

WEEPING LOVEGRASS FOR VEGETATING WATER CHANNELS^{1,2}

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Weeping lovegrass (*Eragrostis curvula*) is an exceptional plant for re-grassing eroded and abandoned (Staten and Elwell 1944) land throughout most of Oklahoma. The increasing popularity of this grass is arousing great interest for its use in good conservation farming. One of the uses often discussed is its value for protecting waterways.

EXPERIMENTAL

Several broad flat water channels on the Wheatland Conservation Experiment Station, Cherokee, Oklahoma, were seeded to weeping lovegrass in the spring of 1942. Two channels of this grass (Fig. 1) are also being observed on cooperators' farms in the Cottonwood Creek Soil Conservation District near Guthrie, Oklahoma. In addition, the hydraulic characteristics of weeping lovegrass in water channels have been studied (Cox and Palmer, MS) in the hydraulic laboratory near Stillwater, Oklahoma.

RESULTS AND DISCUSSION

Weeping lovegrass is easy to establish from both seed and sod and is adapted to a wide range of soil conditions. It has produced a good stand and on soils with average fertility made a growth of 6 to 8 inches in two months. Therefore, this grass is being used successfully for water channels on land slopes of 6 percent or less. The best seeding period is in April or May. Pure viable seed sown at 2 to 2.5 pounds per acre has produced excellent stands. Sodding has been very useful for repairing breaks that occasionally occur in the channel cover. However, this method was not as satisfactory for the initial planting as seed.

Like many of the other bunch grasses, weeping lovegrass does not survive excessive silting. To prevent damage from silting the grass may also be seeded along the berm and at places where runoff water enters the channel. As water from the land moves through the border strips most of the soil is deposited. Such border-strip areas can be tilled and the silt removed. This is an important part of channel maintenance.

Systematic mowing or grazing is a desirable practice for maintaining a close uniform stand. The grass will provide better channel protection if it is kept at a height of about 6 to 8 inches. It should not be burned nor the channel used for a roadway.

LITERATURE CITED

- Cox, M. B., and V. J. Palmer. MS. Results of tests on vegetated waterways. Tech. Bull., Okla. A. and M. Coll. (In press.)
Staten, H. W., and Elwell, H. M., 1944. Weeping lovegrass in Oklahoma. Bull. Okla. Expt. Sta. 281.

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²Paper read at the meeting (Dec. 7, 1946) of the Academy by Mr. Maurice B. Cox.



Fig. 1. Weeping lovegrass produced an excellent cover in a broad flat water channel on a cooperator's farm in the Soil Conservation District near Guthrie, Oklahoma.