

be used every month, or during the summer months, perhaps only a nitrogen fertilizer will do the job. If the compost used is high in nitrogen this will supplement the fertilizer so that one or more fertilizations may be omitted. The judgment of the greenkeeper must be used here in deciding just what the green needs. It is just as easy to destroy a green with too much water, fertilizer, and compost, as to harm it by neglect.

He reported a method of destroying weed seed in compost which was worked out by Dr. J. A. DeFrance. This method consists in mixing some source of nitrogen with the compost several months prior to its use. Any of the following materials used at the rates listed below should kill the weed seeds in a cubic yard of compost: Milorganite at 85 lb. per cu. yd.; agrinite at 65 lb.; cyanamid at 15 lb.; or ammonium sulfate at 25 lb. Dr. DeFrance did not test urea. Bell feels, however, that urea used at the same rate as cyanamid would be effective. Be sure the compost is moist enough to allow a thorough reaction between the fertilizer and the weed seed.

The average mixed bent putting green should be composted during April, June and September. If creeping bent predominates an additional composting may be necessary.

Harry Keil, asst. plant pathologist, R. I. State college, handled the topic of disease of turf grasses and their prevention. Keil feels that Thiosan, properly applied as a spray every 10 days during the disease season, should control turf diseases. Some greenkeepers in Rhode Island have not obtained satisfactory control with Thiosan and prefer to use Calo-Clor or other mercury compounds. Keil pointed out that many new organic fungicides were being developed at the experiment station and that some of these would probably turn out to be better than any fungicide used at the present time.

"Further discussion disclosed the fact that continued use of large quantities of fungicides and insecticides which contain poisonous materials such as mercury, lead, and arsenate may eventually cause poisoning of the grass. If satisfactory organic materials toxins can be produced they will be preferable since they will decompose and leave no harmful residues.

Cedric Jennings, entomologist from the State Department of Agriculture, said that arsenate of lead spray used at rate of 1½ pounds in 10 gallons of water to 1000 sq. ft. would control sod webworms and cutworms. The moths of the webworm fly over the greens dropping eggs indiscriminately. The worm is easiest to kill when young, so when the moths start flying around apply the arsenate of lead to the grass foliage, two ap-

plications a week apart will protect grass while eggs are hatching. Experiments are under way to find other insecticides which will effectively control sod webworms.

Jennings expressed the opinion that those courses which are infested with Japanese beetle grubs should apply arsenate of lead at the rate of ten pounds to 1,000 square feet. It is too late to prevent the emergence of this year's crop of beetles but if properly spread and watered it should prevent beetle grub injury for the following five or ten years. The milky white disease method is a slower method since the disease has to be spread from grub to grub.

The chinch bug sucks the juices from grass, causing it to turn brown. The chinch bug is a small insect very hard to see. To discover it take some water having a temperature of 100 degrees F., pour on an area and cover with a newspaper. The chinch bugs will crawl out, if present. Chinch bugs are becoming commoner in Rhode Island. Every course should be prepared to purchase some tobacco dust to use on chinch bug areas. Jennings recommends 25 lb. of tobacco dust to 1,000 sq. ft. of area.

Many questions were asked by the guests and experiences were exchanged. Oscar Chapman, R. I. Greenkeepers Assn. president, and Charles Allen, foreman of the State college and station turf operations, presided at the question and answer session. The meeting seemed highly successful from the point of view of the men from State College since it served to renew contacts with the problems of the state's golf courses. Dr. B. E. Gilbert, vice director of the experiment station and acting head of the agronomy dept. of R. I. State college, emphasized the fact that the services of the State College were free to the people of the state. Soil testing, diagnoses of plant diseases, identification of insect pests, and if needed personal visits from a specialist are available upon request to the Dean or department head. Dr. Gilbert invited the R. I. Golf Assn. and the greenkeepers to come to Kingston, probably in September to meet Mrs. F. F. Davis from the USGA and look over the experimental plots at Kingston and at Point Judith.

GOLF FOR RAF—An appeal has been issued for old golf balls for the use of the Royal Air Force. Golf is officially encouraged in the service, the eyesight of pilots being sharpened by concentration on short-range objects. Constant focusing on distant horizons tends to develop long sight with many pilots, and golf has proved a good corrective.—Golf Monthly, Edinburgh.