

TECHNICAL NOTES

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SOIL CONSERVATION SERVICE

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MULCHES FOR EROSION CONTROL ON CRITICAL AREAS

Robert Tresler, Conservation Agronomist in Wyoming has issued a technical note on mulches for erosion control that contains tabular data supplementing that given in California Technical Note Agronomy 22, September 1971.

Mr. Tresler's table uses data from research at Lincoln, Nebraska by ARS, Nebraska AES, Nebraska Bureau of Roads and U.S. Bureau of Public Roads cooperating. It gives the relative effectiveness of various mulches as tested under Nebraska conditions.

The table is reproduced on the reverse side of this note.

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State Conservation Agronomist

Mulch Treatment	Percent Soil Moisture	Maximum Soil Temperature Fahrenheit	Percent Turf Cover	Erosion Tons/Acre
Excelsior mat	28.0	82.0	66.7	0.53
Wood excelsior covered with large mesh kraft netting.				
Prairie hay and asphalt	25.0	86.8	59.2	1.04
One ton prairie hay plus 150 gallons 1:5 asphalt dilution.				
Prairie hay and netting	24.9	85.0	64.2	3.59
One ton prairie hay anchored with twisted kraft netting.				
Asphalt	24.9	101.5	5.2	1.23
1,200 gallons of an emulsifiable asphalt diluted 1:1 with water.				
Wood chips and asphalt	22.6	89.5	66.7	1.14
Six tons of wood chips with 150 gallons of 1:5 asphalt dilution.				
Jute netting	22.6	89.3	36.7	0.50
Heavily woven jute net with 1.6 by 1.1 yarn count.				
Corncoobs and asphalt	22.0	88.5	66.7	2.23
Five tons ground corncoobs anchored with 150 gallons 1:5 asphalt emulsion.				
Medium paper netting	21.6	89.3	27.5	9.85
Twisted netting with 7 by 4 yarn count.				
Latex	21.4	90.2	14.3	12.66
Emulsifiable material diluted 1:6 - 150 gallons.				
Fiberglass	20.8	91.7	22.5	3.93
1,000 pounds continuous filament applied with compressed air.				
Wood cellulose and asphalt	20.8	93.3	45.8	4.03
1,000 pounds cellulose anchored with 150 gallons 1:5 asphalt emulsion.				
Fiberglass and asphalt	20.5	93.2	25.8	0.67
1,000 pounds fiberglass anchored with 150 gallons 1:5 asphalt emulsion.				
Check (no mulch)	20.4	91.0	18.3	--
Wood cellulose	19.6	90.3	18.3	6.25
Wood cellulose fiber applied as a slurry.				

1/ Taken 30 days after seeding at one-half inch depth.

2/ Taken 30 days after seeding.

3/ On 3:1 slope from three simulated rainstorms.