

**"WE GOT AN  
INCREASE OF  
5 BUSHEL  
PER ACRE!"**



Says Sherman McGregor, who operates a large acreage of wheat in the fertile eastern Washington area: "We used ESTERCIDE 330 to control annual weeds in our wheat and barley. We have, principally, mustard, China lettuce and some tar weed. We found that ESTERCIDE 330 really does a fine job of weed control. We know ORTHO 2,4-D products are good. All the farmers around here that use ORTHO 2,4-D products were well satisfied...and the only comment we heard was 'I wish I had sprayed more acreage than I did'. As far as our own acreage is concerned, I have estimated that we got an increase of 5 bushels per acre or more, and as a result of having a weed-free field, our harvest was more rapid and there was much less dockage."

**Farmers report ORTHO Weed Killers give them greater grain yields—reduce harvesting and handling costs—improve quality and increase farm income**

### **Here are your ORTHO WEED KILLERS: ESTERCIDE 330 (ester of 2,4-D)**

Mixes readily with water and is soluble in oil for low gallonage application, for use as a selective spray to kill weeds in growing grain. The most effective formulation for the control of hard-to-kill perennials in summer fallow; stubble, pastures, range and wasteland and rights-of-way.

#### **WEED-B-GON 64 (amine 2,4-D)**

Mixes readily with water and is suitable for application in all types of equipment; recommended principally for use as a selective spray in standing grain and pastures or grass-seed crops, but also used as a non-selective spray in summer fallow, stubble, or wasteland; safer to use than an ester, if easily damaged crops are growing nearby.

#### **ESTERCIDE T-245 (ester 2,4,5-T)**

The newest in weed killers. Especially designed to control woody plants that have shown resistance to 2,4-D. Mixes readily with water or oils and can be used in a combination spray with ESTERCIDE 330.

**Control WIREWORMS with  
ISOTOX (lindane) or GAMTOX (BHC)**

**Control ALFALFA WEEVIL with  
GAMTOX Liquid Spray or ISOTOX  
or PEST-B-GON (DDT) or PERSISTO (DDT)**

**Control CUTWORMS & ARMYWORMS with  
ALLTOX (toxaphene)**

**Control LICE on LIVESTOCK with  
ISOTOX (lindane)**

**Important: Note label directions.**



**CALIFORNIA SPRAY-CHEMICAL CORP.**

Caldwell, Idaho, P.O. Box 428, phone 598

ORTHO, WEED-B-GON, PEST-B-GON, PERSISTO, ESTERCIDE, ISOTOX, GAMTOX, TM'S REG. U. S. PAT. OFF.

## **Chemicals Control Weeds On Ditch Banks**

By R. L. WARDEN, Extension  
Weed Control Specialist

THE CONTROL OF WEEDS growing on and in field ditches makes irrigation easier and prevents seed production.

Since much of the vegetation which occurs in field ditches is grass, we need a weed killer which will kill the above-ground part of both grasses and broad-leaved plants.

There are two types of herbicides which are used for the control of all vegetation on ditchbanks. The first group is composed of materials which will produce a top kill only. These are known as general or non-selective contact herbicides. The second type is the soil sterilants, which will prevent any vegetation from growing for a period of a few months to several years.

#### **Contact Controls**

Of the materials which can be used for general contact work oils, dinitro general herbicides, pentachlorophenol (PCP) and sodium chlorate (atlatide) are the most widely available. These herbicides will kill all above-ground growth, but regrowth from perennial roots will occur except when sodium chlorate is applied at heavy rates.

The oils being used today for general contact work are usually of a light fuel oil type. In general, the lower grade fuel oils are the best. In most cases at least 100 gallons per acre are required.

The dinitro generals and pentachlorophenol behave very much alike. Both of these materials use a low grade fuel oil as a carrier at lighter rates than oils used alone. They will do a good job of burning down all above-ground foliage. Follow the directions on the label for rates of the dinitros, PCP and oils to use per acre.

For general contact work, sodium chlorate, the soil sterilant, is very effective as a contact herbicide at rates too low for sterilization. For general contact work 1 pound of sodium chlorate mixed with each gallon of water will be satisfactory. Apply this mixture in large enough quantities to wet the plants. In general, this will require from 50 to 100 gallons of water per acre.

#### **Soil Sterilants**

The soil sterilants in general use at the present time are borax materials and sodium chlorate.

For best results and complete sterilization use borax at rates of 20 to 30 pounds per square rod. Sodium

chlorate should be applied at 5 to 9 pounds per square rod. Remember that sodium chlorate is a very good herbicide but that it is poisonous to livestock in large quantities and is very inflammable.

In addition several mixtures of sodium chlorate and borax are now available on the market and the combination of the two is more effective than either one alone.

Lighter rates of these sterilants may be used to give decrease in plant growth without giving complete sterilization. Such partial sterilization may be a very effective means of controlling weeds in ditches to prevent interference with irrigation operations.

## **Pile Bales Loose In Mow**

WITH THE INCREASED practice of field baling in the handling of hay, many farmers have made the mistake of overloading their hay mows by stacking bales in orderly piles and putting in more weight than the barn was built to carry.

Most barns are built with mow capacity for loose, long hay which weighs approximately 4 pounds per cubic foot. Baled hay weighs approximately 14 pounds per cubic foot so it is possible to store three times the weight of baled hay that the mow was built to carry.

To avoid overloading, many farmers like to drop bales in "helter skelter" or loose piled. Baled hay stored this way requires a lot more space but it cures out better because of the air spaces between the bales. The most practical way of getting the bales into the mow and carried the length of the mow is with the loose-line grapple fork and conventional hay carrier system. Many farmers like to handle bales with slings instead of the fork, but in either case, the bales are dropped without any additional handling.

When the hay is fed out, the loose bales slide down easily. Since most hay that goes into a mow is to be fed, the fact that an occasional bale will break is not a serious handicap, feeders state.

Since most mows are already equipped with a track and carrier system, it is economical to mow hay with this system rather than with other costly equipment that will take far more labor to store the bales. When bales are stored in the loosepile style, it is not likely that the average mow will be overloaded.

# **ORTHO WEED KILLERS**

*Distributed by*

## **ANNIN WEED CONTROL CO.**

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