LEAFY PETIOLES CROP SUBGROUP 4B (EXCEPT RHUBARB) - SEEDBEDS

General Information

PRODUCT INFORMATION

Caparol 4L is a selective herbicide that may be applied either before or after weeds emerge for control of most annual broadleaf weeds and grasses, including groundcherry, lambsquarters, annual morningglory, malva, mustard, black nightshade, pigweed (carelessweed), purslane, Florida pusley, ragweed, smartweed, teaweed (prickly sida), barnyardgrass (watergrass), crabgrass, foxtail, goosegrass, junglerice, Panicum spp., signalgrass (and other Brachiaria spp.), and wild oats. Caparol 4L also controls shallow-germinating seedlings of cocklebur, coffeeweed, and sandbur. Caparol 4L will also provide partial control of spurred anoda (cottonweed), rough blackfoot (ironweed, cluster flaveria), and prairie sunflower in NM and western TX. Caparol 4L does not control johnsongrass, bermudagrass, other established perennials, or sprangletop at selective rates.

When applied before weeds emerge, Caparol 4L enters weeds through their roots. Thus, its effectiveness depends on moisture to move it into the soil. Under very dry soil conditions after application, a shallow cultivation or rotary hoeing will generally result in better weed control.

When applied to emerged weeds, Caparol 4L provides foliar knockdown and/or residual control of later germinating weeds, depending on the rate applied.

Resistance Management

Prometryn, the active ingredient in this product, is a Group 5 herbicide based on the mode of action classification system of the Weed Science Society of America. Any weed population may contain plants naturally resistant to Group 5 herbicides. Such resistant weed plants may not be effectively managed using Group 5 herbicides but may be effectively managed utilizing another herbicide alone or in mixtures from a different Group and/or by using cultural or mechanical practices. However, a herbicide mode of action classification by itself may not adequately address specific weeds that are resistant to specific herbicides. Consult your local company

representative, state cooperative extension service, professional consultants or other qualified authorities to determine appropriate actions for treating specific resistant weeds.

Best Resistance Management Practices

Proactively implementing diversified weed control strategies to minimize selection for weed populations resistant to one or more herbicides is recommended. A diversified weed management program may include the use of multiple herbicides with different modes of action and overlapping weed spectrum with or without tillage operations and/or other cultural practices. Research has demonstrated that using the labeled rate and directions for use is important to delay the selection for resistance. Scouting after a herbicide application is important because it can facilitate the early identification of weed shifts and/or weed resistance and thus provide direction on future weed management practices. One of the best ways to contain resistant populations is to implement measures to avoid allowing weeds to reproduce by seed or to proliferate vegetatively. Cleaning equipment between sites and avoiding movement of plant material between sites will greatly aid in retarding the spread of resistant weed seed.

To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, as crop injury may result.

APPLICATION PROCEDURES

Do not apply this product in a way that will make contact with workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Ground application (All uses): Use conventional ground sprayers equipped with nozzles that provide accurate and uniform application.

Calibrate sprayer before use and recalibrate at the start of each season and when changing carriers. Unless otherwise specified, use a minimum of 20 gal of spray mixture per acre for all preplant incorporated, preemergence, and postemergence applications (with or without surfactant) with ground equipment.

Use a pump with capacity to: (1) maintain 35-40 psi at nozzles, and (2) provide sufficient agitation in tank to keep mixture in suspension. A centrifugal pump which

provides propeller shear action is recommended for dispersing and mixing this product. The pump should provide a minimum of 20 gal/minute/100 gal tank size circulated through a correctly positioned sparger tube or jets.

For preplant incorporated or preemergence application, use flat fan nozzle tips. For postemergence band application, use drop extraction tubes off-center nozzle tips. For postemergence broadcast application, use flat fan or off-center nozzle tips. Use flood nozzle tips only in AZ and CA for lay-by treatment in cotton at least 18 inches tall.

Use screens to protect the pump and to prevent nozzles from clogging. Screens placed on the suction side of the pump should be 16-mesh or coarser. Do not place a screen in the recirculation line. Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles. Check nozzle manufacturer’s recommendations.

Aerial application (Cotton and pigeon peas only): Use aerial application only where broadcast applications are specified. Use a minimum of 5 gal of spray mixture per acre. Avoid applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

Avoid application to humans or animals. Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

To assure that spray will be controllable within the target area when used according to label directions, make applications at a maximum height of 10 ft. above vegetation, using low-drift nozzles at a maximum pressure of 40 psi, and restrict application to periods when wind speed does not exceed 10 mph. To assure that spray will not adversely affect adjacent sensitive nontarget plants, apply Caparol 4L by aircraft at a minimum upwind distance of 400 ft. from sensitive plants.

Seedbed Preparation

To ensure proper placement of Caparol 4L, seedbeds must be well prepared and as free as possible from trash and clods. A firm seedbed is best for obtaining effective weed control. Uniformity in height and width of seedbed is essential for proper postemergence applications of Caparol 4L. Beds should be low and flat. Take care to avoid planter marks. Wide planter packing wheels or rollers are recommended. Wheel furrows should be uniform in depth. Mount the sprayer so that it follows the same rows as the planter.

Limitations, Restrictions, and Exceptions

LEAFY PETIOLES CROP SUBGROUP 4B (EXCEPT RHUBARB)

Seedbeds

Broadcast 1.2-1.6 pt in a minimum of 20 gal of water per acre after the crop has 2-5 true leaves. Application may be made over the crop. Apply only after seedbed covers have been removed from seedbeds for at least one week.

Apply only once per year to seedbeds.

Application to Leafy Petioles Only

Apply this product only through sprinkler, including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut down and make necessary adjustments should the need arise.

Chemigation Systems Connected to Public Water Systems: If the chemigation system is connected to a public water supply, the following conditions must also be met:

- Public water systems means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

- Chemigation systems connected to public water systems must contain a functional reduced-pressure zone, backflow preventer (RPZ), or the functional equivalent in the water supply line upstream from a point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

- The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shutdown.

- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump)

effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

- Upon completion of herbicide application, remove scale, pesticide residues, and other foreign matter from the supply tank and entire injector system. Flush thoroughly with clean water.

Sprinkler Chemigation: To apply a pesticide using sprinkler chemigation, the

chemigation system must meet the following specifications:

- The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

- The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

- Do not apply when wind speed favors drift beyond the area intended for treatment.

Application Procedures

- Mix in clean supply tank the recommended amount of this product for acreage to be covered and needed quantity of water.

- This product should not be tank mixed with other pesticides, surfactants, or fertilizers unless prior use has shown the combination non-injurious under your conditions of use.

- Follow precautionary statements and directions for all tank mix products.

- Provide constant mechanical agitation in supply tank to keep this product

suspended throughout application operations.

- On all crops, use sufficient gallonage of water to obtain thorough and uniform coverage, but not cause runoff or excessive leaching. This will vary depending on equipment, pest problem, and stage of crop growth.

Application of more or less than optimal quantity of water may result in decreased chemical performance, crop injury, or illegal residues.

- Meter this product into the irrigation water uniformly during the period of operation.

- Do not overlap application. Follow recommended label rates, application timing, and other directions and precautions for crop being treated.

- If sprinkler irrigation is intended to replace incorporation, use sufficient water to activate herbicide. The exact amount is highly dependent on moisture conditions and soil type, however 1/4 to 1/2 acre inch may be appropriate as a starting point. Pre-irrigation may be beneficial under dry conditions. Additional irrigation may be needed following application if rainfall is scant.

Method
Broadcast/Foliar Air
Broadcast/Foliar Ground
Pre-Harvest Interval

40 days

Rates
field_rates 0

-

Restricted Entry Interval

12 hours

Exception: If the product is soilinjected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

Timings

After the crop has 2-5 true leaves.