

A Review of Agricultural Film Recycling in the US: A Look at the Obstacles and Opportunities



By Gene Jones
Southern Waste Information eXchange, Inc.
Post Office Box 960
Tallahassee, FL 32302
Phone: 1-850-386-6280
Email: gene@swixusa.org







How to Calculate the Volume

- ▶ Ag film mulch:
180 to 220 lbs per
acre/planting
- ▶ Drip tape:
70 - 77 lbs per acre/planting

Example

- ▶ 10,000 acres of Strawberries

Mulch Film: ~ 200 lbs/acre = 2,000,000 lbs

Drip Tape: ~ 75 lbs/acre = 750,000 lbs









Ag Film Stock Piles





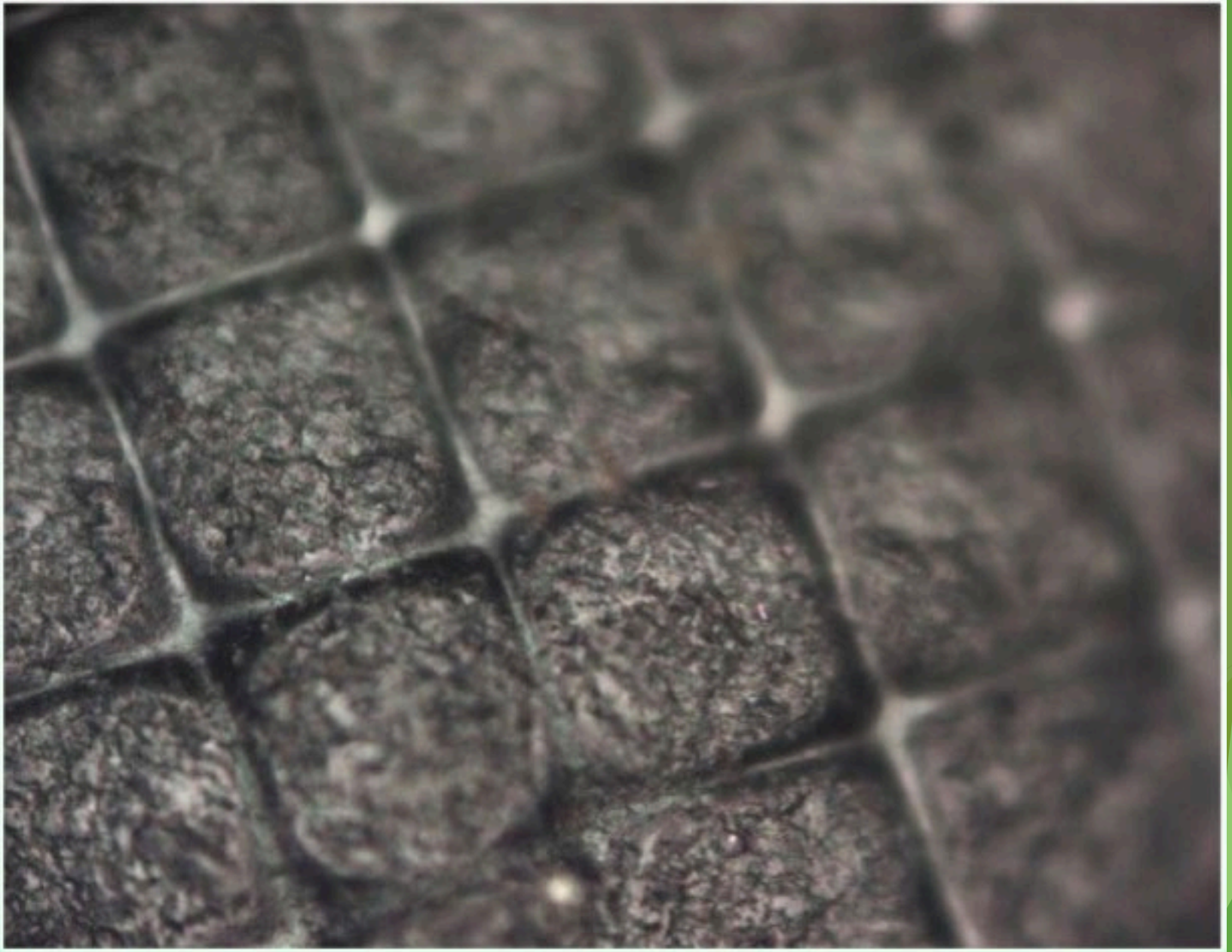


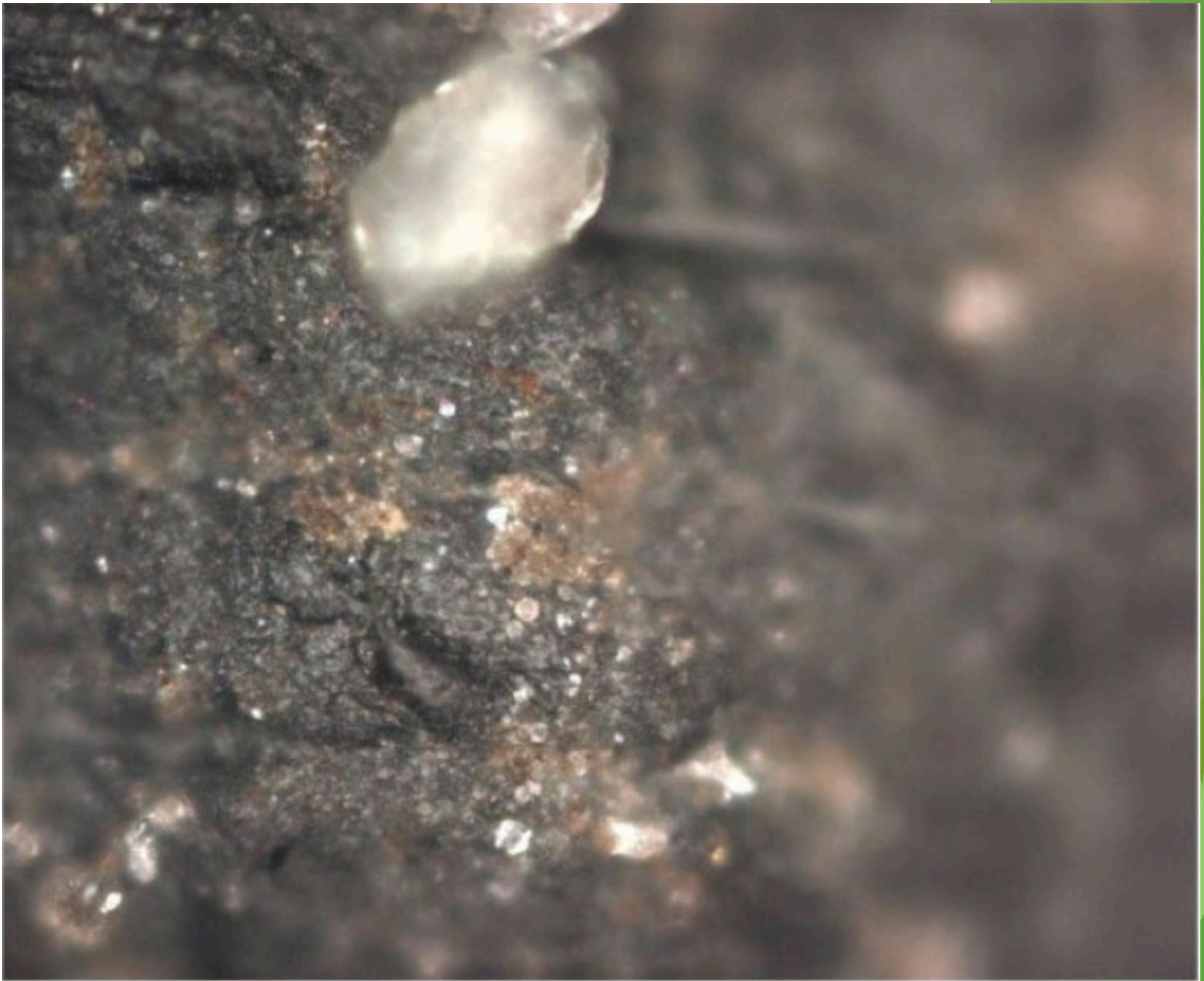
















16.14g

MODE

ON/OFF

TARE









Sink to Clear Flocculant

Sinks debris, dead algae
& large particles to pool floor

Quick vacuum clean up

Clears severe cloudy water



KEEP OUT OF REACH OF CHILDREN
WARNING
FLOCCULANT. MAY BE HARMFUL IF SWALLOWED.
See label for First Aid and additional
safety statements.
Contents: 1 Quart (946 mL)









SOUTHERN WASTE
INFORMATION EXCHANGE





Cuisinart

84.6g

MODE

ON/OFF

TARE



Results

- ▶ Total Sample Weight: 16.14 oz
- ▶ Net Plastic after cleaning 4.16 oz
- ▶ Total Soil and Moisture 11.98 oz 74%
- ▶ Net Plastics 4.16 oz 26%

- ▶ **Contamination Breakdown:**
- ▶ Soil (e.g sand granules) 8.46 oz 71%
- ▶ Soil Micro Dust 1.02 oz 9%
- ▶ Estimated Moisture: 2.5 oz 21%





















Opportunities

- ▶ Alternative Fuel for Cement Industry
- ▶ Plastics to Fuel/Chemical Conversion













Drip Tape Recovery







Drip Tape Contamination Review









Drip Tape Recovery Results

- ▶ Gross Weight: 22.2 lbs
- ▶ Core 1.1 lbs
- ▶ Gross Weight less Core: 21.1 lbs

- ▶ Net Plastic after washing: 18.4 lbs 87%
- ▶ Moisture and Soil Contamination 2.7 lbs 13%

- ▶ Soil/Organics 1.36 lbs 6.4% of Gross Weight less Core
- ▶ Moisture 1.34 lbs 6.4% of Gross Weight less Core

- ▶ Moisture and Soil Contamination 2.70 lbs
- ▶ Soil/Organics 1.36 lbs 50.4% of Moisture and Soil Contamination Total
- ▶ Moisture 1.34 lbs 49.6% of Moisture and Soil Contamination Total



The 6th Agricultural Plastics Recycling Conference & Trade Show

Hyatt Regency Mission Bay Spa & Marina
San Diego, California, USA

August 19-21, 2020

► <https://agplasticconference.com>