TURFGRASS CULTIVARS RECOMMENDATION FOR MICHIGAN Suleiman Bughrara Department of Crop and Soil Sciences Michigan State University

The new generation of improved turfgrass cultivars is well recognized throughout cool, humid regions of the country for their part in lowering maintenance costs and increased quality and persistence of the turf.

It was estimated that about 50 percent of the turfgrass quality is likely to be genetic and 50 percent cultural practices. No turfgrass is ever any better than the genetic potential of the seed that are planted. However, this does not guarantee that the potential will be realized under existing soil and climatic conditions.

Turfgrass cultivars are generally developed from grass types that have a so called wide genetic base. That is, some individual plants may be resistance to a specific disease and others are susceptible. Some may have shade and close mowing tolerance and others may not. However, the turfgrass breeders tried to develop turfgrass cultivars to improve disease or insects resistance, vigorous growth characteristics to compete with weeds, or more tolerance to heat and drought. Whether or not their desirable traits are expressed in turfgrass cultivars depends on how the turfgrass cultivar is managed. Cultural practices such as mowing, watering, fertilizing, soil aerification, thatch, or shade management can produce undesirable turf when executed improperly for a given cultivar, blend, or mixture of grasses. Close to 50 percent of the time turf failures can be traced to poorly executed cultural practices. The other 50 percent of the time the genetic potential wasn't there to begin with.

THE WRONG CULTIVAR WAS SELECTED FOR EXISTING CONDITIONS

The performance of bentgrass, Kentucky bluegrass, tall fescue, perennial ryegrass and fine fescue at Michigan State will be discussed.