



# HARD FESCUE

## *Festuca brevipila* (Tracey)

Plant Symbol = FEBR7

### Alternative Names

*Festuca trachyphylla* (Hack)

### Description

**General:** Grass family (Poaceae). Hard fescue is a cool-season, medium tall, long-lived perennial bunchgrass native to Europe. It is semi-erect with densely tufted basal leaves that are coarse and long. Plants can grow 6-30 inches tall. Closely related to sheep fescue, hard fescue is more drought tolerant than native sheep fescue but is not as hardy due to its low seedling vigor. Hard fescue is an abundant seed and root producer.

**Distribution:** Hard fescue has become widely naturalized beyond Europe. It has naturalized throughout temperate hardiness zones 4-9 (Roché et al., 2007). In North America, observations include nearly all eastern states, most western states, and throughout Canada (Beard, 1973). For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site.

**Habitat:** It is found in open forests and forest edge habitats in its native Europe. In areas where hard fescue is naturalized it is commonly found on roadsides, disturbed areas, and ski slopes (Roché et al., 2007).

### Adaptation

Hard fescue is best adapted to areas that receive 12 inches or more of precipitation with well-drained medium to fine textured soils. It does not tolerate saturated or saline-alkaline soils and performs best at a pH of 5-6. It is somewhat shade tolerant, does well on low fertility sites and has good drought tolerance (Schwendiman, 1964).

### Uses

**Erosion control/reclamation:** Hard fescue is primarily used for soil stabilization on roadsides, ditch banks, airports, and ski trails; as a cover crop within orchards and vineyards; or to revegetate retired cropland (Plant Science Handbook, 1971). It provides erosion protection in forested areas after a burn (Plant Sciences Handbook, 1971). The dense, extensive root system is ideal for stabilizing disturbed soils and can contribute large quantities of organic matter.

**Lawn/Turf:** In higher rainfall zones, hard fescue is sometimes used in turfgrass mixtures and in arid climates, as a low maintenance lawn species. Along with other fine fescue species, hard fescue is used in sites where low maintenance species are required such as parks, poor growing conditions, and rough areas on golf courses. Heavy foot traffic and frequent mowing reduces longevity (Reiter et al., 2022) but the numerous dense, tough leaves make mowing difficult.

**Grazing/Rangeland:** Hard fescue can be used for grazing, but cattle do not prefer it when more palatable grasses are available (Hafenrichter, 1968). When grown with alfalfa or clover hay yield is not reduced (Hafenrichter, 1968).

**Weed control:** Established stands of hard fescue are excellent weed control barriers due to the dense root system. Although hard fescue is quite competitive against weeds in a pure stand, it also does well in mixes with other desirable species without being over-competitive (Hafenrichter, 1968)



Hard fescue plants. Photo credit: Dave Skinner USDA-NRCS Pullman, Washington Plant Materials Center.

## **Status**

Please consult the PLANTS Web site (<http://plants.usda.gov/>) and your state's Department of Natural Resources for this plant's current status (e.g., threatened or endangered species, state noxious status, and wetland indicator values).

## **Planting Guidelines**

A firm, moist, weed-free seedbed is essential to establishment. Germinating seedlings are highly susceptible to soil crusting so early spring plantings are critical. In drylands, seeding should be done as early in spring as possible to avoid seedling mortality from soil crusting. Fall seeding is possible, but not as successful. Hard fescue should be planted with a drill  $\frac{1}{4}$  to  $\frac{1}{2}$  inch deep at 3-6 pounds Pure Live Seed (PLS) per acre. Although not as successful, broadcast seeding at 10 pounds PLS per acre followed by harrowing or raking may be necessary on sites too rough to drill.

## **Management**

New seedlings need protection from traffic or grazing during the first year. If irrigated, seedlings should be watered every 4 to 7 days until grass is well established. Successful stands are dependent upon adequate moisture near the soil surface until the root system is well established. Weed control is especially important during establishment. Fertilization is not recommended in the establishment year to avoid stimulation of weed growth. Weeds may be controlled by mowing or spraying prior to seed set. Once established, hard fescue is an effective barrier against invading weeds. After establishment, maintenance applications of fertilizer, based on soil test results, may be necessary to avoid stressed stands.

## **Pests and Potential Problems**

Hard fescue is more tolerant of diseases compared to other fine fescues. However, some incidences of leaf spot, dollar spot, summer patch, and red thread have been recorded with certain cultivars of hard fescue (Ruemmele et al., 2003). No serious insect problems have been observed.

## **Control**

As with most plant species, under ideal environmental and climatic conditions, hard fescue has the potential to spread into adjoining vegetative communities. If control is necessary, please contact your local agricultural extension specialist or county weed specialist to learn what works best in your area and how to use it safely. Always read label and safety instructions for each control method.

## **Seeds and Plant Production**

Row spacing of 30 to 36 inches is recommended. Seed production fields should be fertilized with up to 20 pounds of nitrogen fertilizer per acre at establishment. It is important to keep the planting as weed free as possible. Direct combine the seed at dough stage to harvest. Seed yield of hard fescue can average 600,000 seeds per pound. In the fall, side dress established stands with 40 pounds of nitrogen fertilizer per acre to ensure the quality of the stand and seed production.

## **Cultivars, Improved, and Selected Materials (and area of origin)**

Over 90 cultivars of hard fescue have been released as of 2024, some of which are Plant Variety Protected. Many of these varieties are for turf and lawn use. Seeds can be obtained from commercial seed suppliers.

'Durar' hard fescue was released in 1949 by the USDA NRCS Pullman Plant Materials Center and Agricultural Experimental Stations in Pullman, Washington and Moscow, Idaho. It was developed by re-selection of seed collected at the Eastern Oregon Livestock Experiment Station at Union, Oregon. The name is to identify it as a durable grass. It is highly drought tolerant with long-lived stands. It can withstand heavy traffic and moderate compaction. It produces a tremendous root system which produces more biomass than the above-ground growth.

Cultivars should be selected based on the local climate, resistance to local pests, and intended use. Consult with your local land grant university, local extension, or local USDA NRCS office for recommendations on adapted cultivars for use in your area.

## **Literature Cited**

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### **Citation**

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