The fast growing and expanding turfgrass industry has prompted a broad area of turfgrass research and generated a large volume of information on in-depth understanding of turfgrass management and physiology. This handbook is an up-to-date collection of contributions from the most competent experts in turfgrass science.

This well written book is comprehensive and divided into nine sections. Section I begins with responses to questions raised in a survey on golf course turf variety selection and maintenance in 14 southern states of the United States.

Sections II, III, and V cover turfgrass breeding, genetics, biotechnology and various aspects of management and cultural practices, with Section III focusing on sports-turf management. Various weed management practices (mechanical, cultural, biological, and chemical practices) are examined in details in Chapters 4 and 5 of Section II. While Chapter 7 of Section II focuses on warm-season (tropical) turfgrass management, chapter 8 of this section focuses on planting, management, and harvest of turfgrass for sod production.

Sections VI, VII and VIII discuss turfgrass management with respect to pest control under various pest, disease, pathology, and other environmental stress conditions. Section VI covers integrated pest management practices for turfgrasses and plant-parasitic nematodes, while section VII deals with turfgrass under various environmental stress conditions, including soil, salinity, water, temperature, light, and low-oxygen stress. Salinity, especially salinity associated with use of recycled wastewater, is a common problem for turfgrass management addressed in chapters 24 through 26 of section VIII. Shade stress is another relatively common problem on golf courses, and it is addressed in chapter 28 of the same section. Chapter 32 of this section describes how to identify various turfgrass stresses using the spectral reflective method.

The last section, section IX, explores potential issues, benefits, characteristics, and management of future turfgrass. Sections VI, VII and VIII discuss turfgrass management and physiology. It also addresses concerns that a turfgrass researcher, golf course superintendent, and landscape manager may encounter in his/her work. Sections VI, VII and VIII address both theoretical and practical aspects of turfgrass management and physiology and should be a good source of reference for the above-mentioned individuals to improve their knowledge of turfgrass science.