



CULTIVATING WEED PLOTS—Herbicide experiments conducted at the U. S. Department of Agriculture's weed investigations section, Beltsville, Md., show the effect of a pre-emergence treatment with the experimental weed killer 2-(1-chloropropyl) N-(3-chlorophenyl) carbamate at eight pounds per acre. On the left, the untreated plot shows heavy infestations of crabgrass, foxtail and other weeds. The treated plot on the right shows excellent control for 60 days with little or no injury to cotton plants.

AGRICULTURE

Weeds to Weed Weeds

► WHILE MOST persons want to get rid of weeds, the Department of Agriculture is carefully raising them.

In an effort to find new methods of weed control, the Department's weed investigations section at the Plant Industry Station, Beltsville, Md., plants, cultivates and then tries to eliminate weeds.

Dr. M. W. Parker, head of the weed investigations section, described the operation, which was set up in 1950, as an attempt to find new ways of depriving weeds of the right to compete with food, fiber, forage and ornamental crops.

Specific varieties of weed seeds are sent to the section from field collectors on request.

Often, wild weeds will make their appearance in a cultivated weed plot. Dr. Parker pointed out that there is no effort to weed out these wild cousins.

A large part of the program is the testing of herbicides, weed-killing chemicals, for effectiveness.

The station receives these chemicals from various industries, institutions and research organizations. These are then tested on a specific weed, which is harmful to certain crops.

Weeds are cultivated in flats in greenhouses along with a number of crops such as alfalfa, cotton, red clover and beans. A

new herbicide is then tested as a weed-killer, to determine whether it will eliminate such known weeds as crabgrass or pigweed, or perhaps both. If preliminary tests are favorable, the herbicide is then reapplied to a larger variety of weeds and crops in field plots.

All herbicides are tested on specific, common weeds. "We do not gamble on natural infestation," Dr. Parker explained.

Dr. Warren C. Shaw, agronomist with the weed investigations section, stated that there were three possible methods of weed control with the herbicides: pre-planting, pre-emergence and post-emergence.

When testing for pre-planting control, the herbicide is applied before the crop seeds are sown. Pre-emergence control applies to herbicides that are used after the seeds are sown, but before they begin to grow, and post-emergence control of weeds employs the herbicides after the plant has started to develop.

In a search for a new weed-killer, a herbicide is tested for all three ways of possible elimination.

In a recent test, a pre-planting herbicide, six pounds of CIPC per acre, was sprayed onto a good seed bed. Red clover was then transplanted from the greenhouse into furrows in the plot. Three weeks were al-

lowed to go by without cultivation or soil treatment. At the end of this period, it was found that the herbicide had been effective in preventing grasses and broadleaf weeds from emerging.

Drs. Parker and Shaw stated that pre-planting herbicidal control had been very effective in this instance because it protected the young seedlings. Similar herbicides have proven useful during wet weather, when cultivation is almost impossible.

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METEOROLOGY

Abandon Heard Island In Sub-Antarctic

► THE AUSTRALIAN weather station at Heard Island in the sub-Antarctic regions, 2,500 miles southwest of Perth, West Australia, is being abandoned.

Buildings and equipment on Heard Island will be used to expand Australia's new research station at Mawson on the Antarctic mainland. The Minister for External Affairs, R. G. Casey, said that Heard Island would be a staging camp for future Antarctic expeditions.

Australia will continue to maintain her station on Macquarie Island, 800 miles southeast of Tasmania.

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