



## Description

**Discovery™ Bermudagrass** was initially bred in Australia and then taken to France. Its final inspection was performed in the United States. Discovery (BAR 1CD3,) is a vegetatively propagated variety of bermudagrass with natural dark green color, slow vertical growth and little seed head production. Discovery has short internodes and short leaf length.

## Production and Quality Control

Genetic purity and preservation of the Discovery Bermudagrass variety is of the utmost importance. Only licensed turfgrass producers are authorized to grow Discovery for sale. All licensed Discovery production is monitored through on-going quality control and quality assurance programs. Because of little vertical leaf growth on Discovery, any damage and/or stress, such as insects or drought, is more noticeable than compared to other bermudagrass varieties.

## Best Management Practices

### Installation and Establishment

Installation and the care taken during the initial days that follow are the most critical factors in determining the long-term quality and performance of Discovery Bermudagrass. Harvesting and transplantation is extremely stressful to any turfgrass and precautionary measures should be taken to help reduce further cultural and environmental stresses. Discovery is a tough, hardy turfgrass that once established, produces a beautiful lifetime lawn, landscape, sportsturf, or golf course.

**Proper care, including pre-installation soil preparation and limiting time on the pallet to less than 24 hours, yields positive results. Improper care, however, can cause death of the turfgrass or damage that results in lengthy recovery and additional expense.**

### Irrigating Newly Installed Discovery:

#### Proper watering upon installation is essential to successful establishment:

- Prior to installation, ensure irrigation systems are working properly and covering all areas to be planted
- Water thoroughly upon installation ensuring that both the Discovery is wet and the soil is moist to a depth of 3", which is approximately 1" of water per day. Do this for the first 1-2 weeks.
- In hot weather, water within a few hours of installation to mitigate severe damage or loss due to heat / dehydration stress
- Shaded areas and heavy soils require less water than full-sun areas and sandy soils
- When proper rooting is evident, alter irrigation program accordingly (see Post Establishment Irrigation on page 2)

**Mowing:** New installations are often uneven and care should be taken not to scalp high spots:

- Mow within 10 days of installation and bag clippings the first few mowings
- See Post Establishment Mowing on page 2 for more information

**Fertility:** Use a transplant-friendly regimen that will help reduce shock and minimize disease:

- Use a starter fertilizer that is low in Nitrogen and higher in Phosphorous and Potassium

## Post Establishment

**Mowing:** Mowing is a critical and often under appreciated cultural practice:

- Maintain Discovery at 0.5-1.25" (1" is optimal)
- Heights above 1.5" will reduce quality
- Rotary mowers are preferred for heights 1" or higher
- Reel mowers are preferred for heights below 1"
- Mow every **3-4 weeks** during the active growing season.
- Mow every **2-3 months**, or as needed, during cooler weather
- Never cut more than 1/3 of the total length of the blade at any one mowing
- If a scheduled mowing is missed and clippings clump on top of the Discovery, bag or vacuum clippings to reduce shade-out
- Vertical mowing (verticutting) may be performed to renovate Discovery

- In early spring, mow Discovery tight, bagging all clippings to remove excess thatch. This will help Discovery recover from winter dormancy. Don't worry about scalping (removing more than 1/3 of the leaf blade) at this time as this is a beneficial maintenance practice for spring green-up and growth.



**Insecticides:** Avoid stress from insects by performing insecticidal applications as needed:

- **For any insecticide application, always read and follow label directions carefully**
- Early identification and treatment of insect stress minimizes inputs and injury
- Make routine observations of the landscape being aware of seasonal pests like Army and Webworms
- Grubs can reduce quality if critical populations are reached
- Control Army and Webworms with Sevin, Orthene, Diazinon or Pyrethroid products
- If a stunting (witches broom) is noticed in Discovery, you may have Bermudagrass mites. For control, treat with labeled miticides or bifenthrin based products and incorporate a systemic product, such Merit (imidacloprid) for better results. (See University of Florida website (<http://edis.ifas.ufl.edu/pdffiles/LH/LH03500.pdf>) for detailed control description.
- Due to little vertical leaf growth on Discovery any damage and/or stress, such as insects or drought, is more noticeable than compared to other Bermudagrass varieties.
- Consult with local experts for insecticide recommendations
- If necessary, you can also reference the *University of Florida's Pest Control Guide for Turfgrass Managers* and/or *University of Georgia Turfgrass Pest Control Recommendations for Professionals* for more detailed information

**Herbicides:** Due to little vertical leaf growth on Discovery weeds may be more noticeable than compared to other Bermudagrass varieties. Proper mowing, irrigation and fertilization of Discovery will reduce weed problems. If a weed problem persists:

- **For any herbicide application, always read and follow label directions carefully**
- **Improper use of herbicides can severely damage or kill Discovery**
- Make routine observations of the landscape being aware of seasonal weeds
- Identify the type of weed causing the problem before using any chemical or mechanical controls
- Discovery, like Celebration, Common and Tifway 419 bermudagrass, is tolerant of many commonly used herbicides
- Consult with local experts for herbicide recommendations or refer to the *University of Florida's Pest Control Guide for Turfgrass Managers* and/or the *University of Georgia Turfgrass Pest Control Recommendations for Professionals* for more detailed recommendations.

**Fungicides:** Discovery has shown resistance to most fungal problems and controls should be used only as needed:

- **For any fungicide application, always read and follow label directions carefully**
- Early identification and treatment of disease stress minimizes inputs and injury
- Make routine observations of the landscape being aware of unusual symptoms
- Consider a broad-spectrum fungicide application if predictable seasonal problems are noted. If you do apply fungicide make sure you repeat 1-2 applications, 14-21 days following for a total of 2-3 applications.
- Consult with local experts for fungicide recommendations or refer to the *University of Florida's Pest Control Guide for Turfgrass Managers* and/or the *University of Georgia Turfgrass Pest Control Recommendations for Professionals* for more detailed recommendations.

**Irrigation:**

- Discovery requires proper ground moisture to reduce possibility of dormancy, which may occur faster than compared to other bermudagrass varieties due to the minimal vertical leaf growth.
- Watering requirements are greatly dependent on soil type, season, geography and other factors
- Ensure irrigation systems are working properly and covering all areas covered by Discovery
- Make routine observations of the landscape and learn the signs (i.e. wilting) that indicate when irrigation is required
- Shaded areas and heavy soils require less water than full-sun areas and sandy soils
- Encourage deep root growth by watering until the soil is moist to a depth of 3", shallow watering encourages shallow roots
- Infrequent deep watering maximizes drought resistance and tolerance
- As a general rule, Discovery should receive ¾-1" of water once a week from irrigation or rainfall

**Fertility:** Proper fertility practices will encourage healthy, disease and insect free Discovery:

- Perform soil tests to understand your soil type(s) and condition and best determine your specific fertility needs
- Make routine observations and fertilize according to what the landscape tells you

- Understand what and how much fertilizer you are applying
- Avoid disease and insect inducing growth flushes by reducing Nitrogen rates
- Improve color and limit growth surges by utilizing iron sources
- Use 1lb of Nitrogen per 1000 square feet every 45-60 days during the active growing season to encourage density and growth of Discovery.
- Apply lower rates of Nitrogen in the fall
- Try to use a 1-0-1 ratio, such as a 15-0-15 each time you fertilize during the active growing season of Discovery.
- Never cut more than 1/3 of the total length of the blade at any one mowing
- If a scheduled mowing is missed and clippings clump on top of the Discovery, bag or vacuum clippings to reduce shade-out
- Vertical mowing (verticutting) may be performed to renovate Discovery

