



DEMAND CS INSECTICIDE APPLICATION INFORMATION

May 2026

This document is a supplemental resource and does not replace or supersede the product label. By law, all treatments must follow the restrictions, requirements and instructions on the product label. To the maximum extent permitted by law, the CRB Response disclaim all liability for any damages or injuries resulting from the use of this product. Users assume all risk associated with the use, misuse, or inability to use this product. Distribution of this document does not imply any responsibility for user actions.

BACKGROUND INFORMATION

Demand CS is a low-toxicity pyrethroid insecticide formulation that can be used in a number of residential and non-residential areas. This document will summarize some parts of the product label most relevant to Coconut Rhinoceros Beetle (CRB) treatments and provide a suggested protocol.

Demand CS is a liquid that must be diluted with water, mixed, then sprayed on CRB host plants at your home. This will typically be on damaged host plants, like palms which are used purely for ornamental purposes and not for food, using the “Turfgrass and Ornamentals” section of the label. It can also include “Spot Treatment” which can be used to treat newly emerged fronds.

Application is performed with a sprayer which includes hand-pumped sprayers, backpack sprayers, and sprayers with motorized pumps. Sprayers with nozzles that provide a coarse spray (large droplets or stream) and operate with low pressure (< 60PSI) are preferred to minimize drift. Use a sprayer that you feel comfortable operating when it is filled with product. Practice the operation of the pump with water before you attempt treatment with pesticide.

ACTIVE INGREDIENT

Lambda-cyhalothrin 9.7%

QUICK REFERENCE INFORMATION:

Product: Demand CS Insecticide

EPA Registration #: No.100-1066

Link to label: <https://files.hawaii.gov/dab/labels/9226.394.pdf>

APPLICATION RATES:

Turfgrass and ornamentals: 0.02-0.05 fl oz (0.6-1.5 mL) Demand CS Insecticide per gallon of water.

Spot treatments: 0.5 (15mL) fl oz Demand CS Insecticide per 1–2.5 gal of water.

APPLICATION LIMITS:

Do not apply more than 52.4 fl oz of Demand CS concentrate per acre per year (~1.2 fl oz per 1000 square feet of land per year).

Wait 7+ days between treatments.



[www.crbhawaii.org/
community](http://www.crbhawaii.org/community)

This kit is intended for those located in Coconut Rhinoceros Beetle affected areas that are not part of an active eradication program. These materials and their distribution is funded by the State of Hawaii through Act 236. This kit is not a retail item and should not be sold.

Contact CRB Response: crbhawaii.org | info@crbhawaii.org



KIT CONTENT

1. Bottle with label
2. Gloves
3. Safety glasses
4. Measurement tool

ADDITIONAL SUPPLIES NEEDED

- Personal Protective Equipment (PPE):
 - Long pants
 - Long sleeves
 - Shoes and socks
 - Waterproof gloves
- Application tool (sprayer)



RESTRICTIONS

- Do not use on golf course turf. Not for use on plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes.
- Time application to flowering plants during periods when pollinating insects are not present, such as early morning or late evening.
- Do not apply this product through any type of irrigation system.
- Do not apply this product to edible crops.
- Treating coconut palms and other plants with edible parts is allowed if the plant is used ornamentally and no fruit or other food will be harvested for consumption from the treated plants.
- Use of this pesticide adjacent to water may affect aquatic organisms. To protect these organisms, do not apply this pesticide within 25 ft of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds.



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DEMAND CS INSECTICIDE EXAMPLE PROTOCOL

PART 1

May 2026

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This example protocol includes many important steps and calculations to consider when applying this product. Use this in conjunction with the product label to make your own protocol that applies to your site and pest control objectives.

1. PLAN YOUR APPLICATION.

- a. Look at the weather report and choose a day with a low or zero chance of rain and winds below 15 mph. Demand CS can not be applied during rain, if rain is imminent, or if wind exceeds 15mph. Reference the restrictions on the information page and on the label.
- b. Choose a day when nobody will need to access the treated area for 4+ hours after application. Ideally, have someone available to assist you if something goes wrong. They should be prepared to call poison control (800-222-1222) or 911 in an emergency.
- c. For palm applications, you will also need to get the spray nozzle close to the top (crown) of the palm. We do not recommend using a high-pressure stream to propel the product from the ground to a tall crown due to increased risk of drift. A nozzle on an extension pole is a safer alternative for an applicator on the ground. Accessing the crown may require additional equipment (ladder, lift) or training beyond the scope of this document. For many, hiring a pesticide applicator or tree care professional is the best option.
- d. Label all mixing and dispensing equipment. Any tool that contacts concentrated or diluted Demand CS should be labeled so that it is not used for food or other exposure risks. We suggest writing "Caution Pesticide" in permanent marker on all tools, vessels, and lids.

2. CALCULATE YOUR VOLUMES AND DILUTIONS.

Palms: One mature palm typically requires $\frac{1}{4}$ to $\frac{1}{2}$ gallon of diluted product to get good coverage. Start on the low end by calculating $\frac{1}{4}$ gallon of diluted spray per palm. You will need to add 0.02-0.05 ounces (0.6-1.5 mL) of concentrate for each gallon. Write down the volumes of diluted spray and concentrate for future reference.

Example:

For 12 palms you will need 3 gallons (12 palms * $\frac{1}{4}$ gallon) of diluted spray.

3 gallons of diluted spray requires 0.06-0.15 fluid ounces (1.8-4.4 mL) of Demand CS concentrate.

Spot Treatment: "For spot treatments, use 0.5 fl oz (15mL) Demand CS Insecticide per 1-2.5 gal of water." Do a test spray with plain water (no pesticide) to estimate the volume of spray needed for coverage.



3. GATHER YOUR MATERIALS AND GET READY

- a. We recommend wearing long pants, long sleeves, shoes and socks, waterproof gloves, and protective eyewear. You will also need a sprayer, a water source, and the bottle of Demand CS with the product label. You may also need additional measuring vessels for the pesticide concentrate or mixing water. We recommend having clean rinsing water available at all times to rinse your eyes or skin in case of an accidental exposure.
- b. Inform every individual who could enter the area that you will be treating. Secure pets so that they will not enter the area until the treated area is dry. If the treated area is close to a property line, you should inform neighbors as well.
- c. Put on all Personal Protective Equipment (PPE) (long pants, long sleeves, shoes, socks, etc.).

4. MIX

- a. Put half of the dilution water in your sprayer or mixing vessel.
- b. Measure the amount of Demand CS concentrate that you calculated in step 1 and put it in the water in the mixing vessel.
- c. Seal the sprayer/vessel and shake to mix. Alternatively, you can stir if the mixing vessel is too heavy to shake.
- d. When the concentrate has dissolved uniformly, add the rest of the water.
- e. Mix again until it is uniform.
- f. If the mix sits for an extended period, shake or stir the reservoir before spraying.

5. SPRAY

- a. Pressurize your sprayer on the ground if it needs to be pumped up before use.
- b. Position yourself as far from the nozzle as is practical. Ideally, you will be above the nozzle so no product can drift or drip onto you. If you are below the nozzle, position yourself as far as you can laterally and upwind.
- c. Apply to host palms. Make sure to spray the base of fronds in the upper half of the palm crown. This is where CRB typically enters the palm. Spray each frond base thoroughly but avoid runoff.
- d. Dispense all of the diluted mix on allowable sites. If you finish treating and have mix left over, you can apply the remainder to other sites allowed on the label, including in and around your home, turf and lawns, ornamental plants, trees, and shrubs. Focus on areas with known insect pests.
- e. If you run out of mix before all sites are treated, calculate the amount that you applied per palm/spot and mix the volume needed to finish the application according to the mixing instructions above.



Spray the base of fronds in the upper half of the palm crown



6. CLEANUP

- a. Seal and put away all pesticide concentrate.
- b. Make sure all diluted product is applied to allowable sites.
- c. Rinse all tools and mixing vessels with clean water three times and pour the contaminated rinse water at the base of a treated palm, on your lawn, ornamental plants, or other sites allowed by the label.
- d. Put all tools and loading equipment in a designated pesticide area.
- e. Wash your clothing in a separate wash load.
- f. Wash your hands well with soap and water.

7. EMPTY BOTTLE DISPOSAL

- a. Do not reuse or refill the original product container.
- b. Triple rinse the container promptly after emptying the last of the concentrate
- c. Then offer for recycling if available, or puncture and dispose of the empty container through municipal or private trash collection services.

8. REENTRY

The treated area is safe for re-entry by people and pets when the applied product is dry.

9. RETREATMENT

- a. Do not apply more than 0.36 lb of the active ingredient per acre within one year. That corresponds to 52.4 fl oz of concentrate per acre. Look up or measure the size of your property or treatment area. 1000 square feet (50'x20') is ~0.023 acres, corresponding to ~1.2 fl oz of concentrate per year.
- b. Apply at 7-day intervals if retreatment is necessary. Limit more frequent treatments to spot treatments. Recognize that as plants grow, new foliage will be unprotected until treated.
- c. We recommend treating palm crowns with a pyrethroid like Demand CS once every three months, with more frequent spot treatments on newly emerged frond bases in areas with moderate to heavy palm damage.
- d. Treating with another class of pesticide periodically can be beneficial to avoid resistance. Consider adding or alternating a product containing imidacloprid.