

For Weeds: AMMONIUM SULFAMATE

Green Section Reports Remarkable Results
With This Non-Critical Chemical

POISON IVY, poison oak, ragweed pollen, etc., can now be eradicated easily and effectively with ammonium sulfamate, which, according to WPB Order M-242, is available commercially for herbicidal purposes. The single restriction expressed in the Order is that if the chemical is to be bought by the purchaser in amounts exceeding 100 pounds a month, a priority statement must be presented.

This chemical and its parent compound sulfamic acid, have been tested by scientists in various sections during the past four years for herbicidal properties against such weeds as poison ivy, poison oak, ragweed, wild blackberries, and Canada thistle.

Green Section tests last year in collaboration with L. W. Kephart, of the Department of Agriculture, demonstrated its outstanding efficiency in control of poison ivy, even of very old and well established plants. Single applications of ammonium sulfamate eradicated the weed more effectively than did repeated treatments with sodium chlorate, ammonium thiocyanate, and sodium arsenite made throughout the season.

Ammonium sulfamate is a salt which is very soluble in water and consequently easily handled. It takes up water from the air and should therefore be stored in airtight containers and dry places. Applications are easily made with a knapsack sprayer. The solution is somewhat corrosive to galvanized metal and therefore should not be left in the sprayer can. The sprayer should be washed out carefully with water after ammonium sulfamate has been used in it.

Unlike the arsenicals which have been used in some cases in the control of poison ivy, the chemical is not poisonous to man or to animals which may graze on treated areas. Neither is it inflammable, as is sodium chlorate. As a matter of fact, it has been widely used as a fire retardant for fireproofing fabrics and building materials. Ammonium sulfamate apparently does not have any injurious effect on soil, particularly when ap-

plied as recommended for poison ivy. This combination of effective herbicidal properties with other desirable characteristics in a single chemical compound is unique, and it would seem that it is the material for which the public has been waiting. The manufacturers recommend its use in solutions containing one-half to one pound of ammonium sulfamate in one gallon of water. When the foliage is well wetted with a solution of this concentration the treated plants usually succumb, even though in the case of perennials such as poison ivy the plants may be deep-rooted and well established. A second treatment is usually advisable after several weeks have elapsed, in order to treat any plants overlooked in the original treatment or any new shoots sent up from deep-seated perennial roots. About a year later the area should be checked to make sure no poison ivy has escaped.

Ammonium sulfamate is more injurious to some plants than others but little is known about this and for the time being care should be taken to keep the spray solution away from valuable foliage.

The action of the chemical is notably slower than that of other herbicides used commonly for eradication of weeds. Toxic effects may not become evident for 24 hours or more after treatment and then only in the form of wilting or a browning of the edges of leaves. It may be a week or longer before the leaves finally become uniformly brown and brittle and the plants appear dead. The ammonium sulfamate apparently is taken up by the cells of the foliage and translocated through the plant, killing slowly as it goes. It is therefore important that the foliage be well developed at the time of treatment. Applications to perennial plants should be made before they begin to go into dormancy in late summer or fall. For poison ivy, therefore, it would seem best to apply the spray treatments between May 15 and August 15.

Little has been done yet in considering possibilities of ammonium sulfamate for

WELCOME! HURRAY!! WHOOPIE!!! ALFRED BOURNE SMITH ARRIVES

Stop the press, strike up the band and let there be merry-making in the streets and jubilation among the lads overseas.

Alfred Bourne Smith was born June 30, 1943.

His mother is one of the loveliest girls ever on a golf course and his dad, before he enlisted in the Air Corps, was one of the finest, most famous young men in pro golf. Now Alfred Bourne Smith is the star of the outfit. So say his parents, Mr. and Mrs. Horton Smith.

selective eradication of weeds. Our preliminary experiments last year indicated it may be possible to kill selectively certain weeds in turf by applying ammonium sulfamate in very dilute solutions. Applications of it at rates of two ounces and four ounces dissolved in five gallons of water to 1,000 square feet were notably less injurious to turf than was sodium arsenite applied at the same rate. In one instance when the applications at the two- and four-ounce rates were followed by rain within an hour, a stand of the turf weed lawn pennywort (*Hydrocotyle rotundifolia*) was reduced approximately 75 percent with no injury whatsoever to the bluegrass turf. A month after treatment the grass on the treated plots showed a definitely stimulated growth.

It is hoped additional experiments this year may demonstrate whether in these dilute concentrations ammonium sulfamate may be useful in selective control of turf weeds, and if so, what conditions may be expected to influence results.—USGA Green Section Timely Turf Topics.

Columnist Praises Greenkeeper's Turf-Growing Talents

SELDOM does a greenkeeper get the great publicity Roland F. Robinson got in Al Hirshberg's column in the Boston (Mass.) Post of June 9.

Robbie, after years of successful golf course maintenance at Oyster Harbor and other New England courses, became groundskeeper at Fenway Park, Boston, home of the Red Sox baseball club. Fenway is said to be "the best kept baseball plant in the major leagues." He also has been responsible for the fine playing conditions at Payne Field, Sarasota, Fla., where the Red Sox trained prior to this year. In addition he rebuilt the infield

and outfield at Louisville when the Red Sox took over the Colonel's franchise.

When Orville Clapper brought Robinson to Fenway Park in response to Eddie Collin's request for a real grass man, it was the first time Robbie had seen a major league game. Orville is much better acquainted with the technique of baseball; in fact so much so that recently he was playing baseball, fell on the ball and broke an arm.

Hirshberg says "Robbie is not one to worry about the ground being torn up by football. Unless the weather is too cold he seeds the whole outfield before the final football game of the season. He lets the football players do the rest."

The players' cleats tramp grass seed into the ground and that job is further done by fans who flock onto the field after the game.

Robbie uses a Toro power mower, a Toro power roller on the infield, Netco grass seed, Milorganic and Milarsenite. Clapper goes out to the ball park to see how his products are doing. It makes a swell alibi.

Yank Golfers Try Luck on Aussie Courses

CONSIDERABLE interest has been aroused by the presence on Sydney courses of two members of "Uncle Sam's" fighting forces, one a professional, and the other a leading member of the New York district. Fred Catropa, now an airman, was one time assistant to our old friend, Gene Sarazen. After over a year in the New Guinea area, he made the most of his leave and produced some good scores for a man to whom golf had been just a memory for many months.

The amateur is Sgt. Frank Strafacci, who broke into golf in a big way when he won the National Public Links title in 1935, after qualifying the previous year. Since then he has only once failed to qualify in the National Amateur, and on the last occasion of play, in 1941, he entered as Private Strafacci. Twice he has finished second amateur in the U. S. Open, in 1937—when his 72 holes tally of 291 was only a stroke more than Johnny Goodman's total—and again in 1939. He also won the North and South, and New York district titles.

Evidently golf is a family weakness—or should we say strength?—for among qualifiers for the National Public Links