



# TECHNICAL NOTES

## U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE MICHIGAN

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AGRONOMY #23

SUBJECT: Using Mulch for  
Erosion Control and  
Establishing Vegetation

DATE: January 1985

To: All Offices

From: William Hartman, State Resource Conservationist

### Use of Mulch

Mulch is extremely important for new seedings on slopes, droughty sands, clayey soils, on areas without topsoil and other areas subject to erosion. Apply mulch during spring, summer and early fall (the growing season) to control erosion and encourage quick establishment of vegetative cover.

Mulch during the late fall and winter months to control erosion when seedings cannot be made by the normal fall seeding date.

### Preparation for Mulching

Install conservation practices such as diversions, berms, terraces, outlets, sediment basins, ditches, ponds, grassed waterways and critical area plantings.

Where practical, grade to permit use of conventional equipment for seedbed preparation, seeding, mulch application and anchoring.

Complete lime and fertilizer application and seedbed preparation.

Complete seeding operation (if during the seeding season).

### Selecting Mulch Material

Use mulch consisting of straw or hay. Clean, unweathered, weed free, small grain straw is preferable.

### Applying Mulch

Spread mulch uniformly at a rate of 1½ to 2 tons (air dried weight) per acre with machinery or by hand. To make hand mulching easier, divide the area into sections, each containing 1,000 square feet, and apply 100 lbs. (2 to 3 bales) of straw in each section. Shake out clumps and spread evenly.

### Anchoring Mulch

Anchor mulch by one of the following methods:

1. Asphalt - The following asphalt products may be blown on with the mulch, sprayed or sprinkled on immediately after the mulch is spread. In areas of playing children or pedestrian traffic, asphalt emulsion may result in "tracking in" of homes, damaging shoes, clothing, automobile finishes, etc.

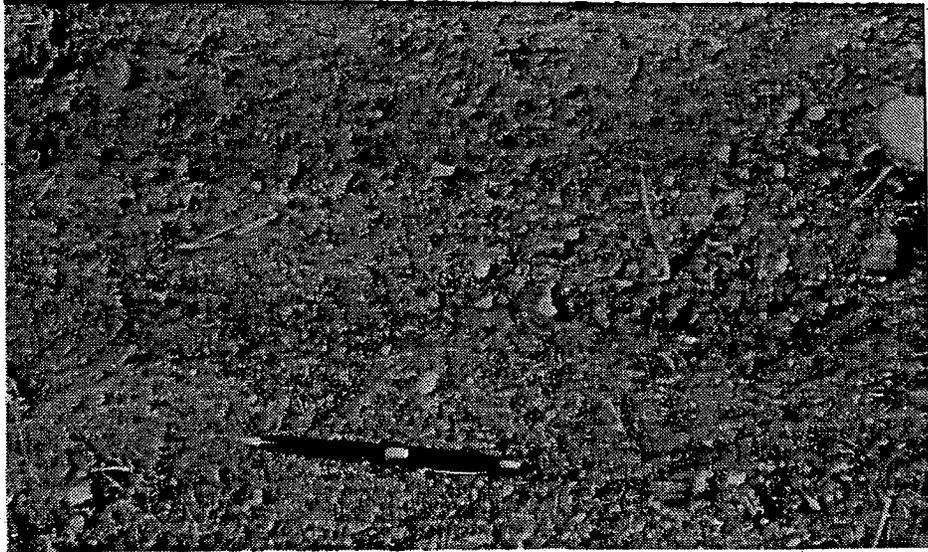
Emulsified asphalt - Rapid Setting (R.S.-1m) or Slow Setting (S.S.-1s or S.S.-1h). Apply 0.04 gallons per square yard or 200 gallons per acre. Emulsified asphalt contains approximately 50 percent water, therefore, it cannot be applied during freezing weather.

Slow Setting (S.S.-1s or S.S.-1h) is formulated for use during dry, hot weather with approximately 24 hours curing time.

2. Mulch Netting - Lightweight materials, properly placed over the mulch and stapled to the ground, will check erosion and reduce displacement of the mulch.
3. Mulch Anchoring Tool - This tool has a series of flat, notched disks. It can be used to punch mulch into the soil on slopes where machinery can travel.
4. Spade - On small areas, cut mulch into the soil by use of a square spade. Work rows on the contour about 18 inches apart.
5. Water - On small areas, such as a lawn, keep mulch material wet by watering as frequently as needed to hold mulch in place.
6. Disk - A regular farm disk weighted, with coulters set nearly straight may be used but it will not do a job comparable to the special mulch anchoring tool. The soil must be moist, free of stones, and loose enough to permit disk penetration to a depth of 3 inches. Work across the channel when seeding and mulching waterways.

Prepared By: Dwight L. Quisenberry  
State Agronomist

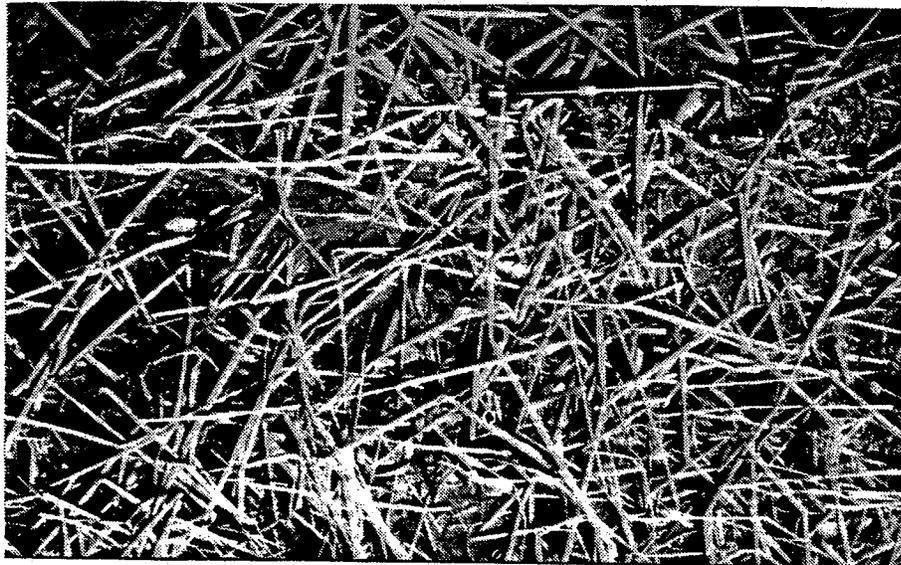
# A PHOTO GUIDE TO MULCH RATES



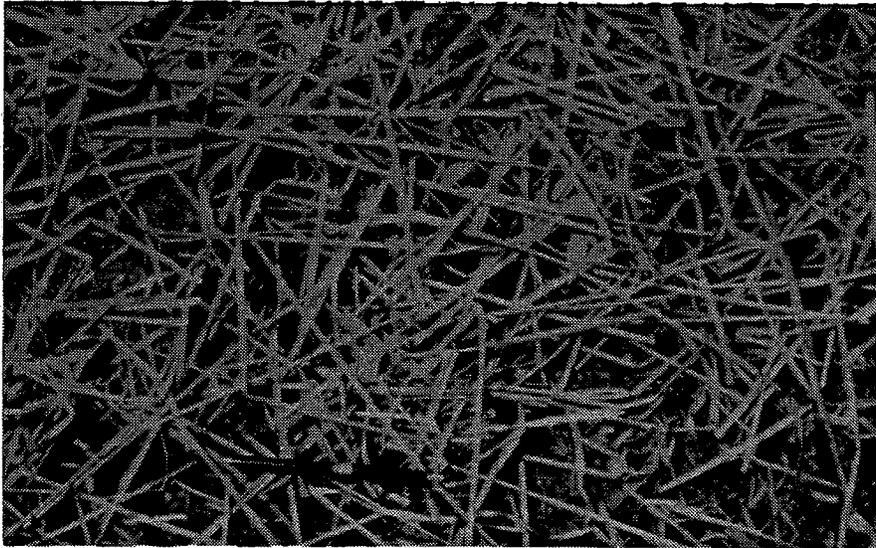
BARE SOIL NO MULCH



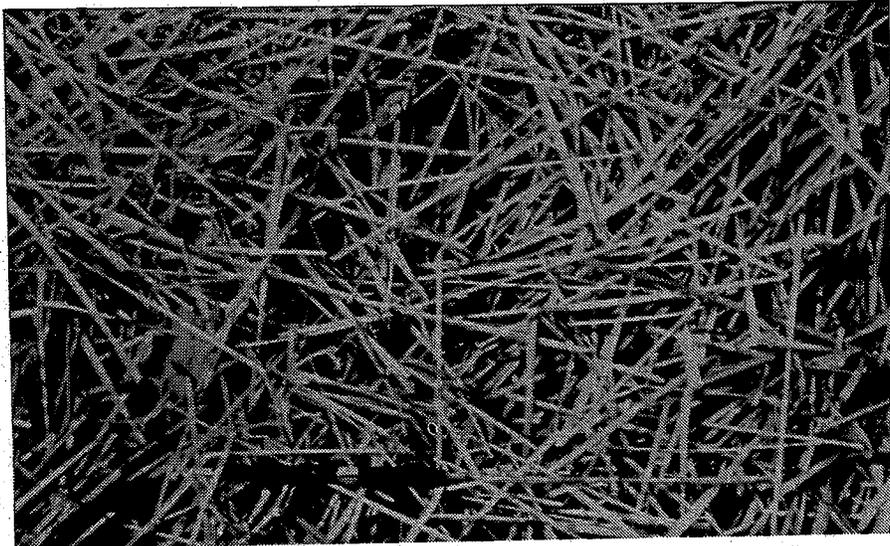
STRAW MULCH AT 1/4 TON PER ACRE



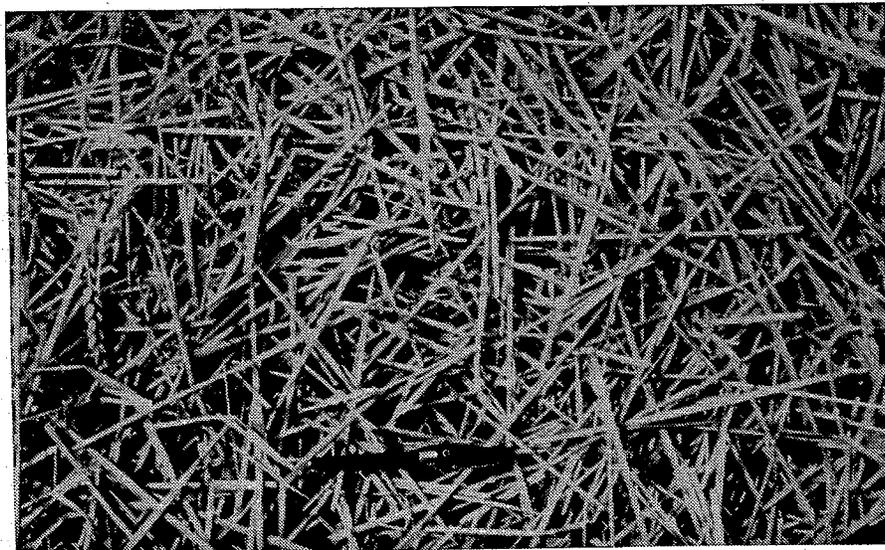
STRAW MULCH AT 1/2 TON PER ACRE



STRAW MULCH AT 1 TON PER ACRE



STRAW MULCH AT 2 TONS PER ACRE



STRAW MULCH AT 4 TONS PER ACRE