

Gulf Conducting Research On 'Time-Pill' Fertilization

A single feeding which could nourish plant growth for several years is being researched by Gulf Oil Corporation's Harmarville, Pa. subsidiary.

This "time-pill" research is known technically as encapsulation, or coating of fertilizers and plant foods. These are suspended in a wax coating with additives for soil distribution in powder, structural and "stick" form. Water gradually releases the nutrient from the coating, so that the plant receives a continuous, "sustained release" feeding.

Gulf scientists envisage encapsulation in all planting activity—timbering, forestry, pesticide and herbicide application, and even in prolonged feeding of aquatic pets.

Gulf scientists examine results of a wax encapsulation experiment for fertilizing and feeding plant life. The nutrients are released gradually as the plant is watered. The beaker in the foreground contains various forms of wax encapsulations.



Weed Society Announces Three Policy Changes

Decisions affecting Weed Science Society of America members were made recently by the Society's executive committee, according to F. W. Slife, business manager.

The decisions include publishing the *Weed Science* journal six times annually instead of four. The anticipated bimonthly schedule is January, March, May, July, September and November. The purpose is to shorten the time between paper submission and printing. The change becomes effective beginning with Volume 17 in 1970.

Page rates will go from \$10 to \$20 per page, effective for all manuscripts submitted on or after Aug. 1. Those who cannot obtain page charge payments approval from their employers are asked to contact Slife.

Also, beginning with 1970, Society membership fees will be raised from \$10 to \$12 per year, and subscription rates will increase to \$15. Graduate student membership fees will remain at \$5.

Insect Report

WTT's compilation of insect problems occurring in turfgrasses, trees, and ornamentals throughout the country.



TURF INSECTS

A BILLBUG

(*Sphenophorus venatus vestitus*)

CALIFORNIA: Adults of this and *Sphenophorus phoenicensis* light in lawn turf at Anaheim, Orange County.

SAY STINK BUG

(*Pitedia sayi*)

NEVADA: Adults medium on range plants, especially *Stanleya* sp., in Clark County.

INSECTS OF ORNAMENTALS

SIX-SPOTTED MITE

(*Eotetranychus sexmaculatus*)

FLORIDA: Eggs and adults moderate on 850 of 1,000 azalea plants at Mango, Hillsborough County.

ARMORED SCALES

CALIFORNIA: *Hemiberlesia lataniae* heavy on evergreen pear on hospital grounds at Santa Maria, Santa Barbara County, and *Aspidiotus nerii* (oleander scale) heavy on *Cycas* sp. nursery stock at San Diego, San Diego County. *Lineaspis cupressi* heavy on juniper nursery stock at Torrance, Los Angeles County.

A WEEVIL

(*Rynchophorus cruentatus*)

FLORIDA: Continues problem on Canary date palm in nursery at Homestead, Dade County; controls used.

TREE INSECTS

A CONIFER APHID

(*Cinara* sp.)

WISCONSIN: Eggs unusually heavy on red pine needles at Western Dane County site.

EASTERN TENT CATERPILLAR

(*Malacosoma americanum*)

OKLAHOMA: Third instars on wild plum in Noble, Payne and Mayes counties. First report of year. MISSOURI: Hatching on wild cherry in Phelps County. OHIO: Hatch expected about Apr. 25. VIRGINIA: On wild cherry in lower Nansemond County.

AN OLETHREUTID MOTH

(*Epinotia subviridis*)

CALIFORNIA: Larvae heavy on cypress trees at Laguna Beach, Orange County.

RED-HEADED PINE SAWFLY

(*Neodiprion lecontei*)

FLORIDA: Outbreaks begun late last fall still continuing at Tennile, Steinhatchee, and Keaton Beach in Taylor County. About 100 acres of 2- to 8-year-old commercial longleaf pines involved. Killed 500 8-year-old trees; damage still being evaluated; defoliation followed by attacks of *Ips* sp. (an engraver beetle) and *Pissodes* sp. (a weevil) in dry weather. *N. lecontei* eggs to fourth instars heavy on more from 600 acres of year-old slash pine. *N. lecontei* and secondary infestations of probably *Pissodes nemorensis* (deodar weevil) killed 1000-year-old slash pines in 1968. Infestations total more than 1000 acres.