

# **CITRUS - FLORIDA - TREES ESTABLISHED THREE OR MORE YEARS**

## General Information

### PRODUCT INFORMATION

Hyvar X Herbicide is a wettable powder to be mixed in water and applied as a spray for non-selective weed and brush control in non-cropland areas and for selective weed control in certain crops. Hyvar X Herbicide is an effective general herbicide that controls many annual weeds at lower rates and perennial weeds and brush at the highest rates allowed by this label. It is particularly useful for the control of perennial grasses.

Moisture is necessary to move the herbicide into the root zone of weeds. Best results are obtained if treatment is made to moist soil, and moisture is supplied by rainfall or sprinkler irrigation within two weeks after application. Weed control symptoms are slow to appear and may not become apparent until the herbicide has been carried into the root zone of the weeds by moisture. The degree and duration of control will vary with the amount of herbicide applied, soil texture, rainfall, and other soil and water management practices.

### USE PRECAUTIONS AND RESTRICTIONS

Hyvar X Herbicide is not to be used in any recreational areas or in or around homes. Injury to or loss of desirable trees or other plants may result from failure to observe the following: Do not apply (except as specified for crop use), or drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. Do not use on lawns, walks, driveways, tennis courts, or similar areas. Prevent drift of dry powder or spray to desirable plants. Keep from contact with fertilizers, insecticides, fungicides, and seeds. Thoroughly clean all traces of Hyvar X Herbicide from application equipment immediately after use. Flush tank, pump, hoses, and boom with several changes of water after removing nozzle tips and screens (clean these parts separately).

Do not apply this product through any type of irrigation system.

Do not graze cattle in treated areas.

Treated areas may be planted to citrus or pineapple one year after last application. Do not replant to other crops within two years after last application as injury may result.

Note:

- Calibrate sprayers only with clean water away from the well site.
- Make scheduled checks of spray equipment.
- Assure accurate measurement of pesticides by all operation employees.
- Mix only enough product for the job at hand.
- Avoid over-filling of spray tank.
- Do not discharge excess material on the soil at a single spot in the field/grove or mixing/loading station.
- Dilute and agitate excess solution and apply at labeled rates/uses.
- Avoid storage of pesticides near well sites.

#### CROP ROTATION BIOASSAY

In arid climates (10 inches of rainfall or less) or areas where drought conditions have prevailed for one or more years, a field bioassay should be completed prior to planting any desired crop(s). The results from this bioassay may require the two-year crop rotation interval to be extended. A successful field bioassay means growing to maturity a test strip of the crop(s) intended for production. The test strip should cross the entire field including knolls and low areas.

#### RESISTANCE

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field. Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to re-treat the problem area using a product affecting a different site of action.

To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes, it may be necessary to

change cultural practices within and between crop seasons such as using a combination of tillage, re-treatment, tank-mix partners and/or sequential herbicide applications that have a different site of action. Weed escapes that are allowed to go to seed will promote the spread of resistant biotypes.

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative cultural practices or herbicide recommendations available in your area.

#### INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

#### Limitations, Restrictions, and Exceptions

#### AGRICULTURAL USES

#### APPLICATION INFORMATION

Apply Hyvar X Herbicide using a properly calibrated fixed-boom power sprayer. All use rates of Hyvar X Herbicide are expressed for broadcast treatments. For band treatments, use proportionately less. Use sufficient spray volume (minimum of 10 gallons per acre) to provide uniform coverage of the treated area and to allow proper dispersion and suspension of the product in the spray tank. Continuous agitation in the spray tank is required to keep the product in suspension. Agitate spray tank contents by mechanical or hydraulic means. If a by-pass or return line is used, it should terminate at a bottom of tank to minimize foaming. Do not use air agitation. Spray booms must be shut off while starting, turning, slowing or stopping as injury to the crop or successive crops may result. Nozzle screens should be 50 mesh or larger.

#### WEEDS CONTROLLED

NOTE: Partial control of perennials usually occurs with a single treatment; repeat applications are required to control perennials. Control of perennials may be improved by cultivation prior to treatment; otherwise, avoid working the soil as long as weed control continues or else effectiveness of the treatment may be reduced.

## CITRUS

Apply Hyvar X Herbicide as a band or broadcast treatment beneath and/or between trees. Avoid contact of foliage and fruit with spray or mist.

Temporary yellowing of citrus leaves may occur following treatment. As injury to citrus trees may result, do not use on soils with less than 1% organic matter. Do not use on poorly drained soils, gravelly soils or thinly covered or exposed sub-soils.

Do not treat trees planted in irrigation furrows. Do not treat diseased or stressed trees. Do not use in citrus groves inter-planted with other desirable trees or plants or in areas where roots of desirable trees or plants may extend as injury to desirable trees or plants may result. Do not use in home citrus plantings.

Do not apply more than 8 pounds per acre per year.

When making multiple applications, do not apply at less than 60 day intervals.

## FLORIDA

Hyvar X Herbicide controls many annual weeds, and at the highest rates allowed on this label, it controls certain perennial weeds. It is particularly useful for control of perennial grasses.

Apply Hyvar X Herbicide any time of the year provided rainfall or overhead irrigation is available to activate the herbicide, preferably just before or just after weeds have germinated. Weed control symptoms are slow to appear and may not become apparent until the chemical has been carried into the root zone of the weeds by moisture. Best results are obtained if moisture is supplied by rainfall or sprinkler irrigation within two weeks after application. Multiple applications may improve control of "hard-to-kill" weeds. The degree and duration of control will vary with the amount of herbicide applied, soil texture, rainfall and other conditions. It is non-corrosive to equipment, non-flammable and non-volatile.

## PRECAUTIONS AND USE RESTRICTIONS

The use of Hyvar X Herbicide (bromacil) is prohibited for weed control in non-

bedded citrus groves located on any permeable, better drained soil identified in the intended site of application. Permeable, better drained soils which occur in citrus producing areas of the state include soils unnamed and characteristic of quartzipsamments, and the following soil series classifications:

Adamsville, Candler, Lake Paola, Archbold, Cocoa, Lakewood, Satellite, Astatulam Dadem Neilhurst, St. Augustine, Bahiahonda, Florahome, Orlando, St. Lucie, Broward, Fort Meade, Orsino, Tavares, Canaveral, Gainesville, Palm Beach

Do not use Hyvar X Herbicide in recreational areas or around homes. Prevent drift of dry powder or spray to desirable plants.

Injury to or loss of desirable trees or other plants may result from failure to observe the following: Do not apply (except as specified for crop use), drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.

Do not use on lawns, walks, driveways, tennis courts, or similar areas. Do not apply directly to water, or to areas where surface water is present, or to inter-tidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash water. Keep from contact with fertilizer, insecticides, fungicides, and seeds. Thoroughly clean all traces of Hyvar X Herbicide from application equipment immediately after use. Flush tank, pump, hoses and boom with several changes of water after removing nozzle tips and screens (clean these parts separately.)

Temporary yellowing of citrus leaves may occur following treatment. Because injury to citrus trees may result, do not use on soils with less than 1.0% organic matter or on poorly drained soils.

Do not treat trees planted in irrigation furrows.

Do not treat diseased or stressed trees.

Do not use in citrus groves inter-planted with other desirable trees or plants, or in areas where roots of desirable trees or plants may extend, as injury to desirable trees or plants may result.

Do not use in home citrus plantings.

Do not apply this product through any type of irrigation system.

In areas where drought conditions have prevailed for one or more years, a field bioassay should be completed prior to planting any desired crop(s). The results from this bioassay may require the two-year crop rotation interval to be extended. A successful field bioassay means growing to maturity a test strip of the crop(s) intended for production. The test strip should cross the entire field including knolls and low areas.

#### APPLICATION INSTRUCTIONS

Apply Hyvar X Herbicide as a band treatment only using a properly calibrated fixed-boom power sprayer.

Do not use Trunk to Trunk. All use rates of Hyvar X Herbicide are expressed for broadcast treatments.

For band treatments, use proportionately less.

Use sufficient spray volume (minimum of 10 gallons per acre) to provide uniform coverage of the treated area and to allow proper dispersion and suspension of the product in the spray tank. Continuous agitation in the spray tank is required to keep the product in suspension.

Because injury to citrus trees may result, do not use on soils low in organic matter (less than 1%).

Avoid contact of foliage and fruit with spray or mist.

Do not apply more than 8 pounds product (6.4 pounds active ingredient) per treated acre per year. The maximum allowable use rate for bromacil is 6.4 pounds active ingredient per treated acre per year inclusive of all bromacil formulations.

Treated areas may be planted to citrus trees one year after the last Hyvar X Herbicide application. Do not replant to other crops within two years after the last Hyvar X Herbicide application as plant injury may result.

Allow an interval of 60 days between application of Hyvar X Herbicide.

Do not graze cattle in treated areas.

Trees Established Three or More Years: For control of annual weeds, apply 2-4 pounds of Hyvar X Herbicide per treated acre as needed to maintain weed control. Do not apply more than 4 pounds per treated acre in any one application. Do not use more than 8 pounds per treated acre per year.

NOTE: Use the highest rates allowed by this label for best control of perennial weeds listed on this label. Partial control of perennial weeds can result with only a single treatment of Hyvar X Herbicide. Repeat applications are required (in season and/or annually) for best control of the perennial weeds on this label. Control of perennials may be improved by cultivation prior to treatment, otherwise, avoid working the soil as long as weed control continues or else effectiveness of the treatment may be reduced.

Method

[Band](#)

[Broadcast Spray](#)

Restricted Entry Interval

12 hours

Timings

[Just before or just after weeds have germinated.](#)