

Hitting on a wide range of turf problems at the annual Turf Conference, University of Massachusetts, March 7-8, extension agents from that state who addressed the delegates included (left to right): William J. Bennett, Lewis A. Hodgkinson, H. Thurston Handley, Jr., Herbert C. Fordham, and Dominic A. Marini.

Estimate '63 Lawn Pest Infestations At Annual U. of Mass. Turf Conference

Continued Japanese beetle infestation, widespread chinch bug and frit fly injury, and more leaf hoppers — these will be the effects of 1962 weather on this year's incidence of insects on golf turf and home lawns — at least in the New England area.

Speaking at the Annual Turf Conference at the University of Massachusetts, March 7-8, Professor John C. Schread of the Connecticut Agricultural Experiment Station at New Haven, told the more than 500 participants that other factors enter into the picture of forecasting insect abundance.

These include parasites, predators, nematodes, bacteria, protozoa and predatory animals.

"Fertilizing from spring to late summer is necessary. A 'nonburning' type high in nitrogen is best for home gardens. A wellfertilized lawn reduces the re-



Among top turf men from Massachusetts at the Turf Conference were Eliot F. Rogers (left), president of the Massachusetts Turf Council, and J. Richard Beattie, cooperative extension associate director.

quirement for water," said County Extension Agent Lewis Hodgkinson in his talk on maintenance and equipment.

Rolling can be harmful or helpful, but best done in the spring on shallow-rooted lawns such as new lawns or lawns with little topsoil, he added.

"There's no short-cut or cheap way out in establishing a good lawn," declared Prof. Herbert C. Fordham, Massachusetts Extension horticulturist in discussing lawn construction and insect problems. "Drainage, quality of topsoil, insect control and proper watering are the 'plusses' that must go into a good lawn."

"Which Fertilizer to Use?"

William Bennett, regional extension agent in horticulture, told delegates that type of fertilizer to use is a frequent problem facing CAs. "What to use? How much? When?" he asked.

Balance in fertilizing is fundamental for a healthier and denser turf. Each fertilizer is good if used according to its characteristics and within limitations, he continued. Different types of fertilizer include the inorganic sources such as commercial fertilizers, 10-10-10, 5-10-5, etc.; natural organic fertilizers typified by sewage sludge, bean meals; synthetic organic sources such as urea-formaldehyde; and finally, a combination of organic and inorganic such as 10-6-4, 1-5-5 and 8-6-4, Bennett enumerated.

A combination of organic and inorganic sources of fertilizer probably is best for home lawns in general. "Based on 3 lbs. of nitrogen per thousand square feet per year, applied at rate of 1 lb. of nitrogen per application, best times to fertilize would be about April 1, May 15, and September 1," Bennett concluded.

Confusion and ignorance regarding lawn products such as fertilizers, seed, weedkillers, and management practices are the main problems today, Dominic Marini, county extension agent, emphasized in a discussion of weeds and diseases.

In the Cape Cod area, heavy fog and high humidity are conducive to diseases, especially on heavy turf, he noted. Alternating three fungicides at 2 or 3 week intervals usually gives good control. Crabgrass, toadstools, grubs, and beetles are prime offenders in the pest field.

Role of urea-formaldehyde fertilizers (methylene ureas) was discussed by two separate speakers, H. Thurston Handley, Jr., and Herbert C. Fordham. Both extension horticulturists arrived at the same conclusion: ureaform is an excellent nitrogen product that can be applied twice a year to dry turf to supply nitrogen for a growing season without fear of burning. Part of the nitrogen will break down rapidly for quick results and the remainder gradually for long-term feeding of turf.

Labor-management relations, golf course maintenance and problems, land usage, and plantings were other topics covered during the two-day conference.

Chlordane Controls Billbugs

Chlordane, applied at a rate of 2.5 lbs. of actual material per acre, has been found an effective control of merion bluegrass billbugs, scientists at the Ohio Experiment Station, Wooster, report.

Merion bluegrass, a relatively new variety of lawn grass, has been tested in nitrogen fertilization plots at the Station when brown spots were first noticed. Inspection showed the crowns of the plants destroyed by larvae of the bluegrass billbug, an uncommon pest in Ohio.

Dieldrin and heptachlor, when applied at 3 lbs. per acre, were also effective control measures for the billbugs, the turfmen reported.