Weeping lovegrass

Eragrostis curvula = Eragrostis curvula var. conferta = Eragrostis curvula var. curvula = Eragrostis robusta = Eragrostis chloromelas

Weeping lovegrass is frequently used along roadsides in Mid-Atlantic States but is currently not planted in Maryland. The species establishes rapidly, produces a deep root system that is important for erosion control and bank stabilization, and it is resilient to most roadside conditions. Unlike its native cousin, purple lovegrass, weeping lovegrass is commercially available at reasonable cost. Weeping lovegrass, is rated as Good to Excellent (grade = B+) owing to several management concerns:





Weeping lovegrass is sensitive to cold temperatures but can survive as an annual. It is not recommended for use in Western Maryland.



Weeping lovegrass includes several cultivars that are commercially available. Their suitability in Maryland is unknown.

<u>Biology:</u> Weeping lovegrass is a commercially available perennial warm season grass that was introduced in 1935 into the United States from East Africa. Weeping lovegrass is commonly used in West Virginia (Rentch et al. 2005), Virginia, and Pennsylvania (Landschoot *pers. communication*) along highway corridors. It is also commonly found along roads, fencerows, and railroads in Missouri (Missouri Botanical Garden) and Illinois (Illinois plant information network). In Maryland, weeping lovegrass has been documented to occur in 7 counties of Central and southern Maryland, including the Eastern Shore (Maryland Biodiversity Project).

Seeds per pound: 1,482,000 seeds per pound Cost per pound: \$8.00 per pound from Chesapeake Valley Seed and Ernst **Conservation Seed** *Cost per acre:* \$24.00 per acre Suggested sowing rate: 3 pounds per acre (Chesapeake Valley Seed) Sowing depth: Seeds should not be covered; germination percentage decreases with soil depth between 1-4 cm (Qing et al. 2013). Germination time: 14-21 days Seeding timing: Seed in mid- to late spring Length of growing season: early spring to late fall (Heuze et al. 2015) *Leaf height:* 19.5 inches (Heuze et al. 2015) *Height at seed head stage:* 4-6 feet (Heuze et al. 2015) *Shade tolerance:* prefers full sun but can tolerate partial shade *Suggested mowing height:* unknown Tolerance of wet conditions: requires well drained soils Humidity tolerance: adapted to the humid climate of eastern United States Disease resistance: no serious disease or insect problems

Services:

Commercial availability and cost: Weeping lovegrass is commercially available at a price that is lower than upland bentgrass. Weeping lovegrass is an affordable species to plant over large areas.

Rate of establishment: Weeping lovegrass establishes readily from seed (USDA Plant Fact Sheet).

Ease of maintenance: Weeping lovegrass produces taller plants than purple lovegrass but can still be considered a low-maintenance grass.

Erosion control: The root system of weeping lovegrass is fibrous as well as deep.

Ecosystem benefits: Weeping lovegrass can be important ground cover in areas where conditions are too stressful for other species to thrive. The foliage turns a red-bronze in the fall, and the plumage produces a purplish haze in the summer. In 2012, the US Forest Service added weeping lovegrass to the Southern Research Station Forest Inventory and Analysis Manual SRS-FIA manual (version 6.0) as an invasive species. Owing to its abundant seed production that can spread into disturbed areas, it is considered a serious weed in most areas of Australia (Heuze et al. 2015). Thus, it is a highly successful species in southern locations to the extent that it can become invasive to neighboring native ecosystems. This may not be as much of an issue in northern states owing to an intolerance of weeping lovegrass to cold temperatures that cause mortality in plants and effectively change weeping lovegrass into an annual species that reseeds itself every year (USDA plant fact sheet).

G <u>Resilience</u>:

Drought: Weeping lovegrass is drought and heat tolerant (Heuze et al. 2015).

Low fertility: Weeping lovegrass thrives on soils of low fertility (Heuze et al. 2015).

Freezing: Weeping lovegrass is susceptible to cold winter temperatures, which will prevent regrowth and force plants to re-establish from seeds (USDA Plant Fact Sheet). It can grow from sea level to 3,500 m (Heuze et al. 2015).

Salinity: Weeping lovegrass thrives along roadsides that receive salt.

Acidity: Weeping lovegrass has a pH range from 4.6 to 7.8 but prefers neutral to basic soils (Heuze et al. 2015).

Wear tolerance: Weeping lovegrass can be grazed and mown regularly (Heuze et al. 2015).

Competition: Weeping lovegrass formed a dominant part of the plant canopy during the first year of establishment but cover in the second and third year decreased due to competition with other species (Punshon et al. 2002).

<u>Mixes</u>: Weeping lovegrass grows in colonies and can be used alone in mass plantings or mixed with other species.

<u>Cultivars</u>: Weeping lovegrass cultivars include 'A-67', 'Ermelo' and 'Morpa'.