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| **INTRODUCTION continued**  **BENTGRASS**  Bentgrass (Agrostis) is a large genus with over 100 species. It flourishes throughout the New England states and the Pacific Northwest, where climate conditions are ideal for bentgrass. This species of grasses are primarily used for lawns, athletic fields and golf courses. This grass is common in Europe and Asia as it is commonly found in lawns, pastures, and sports fields (Agrostis #20).  **BENTGRASS: Creeping Bentgrass Description**  Creeping Bentgrass (*Agrostis palustris*) is a cold season grass that forms a dense mat. The grass spreads to profuse creeping stems and possesses rather vigorous shadow roots. Stems (stolons) are creeping and slender, and produce long, narrow leafs. Leaf blades are smooth on the upper surface and rigid on the underside, 1 � 3 mm wide and bluish green in appearance. The ligule is long, membranous, finely toothed, or entire and rounded, auricles are absent. The species are characterized by single, flowered, spikelets in a compact panicle. The panicle in flower is purple to bronze in appearance. Seeds of creeping bentgrass are too small to be identified without a magnifying glass. Seeds are oval in shape and less than 1 mm long. They are usually silver in appearance (Bentgrass, #18).  **BENTGRASS: Spiked Bentgrass Description**  Spiked Bentgrass (*Agrostis exarata*) has many forms. Some are tall, some are short, but ordinarily, they are usually 30-60 cm tall. They have flat blades, which are always dense, but vary in length and thickness. They are native on rather moist soil, and in various habitats and plan associations. This grass is perhaps best developed in the mountains and along the north coast. The species, with it�s many forms, occurs throughout the western half of the U.S. as far north as Canada and Alaska, and as far south into Mexico. Spike bentgrass is particularly abundant along streams, in or about meadows, moist slopes, or moist clearings in the forest. The green foliage and soft seed head are used by grazing animals in the mountains during most of the summer. Though excessive or too close grazing may drastically reduce the density of the grass. On disturbed soils, the grass soon forms a good stand, but over many years, diminishes because of competition between other plants (Bentgrass, #18).  **BENTGRASS: Pacific Bentgrass**  Pacific Bentgrass (*Agrostis avenacea*) can get to 30-60 cm tall. The blades can be 3 to 8 mm wide. It tends to behave as a tumble weed. Introduced from Australia, naturalized mostly in the central valley, but extending into the surrounding foothills, delta region, and around the San Francisco Bay. Pacific Bentgrass occurs abundantly in old rice fields or pastures or marshlands. By late spring, it has widely dispersed its airy wind transported panicles, while pile up in ditches and fences conspicuously (Agrostis, #20).  **BENTGRASS: Adaptation and Use**  Bentgrass is adapted to cool, humid environments such as those found in the northeastern United States. Cold, nighttime temperatures are particularly advantageous to bentgrass. In the south, high daytime temperatures together with warm, nighttime temperatures create highly adverse conditions for bentgrass. During the summer months in the south, carbohydrate reserves are depleted in bentgrass and the turf becomes susceptible to additional stress: drought, shade, insects, or disease. As a result, the only use of bentgrass in the south is for golf greens, where small acreage allows for intense management. In the south, bentgrass is best adapted to the transition zone where cooler temperatures prevail (Agrostis, #20). But even in this area, special attention needs to be given for soil preparation, water management, air circulation, shade, exposure, and other factors.  **BENTGRASS: Preparation**  In the case of bentgrass, particular attention needs to be given to seed bed preparation. Well drained soil mixtures are essential for growing bentgrass in the south. Highly permeable mixtures of sand and organic adjustments placed over a drainage system are commonly used for a bentgrass green. Frequent fertilization is helpful to establish a cover of bentgrass. Early fall is the best time to see bentgrass. Spring planting dates do not allow adequate growing time for plants to mature prior to summer stress.  **BENTGRASS: Management**  Management and frequent observation are keys to the success of bentgrass. Watering, fertilization, mowing, cultivation, and pests must be closely managed to keep the bentgrass green. Water must be closely managed to meet the moisture needs of the grass. Water also serves to monitor the temperature during heat stressed periods. To control insect and disease level, frequent surveillance needs to take place. If worms and crickets are found, the grass needs to be treated immediately (Agrostis, #20).  ([BACK](http://docs.google.com/introduction.html))([Abstract](http://docs.google.com/abstract.html))([Acknowledgements](http://docs.google.com/acknowledgements.html))  [[Home](http://docs.google.com/home.html)][[Introduction](http://docs.google.com/introduction.html)][[Hypothesis](http://docs.google.com/hypothesis.html)][[Procedure](http://docs.google.com/procedure.html)][[Data](http://docs.google.com/data.html)][[Conclusions](http://docs.google.com/conclusions.html)][[Bilio/Links](http://docs.google.com/biblio.html)]  [[2001 Projects](http://docs.google.com/index.html)][[2000 Projects](http://docs.google.com/AP2000/index.html)][[1999 Projects](http://docs.google.com/AP99/index.html)][[1998 Projects](http://docs.google.com/AP98/index.html)] |