

# TECHNICAL NOTES

U.S. DEPARTMENT OF AGRICULTURE

Portland, Oregon

SOIL CONSERVATION SERVICE

AGRONOMY TECHNICAL NOTE NO. 56

November 1986

## CONSERVATION RESERVE PROGRAM (CRP) SEEDING FIELDS TREATED WITH GLEAN

CRP permanent cover seedings on fields treated with Glean may result in failure to establish adequate cover for erosion protection. Since CRP seedings will not be used for production our main concern is with injury to grasses and legumes.

It is inconsistent with the Glean label to plant crops in rotation other than wheat, barley, and spring oats.

### Quotes from the Glean label:

"The season before planting other crops, a successful field bioassay must be completed. This means growing to maturity a test strip of the crop(s) intended for production the following year."

"At soil pH of 6.5, or lower, a 24 month interval or more may be required before completion of a successful field bioassay."

"At soil pH of 6.6 to 7.5, a 36 to 48 month or longer interval may be required."

"Glean should not be used on soils higher than pH 7.5 - ---."

"Do not apply to wheat, spring oats, or barley undersown with legumes and grasses as injury to the forages will result."

Glean applied preemergence or postemergence gives excellent control on a broad spectrum of broadleaf plants. Legumes are in this spectrum.

Dr. Dick Comes, Research Agronomist, ARS, Prosser Washington carried out preliminary research on Glean and grass production. Test plots were seeded Oct 12, 1984, and sprayed with 3/8 ounces/acre Glean on Nov 15, 1984. Evaluations were made July 2, 1985. See Table 1.

CRP mixtures of wheatgrass, fescues, legumes or bluegrass are used to obtain cover in low rainfall areas of Eastern Oregon. Simular mixtures are also used in Western Oregon along with ryegrasses. Annual ryegrass is listed as one of the weeds suppressed by Glean. When Glean has been applied within the above specified time, fescues, some ryegrasses, bluegrasses and legumes probably will not grow. Production of wheatgrasses is questionable, with some species having more tolerance for Glean.

Fields treated with Glean may need to be seeded to a grain cover crop until the Glean has broken down. Note: grain cover crops must be destroyed before hard dough or with ASCS permission may be left for wildlife. Check with ASCS.

Controlling erosion on fields proposed for CRP that have been sprayed with Glean will be discussed with the farmer and ASCS. They should be made aware that a grain cover crop may have to be grown for **one to three** years depending on the Glean application and soil pH, when adequate residue is not present. Also that a bioassay planting of desired CRP grasses and/or legumes may be needed.

Table 1

## PROSSER TEST PLOTS\*1

<b>Grass</b>	<b>Percent cover check plots</b>	<b>Glean plots as % of check</b>
Tegmar intermediate wheatgrass	18.8	86.7
Sherman big <b>bluegrass</b>	7.5	17.3
Slender wheatgrass	38.8	67.8
Ruff crested wheatgrass	56.3	66.7
Nordan crested wheatgrass	50.0	72.6
Fairway crested wheatgrass	53.8	53.5
Streambank wheatgrass	21.3	46.9
<b>Durar hard fescue</b>	<b>11.3</b>	<b>0.0</b>
<b>Covar sheep fescue</b>	<b>2.5</b>	<b>0.0</b>
Critana thickspike wheatgrass	26.3	47.5
Secar bluebunch wheatgrass	21.3	60.1
<b>Canbar Canby bluegrass</b>	<b>0.5</b>	<b>0.0</b>
Siberian wheatgrass	22.5	61.3
Ephriam crested wheatgrass	55.0	77.3

\*1 This is data from one year and one site. Dr. Comes has asked that we not duplicate or publish this list outside of SCS.