AGRICULTURE

2,4-D Destroys Cotton

Chemical makes no distinction between weeds and certain crops. Farmers learned its power by losing cotton crops when dusting rice in Texas.

➤ THE WONDER weed-killer 2,4-D can be a dangerous enemy as well as a useful ally. It can kill your plant friends as well as your foes in the plant world if you do not handle it with care. That is the lesson learned at a high cost in valuable cotton in Texas.

"Extensive damage" to Texas cotton fields from the use of 2,4-D on nearby rice was caused by faulty equipment used in dusting the chemical from the air, U. S. Department of Agriculture officials believe.

Planes carrying the potent dust over the rice field used cotton dusters built for dusting cotton fields against boll weevil, field reports to the Department of Agriculture indicated. When the plane circled back after making "runs" on the rice fields, some of the 2,4-D fell on cotton fields several miles away.

2,4-D will not harm rice, other small grains or the grass on your lawn. But it will kill not only weeds but other broad-leafed plants including cotton, soybeans, potatoes, and most other vegetables and flowers.

Don't Dust from Air

Scientists have warned against dusting 2,4-D from the air. In some cases, the dust will be carried to cotton and other crops by the wind. A better method is to spray rice fields with a liquid solution of 2,4-D in water or an oil.

Recent experiments have shown that oil is better than water for 2,4-D solutions, L. W. Kephart of the Department of Agriculture said, because water is more likely to drift, evaporate or wash off the plants which are sprayed.

The latest 2,4-D incident in Texas is only one of several which have been reported. But a protest from Texas cotton farmers brought a resolution from the U. S. House of Representatives calling on Secretary of Agriculture Anderson to take action to prevent further losses.

Department of Agriculture spokesmen blamed the damage to Texas cotton on "carelessness", but they admitted that the department has not issued any publications concerning the use of 2,4-D on rice fields. A bulletin reported to have been issued by the Louisiana Experiment Station even showed on the cover a plane dusting the chemical.

Only official action planned so far is a press release warning against aerial dusting, it was learned. It is a local matter as far as regulations go, and several California counties are understood to have laws against dusting from the air.

2,4-D is a two-faced chemical with only a short history. On your lawn or in a rice or other small-grain field, the chemical will kill the weeds. But it will also kill other broad-leafed plants such as shrubs or flowers around your home or other types of farm crops.

Chemically 2,4-D is 2,4-dichlorophenoxyacetic acid. It was first used during the war and got some attention from chemical warfare experts as a possible killer of enemy plants. One of the plants which a weapon was sought against was rice, a big and important crop of the Japanese, but 2,4-D has proved to help rice by killing the weeds without harming the rice. On the other hand, 2,4-D could be a biological warfare weapon against many other important food crops such as potatoes.

If you want to kill dandelions and other weeds in your lawn use 2,4-D, but use it with care. Do not use a dust that will blow over on your flowers or garden, or your neighbors', and do not use 2,4-D on any windy day.

The Texas cotton losses have produced one surprising new bit of information about 2,4-D. Young cotton plants hit by the weed-killer are living through the attack where some of the older, better developed plants are killed. This is not what some scientists expected.

Used with care, 2,4-D is an important aid to growing a good lawn or better crops, but it can do much harm if it is not well controlled.

Science News Letter, August 2, 1947

CHEMISTRY

Fermentation for Vinegar

➤ A METHOD for making vinegar that eliminates the present use of shavings or charcoal as substrates for the fermenting bacteria, developed by J. J. Mackin of Green Bay, Wis., is covered by patent 2,423,897. The alcohol solution, with the bacteria already in it, is kept suspended in turbulent air as mist-droplets while fermentation proceeds.

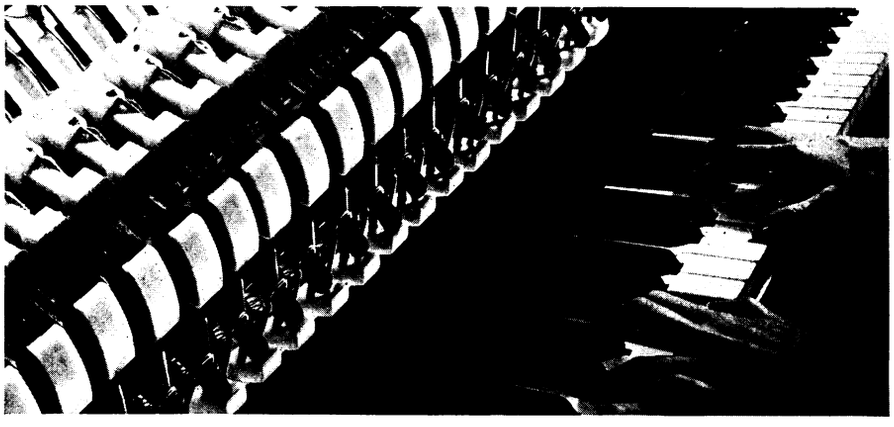
Science News Letter, August 2, 1947

ARCHAEOLOGY

Many-Storied Casa Grande

➤ THE FAMOUS Casa Grande ruin in Arizona indicates that it was a many-storied building resembling an apartment house with roof terraces and a few open windows; its thick walls were made of mud, patted into place by hand.

Science News Letter, August 2, 1947



PIANO POUNDERS—Tenite plastic, magnesium and aluminum piano actions are weather- and moisture-proof. Since they do not shrink or swell like the usual wood parts, they do away with sticky notes.