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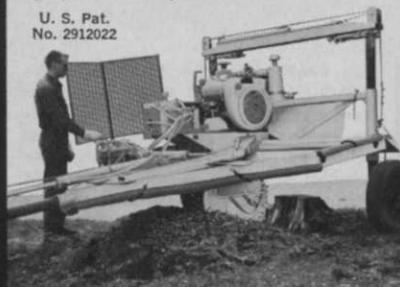


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Hyman Lab Is Site For USFS, UC Research

One of the biggest challenges in the field of research in insecticides, discovery of effective substitutes for DDT and other chemicals, is now getting the joint attention of U. S. Forest Service and University of California scientists at Berkeley.

Leader of an insecticide evaluation project at the USFS Experiment Station in Berkeley, Dr. Arthur D. Moore, announced that USFS has leased lab facilities belonging to Dr. Julius Hyman, president, Hyman Laboratories, 2840 8th St., Berkeley.

Hyman, a chemist who was instrumental in finding and initially developing insecticides commonly referred to as aldrin, endrin, chlordane, and dieldrin, will counsel and work with the 25 Forest Service and some of the 17 UC scientists studying the problem.

Professor of Entomology at UC, Dr. John E. Casida, is directing graduate students and postdoctoral fellows with the University group. Some of the team began work at the Hyman lab early in April. Facilities include six chemical labs, a shop, stockroom library, and a pilot plant for chemical production.

Seek Selective Chemicals

"Our immediate goal," Moore said, "is to develop chemical substitutes for DDT; chemicals that are highly selective against individual species of insects, and those that break down into harmless components without contaminating the environment."

A tree defoliator usually controlled by aerial applications of DDT, the spruce budworm, has already been effectively controlled with Zectran. A carbamate insecticide, Zectran is reported to be effective in small amounts, as little as 2 oz. per acre, and it breaks down in the environment.

Pyrethrum is another insecticide the research group finds promising for control of tree defoliators. It shows extreme toxicity to the insects and is one of the safest insecticides known for control of plant pests. The prob-

lem pyrethrum presents is that it is very unstable in air and sunlight. Dr. Casida believes a synergist may give pyrethrum stability until it reaches the pest, and for a brief period thereafter.

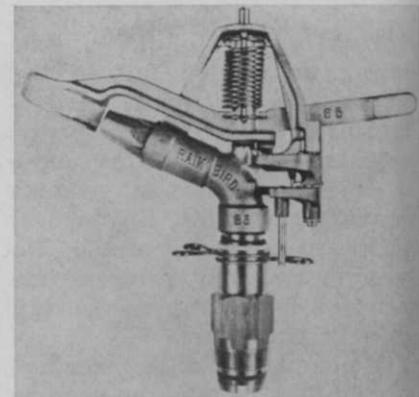
Although the group is concentrating on insecticides for use against forest pests, its basic research will apply to all phases of insect control.

Florida Flood District Sees Growing Weed Control Costs

Sea cows, \$3,000 "Ducks," and \$229,173 spent for weed control last fiscal year are among weed control items covered in Central and Southern Florida Flood Control District's annual report for 1965.

Noting that sea cows (manatees) eat not only aquatic weeds, but even their roots, the publication explains the only problem encountered so far in the district's 3-year study as to feasibility of the animals for weed control is their slow reproduction rate.

Addition of many miles of new canals in the FCD created a need for more equipment. During the year, the district purchased two amphibious vehicles, known to the military as "Ducks," at a cost of just under \$3,000 each. The FCD uses the "Ducks" to tow heavy steel A-frames suspended by cable to the canal bottom for aquatic "plowing." Other measures the district's 20-man crew uses in the battle against weeds



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