

cation of the arsenate and the time when crabgrass seed usually germinates. This may have given time for the arsenate to become soluble. In a few Green Section tests at the Arlington Turf Garden and elsewhere, some retardation of germination has been noted in areas receiving as little as 5 pounds of arsenate of lead to 1,000 square feet, but in most cases the results have been in accord with the Bingley observations.

A DISTINCTIVE COLOR FOR ARSENATES

The Paris green with which we used to kill potato beetles had a distinctive color and could not be mistaken for flour or sugar. Lead and calcium arsenate, however, look too much like flour or sugar to make them safe to have about the house. In fact, many cases of poisoning have been reported because of error in the use of the arsenate. Three states, Louisiana, South Carolina, and Tennessee, have legislation requiring that poisons which resemble foodstuffs or any ingredient of foodstuffs, shall be stained. Through the voluntary action of the manufacturing chemists' association such coloring will be made general, as the association has announced that both lead and calcium arsenate will be colored pink. This action is to be commended, as

it will help to decrease deaths due to mistakes in the identity of the poison. The color will not interfere with the effectiveness of the poison.

SODIUM ARSENITE AND SODIUM CHLORATE RENDER SOILS STERILE

Perhaps there is no part of the United States in which there has been more interest in chemical weed killers than in the West. Chemicals are used extensively on the Pacific Coast to kill weeds in cultivated fields but the problem of sterilizing soil so completely that vegetation may be excluded from tennis courts, drives, walks, and waste places is of special interest. Crafts in California made a study of the relative toxicity of sodium arsenite and sodium chlorate in four different California soils. The reports on this work appeared in *Hilgardia*. The soils varied from a heavy clay loam and adobe loam to a sandy loam and a fine sandy loam, and the results varied considerably in the different soils.

Varying proportions of arsenite were added to the soils and oats were planted to indicate the degree of sterility. Taking a growth of one gram in weight for 10 oat plants in 30 days as indication that the soil was practically sterile, it was found that the quantity of arsenite required