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Fine Fescue Variety Trial

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The fescues are a large genus of which several are well adapted as turfgrasses. Of these, there consists a group that is classified by their leaf texture as being the fine fescues. Here at MSU, we are conducting field trials of sixty fine fescues submitted by the National Turfgrass Evaluation Program (NTEP). This organization headquartered in Beltsville, Maryland, administers field testing of all the major types of turfgrasses. Their activities include the following: charging the participating seed companies a fee for each entry, selecting various sites across the country that represent a wide range of climates, dictating the establishment and management protocols, analyzing the data, and publishing the results. Here at the Hancock Center we are also testing bentgrasses, Kentucky bluegrasses, buffalograsses, perennial ryegrasses, and turf-type tall-fescues. We are responsible for establishing and maintaining the trials, as well as, rating regularly each plot for visual turfgrass quality. If pests are detected, we may also rate their severity.

The fine-fescue plots were established in the Spring of 1994 and contain the following types: strong creeping red fescue (Festuca rubra ssp. *rubra*), slender creeping red fescue (Festuca rubra ssp. *trichophylla*), chewings fescue (Festuca rubra ssp. *commutata*), hard fescue (Festuca *longifolia*), and sheeps fescue (Festuca ovina). The seeding rate for each plot was 4.5 lbs per 1,000 square feet (M). We applied a total of five pounds of N/M the first year, and so far this year we have applied two lbs. Postemergence broadleaved herbicides were used each year, and a fungicide was applied during year one to control pythium. The area is mowed as needed to remove not more than 40% of the leaves and clippings are returned. The height-of-cut is three inches. We irrigate as needed to avoid visual wilt. Although fine fescues are often touted as low-maintenance, shade tolerant turfgrasses, we are conducting these trials under intensive management practices in full sun.

In this climate and these growing conditions, less than one-third of the entries are meeting minimum visual-quality standards as acceptable turfgrasses, and none are performing very well. The major problems are their low densities and lack of persistence that results in many openings to bare-ground. Because of this, they have not competed well against weeds, particularly broadleaves and annual bluegrass. Generally, the red fescues have performed the best, followed in order by chewings, hard, and sheeps. However, the red fescues all have a paler green color than the other groups. Touted as good low-maintenance grasses, many of the hard fescues have performed well in independent tests at other sites, particularly Penn State under infrequent mowing with no irrigation and low fertility. Under more intensive growing conditions in our climate, their performance has been disappointing.