These observations and limited experimental evidence would appear to indicate that harmful root interactions may occur between various species of plants. These interactions are no doubt profoundly influenced by environmental conditions, but their full significance will not be known until they have been tested adequately under various light, moisture, fertility, and management conditions. There is need for intensive fundamental study relative to the nature of these interactions and their effect on grass species now commonly used for turf. The possibility of using these interactions in the control of clover and weeds in turf is a problem deserving of prompt consideration by turf culturists.

## PROTECTION AGAINST FALSE CLAIMS FOR FUNGICIDES AND INSECTICIDES

ERRETT WALLACE AND W. M. DAVIDSON \*

The Insecticide Act of 1910 is administered by the Insecticide Division of the Agricultural Marketing Service and it is important to understand what protection against false claims for fungicides and insecticides may be expected from its enforcement. This law requires that the labels of insecticides and fungicides entering into interstate commerce or marketed in the District of Columbia or the Territories shall not bear any false or misleading claims regarding such articles and that they shall not injure vegetation on which they are intended to be used. Manufacturers and distributors are held strictly responsible in this respect. However, since the burden

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March, 1942 245

of proof is on the Government, sufficient time for adequate tests must elapse before action can be taken in cases of violation of the law.

The law does not cover products which are manufactured and sold in the same State without entering interstate commerce, or give the Department authority to take action against claims made in advertising literature unless such literature accompanies the package in which the insecticide or fungicide is shipped or unless the label on or literature accompanying the package makes reference to such advertising literature. The Department, therefore, has no jurisdiction over advertisements appearing in newspapers, periodicals, or in circulars and other literature published by manufacturers and sent out by mail or otherwise shipped independently, unless such advertising material is referred to on the label; nor does it have authority to control radio advertising.

While some manufacturers limit the claims in their advertising literature to those permitted to appear on their labels, many do not and frequently claims are made in such literature which are not permitted to appear on labels.

It is always the wisest policy for any greenkeeper, when in doubt, to appeal either to the authorities at his local Experiment Station or to the Green Section for advice as to the most effective and economical type of fungicide and insecticide to meet his requirements and how to use it to best advantage.

The Insecticide Division has no authority under the law to certify insecticides or fungicides nor to advise as to the relative merits of different products, nor does it publish the results of its findings unless a product has been found to be in violation of the law, in which case notice of judgment of the court is issued. While the research worker or technical adviser is vitally

concerned with such matters as relative costs of the materials and treatments which they recommend, this is not a consideration in the enforcement of the existing law as it gives no control over prices nor profits which a manufacturer may make.

## THE PRACTICAL ASPECTS OF SEXUAL AND ASEXUAL REPRODUCTION IN TURF GRASSES

WILLIAM L. BROWN \*

Greenkeepers, nurserymen, and others interested in the propagation of grasses are often faced with difficult problems in the maintenance of pure stocks of selected turf grasses. Even in supposedly well managed grass nurseries it is not unusual to find numerous "off types" appearing from time to time. Unfortunately these are not usually recognized until they are placed in turf, where it is often too late to eliminate them. Greenkeepers often feel that such aberrant forms are the result of mixed stocks of stolons they have received. Errors of this sort are not impossible but, as will be shown here, most of such mixtures probably arise in the propagation nurseries and not at the source of the original stocks. If one is to know how and why such "off types" occur he must have some knowledge of the reproductive process in the grasses.

In the past much has been written on the breeding behavior and types of seed production among the grasses. In fact, the subject has been so widely discussed in recent years that it has

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