spore disease indicates that this bacterial disease causes the death of grubworms. It is most effective against Japanese beetle grubs but will also kill others. The disease, he reports, is sold as Doom or Japidemic. Cost is about $7 per pound, which will treat about 4000 square feet of lawn.

Milky spore disease is available from Fairfax Biological Laboratory, Clinton, Corners, N.Y. (For more information, circle Reader Card No. 717).

Insecticide Formulations Effective For Gypsy Mouth

Three new insecticide formulations have been tested recently for aerial application against gypsy moths at the Connecticut Experiment Station.

They are Dylox, a powder used with oil; Gardona in oil; and Sevin-4-Oil. All proved highly effective according to researchers doing the work.

Dr. Charles C. Doane and Paul W. Schaefer made the field tests in an area heavily infected with gypsy moths. Much of the area had been defoliated the previous year.

Oaks in 50-acre test plots showed about 10 percent defoliation when sprays were applied in late May. After treating, defoliation remained stable at the 10 percent damage level. But defoliation in untreated oaks in control areas sustained 70- to 90-percent defoliation.

Sevin-4-Oil residues proved highly toxic to gypsy moth larvae for at least eight weeks, the researchers said. Those of Dylox and Gardona were not toxic after the first rains.

Birds were not directly affected by the insecticides, according to the researchers, though they did note some normal changes as nesting and territory establishment proceeded following spray applications.

Details of the report are aavilable directly from the Connecticut Agriculutral Experiment Station, New Haven, Conn. 06504. Bulletin number of the report is 724.

Blackburn Reports On Aquatic Weed Symposium

Robert Blackburn, a research specialist in aquatic weed control with the Agricultural Research Service, Ft. Lauderdale, Fla., has just returned from England after attending the Third International Symposium of the Control of Aquatic Weeds.

He reports that interest in this session focused on control of aquatic weeds by biological means and the effect of chemical control procedures on the aquatic environment.

Papers presented on the white amur *(Ctenopharyngodon idella* Val.) emphasized the need for more information on its rate of weed consumption as related to temperature, the conversion of aquatic weeds to fish flesh, and the factors necessary for natural spawning. Stock rates of the fish necessary for weed control will probably vary with the water temperatures. Effect of the white amur on native fish populations is not considered a problem in most areas of the world. Even in England where sport fishing is important, scientists believe the likelihood of the white amur spawning naturally is remote. Cost of producing fish large enough to use for stocking purposes appears the major problem because of the slower growth in the colder climates of the European countries.

Blackburn also reports that considerable interest was shown in the snail marisa *(Marisa cornuarietis)* as a biological control for aquatic vegetation. Effect of low temperatures on survival of the snail and its appetite for rice and watercress would limit its use in many areas of the world. The possibility of breeding a more cold tolerant snail was discussed since the snail can be used for human consumption.

Scientists from Holland, Blackburn says, expressed considerable interest in diuron, ametryne, atrazine, and terbutryn as aquatic herbicides. They have collected considerable information on the residue of these herbicides in soil, water, and fish. Information has also been collected on their effect on plankton, benthos, water quality and fish toxicity. Diuron and terbutryn are the most promising for aquatic weed control in irrigation ditches. Diuron showed large accumulations in fish and bottom muds. For this reason, they are placing greater emphasis on terbutryn.