar test, confirm state registration, and read and follow label directions.