# UNITED STATES GOLF ASSOCIATION
# GREEN SECTION EASTERN REGION

NORTHEASTERN DISTRICT
RUTGERS UNIVERSITY
NEW BRUNSWICK, NEW JERSEY

MID-ATLANTIC DISTRICT
PLANT INDUSTRY STATION
BELTSVILLE, MARYLAND

# EASTERN TURFLETTER



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## MORE WINT-CON-CERPTS

RUTGERS

From the address by Dr. C. C. Hamilton, Research Specialist, Entomology Department, Rutgers University.

"The cost of insecticides for controlling turf pests may vary considerably, depending upon the quantity purchased, the percentage of active ingredient in the insecticide as purchased, whether it is in a form ready for application or whether it must be diluted with some inert material before application. The more concentrated the active principle in the insecticide the cheaper the cost per unit of active principle in the insecticide. For example, a 25% granular Heptachlor can be purchased for 40¢ per pound, a 10% granular Heptachlor for 22¢ per pound, a 5% granular for 13½¢ per pound, and a 2½% granular for 11½¢ per pound. On the basis of 100% active Heptachlor which is the basis for recommendations for control, the costs per pound would be $1.60, $2.20, $2.70, and $4.60 respectively. If you use 3 lbs. actual Heptachlor per acre, the costs for materials would be $4.80, $6.60, $8.10, and $13.80 respectively. The 25% granular and the 10% granular should be diluted further with fertilizers or inert materials to bring them to 2½ to 5% materials for easy and uniform application. It may be that including the additional costs of materials, labor for mixing and containers for storing, it will be cheaper and certainly much less bother to purchase materials ready for application."

Ed. note: Often times in the slack season (overwinter generally) fertilizer firms will mix an insecticide of your choice with fertilizer to provide bulk for ease of application. This also has the added advantage of saving labor in the 2 in 1 treatment which provides insect protection and fertilizing in the same application.

PENN STATE

The 28th Annual Conference marked the final turfgrass session presided over by Prof. H. B. Musser, who after 37 years' service is due to retire in July, 1959. Among the many speakers who contributed to a fine program were five of his former students: Dr. Joe Duich, Mr. John Gallagher, Dr. Jack Harper, Mr. Dick Schmidt, and Dr. Jim Watson, names presently well known in the turfgrass field.

Some highlights of Gallagher's address, "Progress in Weed Control" follow:

"As recently as 1949 only 8 chemicals were listed for weed control and soil sterilization in an article by T. C. Ryker in the USGA Journal and Turf Management, July, 1949.

By comparison the 1959 Northeast Weed Research Coordinating Committee reported 50 chemicals were in some stage of field testing; the following problems needed further investigation:

(1) Improved chemical control.
(2) Control of silver crabgrass (Elusine indica).
(3) Pre-emergence (crabgrass) control with October to March applications.
(4) Effectiveness of low lime calcium arsenate long-term toxicity, and effects of granular applications.

Crabgrass and silver crabgrass continue to be the No. 1 turfgrass weed problem. The following materials are currently being recommended:

Post-emergence crabgrass control:

Potassium cyanate (KOCN) 8 - 16 pounds per acre.
Phenyl mercuric acetate (PMA 10%) 5 - 7 pints per acre.
Sodium arsenite 1-1½ pounds per acre.
Disodium methyl arsonate (DMA) 3½ - 8 pounds per acre.
Mono octyl ammonium salt of methyl arsonate (AMA) 3½-8 lbs. per acre.

Pre-emergence controls include:

Lead arsenate, 24 pounds per 1000 sq. ft.
Calcium arsenate, 8 to 12 pounds per 1000 sq. ft.
Chlordane, 60 to 80 pounds per acre." Ed. Note: Refer to Eastern Turfletter, No. 6, Dec., 1958, for recommendations on timing of applications -- reported as a result of Dr. Ralph Engel's work -- a very important factor in pre-emerge treatments.

Note: Heavy applications were reported effective in checking crabgrass but Merion bluegrass, redtop, and Chewings fescue were rather sensitive. Early spring applications are important.

Nitrogen Fertilization Studies conducted at Pennsylvania Experiment Station and summarized by Dr. J. D. Harper II showed the quick-acting inorganic nitrogen, slow-acting organic nitrogens, and the longer-lasting ureaform nitrogens all effective in the development of dense healthy gorwth of grasses when properly managed.

SPRING NOTES

Soils under greens, particularly where drainage is poor, are subject to saturation either from winter thaw or excessive rainfall or both. Surface and subsurface drainage should be checked and remedied where faulty.

If rolling of greens is necessary, it should be done with a light roller. Many superintendents do this with a power mower with cutting reel disengaged, the first time over. Greens are rolled primarily to firm down turf plants and not for the purpose of packing down the surface for smoothness. Sparsely covered greens generally require rolling because the heaving and thawing winter action of soils forces plants out of the soil in thin turf. Dense, full turf cover is less subject to heaving. WINTERIZE YOUR GREENS through good management practices during the growing season and they will be less subject to heaving difficulties during the winter months.

Another thought in somewhat the same vein -- bumpiness of fairways. Some fairways become corrugated and, in effect, get to look like the old fashioned washboard. Corrugated fairways were first noticed with the advent of the tractor in the early '20's; it was not a serious problem in the days of horsedrawn units. It is generally believed that the speed of the tractor sets up a bouncing, rhythmic motion of the mowers, which produce the corrugated effect. Therefore speed of mowing is important to smoothness of fairways -- high speed causes corrugation, and if this is one of your problems, slow down for smoothness sake.

Another good practice in smoothing of fairways is to crosscut occasionally. Periodic cross-cutting of fairways during the season — perhaps every 5th cutting — likewise helps reduce corrugation. If possible, begin the season with cross-cutting fairways.

Spring Housecleaning

There is no better time than Spring to do a thorough job of clean-up on the golf course and clubhouse grounds. No matter how good the turf on the golf course may be, the picture could be nullified by poor housekeeping. On the other hand, meticulous care in housekeeping can create a good impression even if the turf is not up to par. A well groomed course, free from litter and trash, plus good turf is the mark of a master craftsman. Tidiness on the golf course is as important as any good management practice.

# Eastern Turfletter

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