

Coqui Frog Chemical Control & Sprayer Training



County of
Hawaii- Coqui
Frog
Eradication
and Control



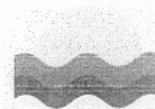
State of
Hawaii,
Department of
Agriculture-
Pesticides
Branch



USDA- Wildlife
Services



University of
Hawaii at
Manoa- College
of Tropical
Agriculture &
Human
Resources



Hawaii Island
Economic
Development
Board

And the Coqui Frog Working Group

University of Hawai'i at Manoa- College of Tropical Agriculture and Human Resources (CTAHR); University Of Hawai'i at Hilo - College of Arts and Sciences, College of Agriculture, Forestry and Natural Resource Management (CAFNRM); Hawai'i Department Of Agriculture- Plant Industry Division; Hawai'i Department Of Land And Natural Resources - Division of Forestry and Wildlife; County Of Hawai'i- Office of the Mayor; U.S. Department Of Agriculture- Animal and Plant Health Inspection Service, Wildlife Services, National Wildlife Research Center; U.S. Fish And Wildlife Service; Big Island Invasive Species Committee; Maui Invasive Species Committee

March 21, 2006
Komohana Ag Complex

Coqui Control & Eradication Quick Reference

Report a New Infestation

Big Island Invasive Species Committee (BIISC): 961-3299

Community Sprayer Loan Program

The County of Hawaii, USDA, State of Hawaii, Department of Agriculture and Hawaii Island Economic Development Board have purchased trailer tank sprayers ranging from 100 – 400 gallon capacity for use at no charge to the community. To schedule a sprayer call:

USDA: 933-6955

County of Hawaii, Howard Lontoc: 961-8066

Citric Acid Matching Program and Hydrated Lime Vouchers

The Big Island Invasive Species Committee (BIISC) has a matching program for citric acid. If you purchased citric acid for the control of coqui frogs, you can bring in your receipt to BIISC and receive an equal amount for free (up to 9 bags). You must call first to check availability and set a date for pick up. Malama O Puna provides vouchers for hydrated lime for individuals in East Hawaii. Hawaii Island Economic Development Board also provides vouchers for hydrated lime. Community groups that have received or are eligible for County grant funding for chemicals are not eligible for the free citric acid and hydrated lime programs.

Big Island Invasive Species Committee (BIISC): 933-3346

Malama O Puna: 965-2000

Hawaii Island Economic Development Board, Andrea Dean: 889-5806

County of Hawaii Community Grants

The County of Hawaii Community Grants Program is supporting communities by providing grants of up to \$5,000. The grants can be used to purchase citric acid, hydrated lime, gloves, masks, refreshments and other supplies necessary to fight coqui.

Download and Print Grant Application <http://www.ctahr.hawaii.edu/coqui/resources.asp>

County of Hawaii: 961- 8065

Web Resources

Hawaii Island Economic Development Board

www.stopcoqui.com

University of Hawai'i at Mānoa, CTAHR- Coqui Frog Website

www.ctahr.hawaii.edu/coqui/

State of Hawai'i, Department of Agriculture- Coqui Frog Page

www.hawaiiag.org/hdoa/coqui.htm

Hawai'i Ecosystems at Risk

www.hear.org/AlienSpeciesInHawaii/species/frogs/

Hydrated Lime Label

www.hawaiiag.org/hdoa/pi_pest_forms.htm

Citric Acid Label

www.ctahr.hawaii.edu/coqui/downloads/citric%20acid.pdf

INSTRUCTIONS FOR USE OF THE REAR'S 400 GALLON DRENCHER

We would strongly suggest that if you have never used this type of sprayer before, do the all of the following steps below but do not add the chemicals in the tank. Just use plain water just to get a feel for this sprayer.

It is also recommended that at least three (3) people are needed to operate this unit safely:

- 1) One person to monitor the engine, pumping system, and water level. When the water level in the tank is at the 50 gallon mark on the sight tube, turn off the outlet manifold valve that is being used to alert the spray person that the water is low. You may keep the engine running at this time because water is still in the tank. You may refill this tank with water and chemicals if you plan to continue spraying more chemicals. If you are done spraying, you may turn off the engine at this time and proceed to clean out this unit.
- 2) One person to help move the heavy 1.5" fire hose when needed.
- 3) One person to operate the spray nozzle.

Once you are comfortable in operating this unit, only then should you proceed in using this sprayer for its intended purpose.

For your safety and others, if you are unsure or do not feel safe operating this unit, please return the unit to the issuing office for further assistance.

Before using this sprayer, please inspect the following:

- 1) Position the sprayer on a level surface. Check the engine oil level. Do not screw the dipstick in when checking level. Make sure it is on the upper level mark. Add 10W30 engine oil when needed. Do not overfill.
- 2) Check fuel tank level, fill with gasoline as needed without spilling. Never fill when the engine is running or hot. Allow engine to cool before refilling. This is a 4-stroke engine, do not add oil/fuel mixture for 2-cycle engines.
- 3) Remove the suction filter bowl and inspect the filter. Always keep the filter clean. The filter bowl should be hand tighten only, do not use any tools to tighten. Insure all hoses are connected on the plumbing system.
- 4) Inspect inside of tank for any chemical build up on the bottom. If found, rinse and drain completely before proceeding.

Completed these 4 items? Go to the next page...

When you are ready to spray, please follow the following steps. Skipping or missing a step could result in damage to the unit or personal injury:

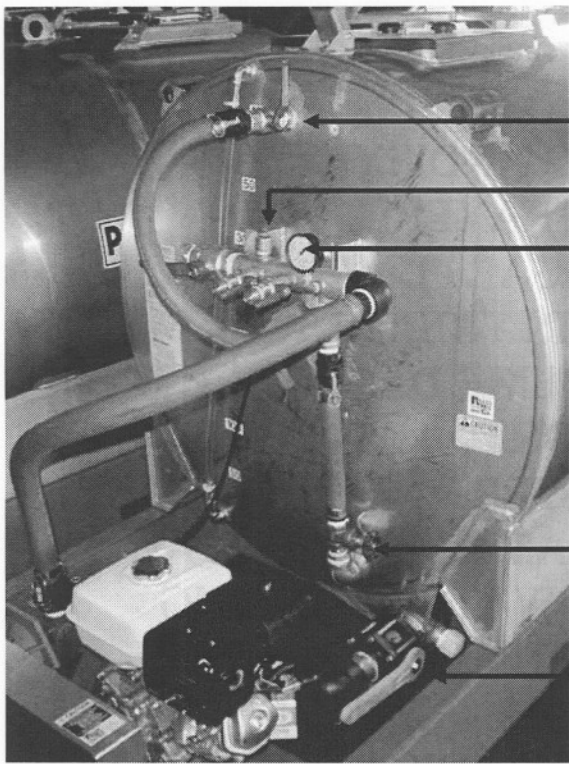
- 1) Fill water in tank at least 1/2 to 3/4 full.
- 2) Unroll the hose in a straight line. Connect the spray hose to the outlet manifold and the spray nozzle to the other end. Make sure the spray nozzle is in the OFF POSITION (it is marked “on” and off” on the nozzle) before turning on the manifold ball valve.
- 3) Confirm that the lid basket strainer is in the proper position. The opening in the tank filler strainer should be facing the dump valve located at the top of the tank
- 4) Confirm that the YELLOW HANDLE suction shut-off valve is in the horizontal position (OPEN) or pump damage will occur if it is closed.
- 5) Make sure ALL the other valves on the unit is turned OFF. The only valve that should always be OPEN is the tank suction shut-off valve. This valve should remain open at all times EXCEPT when there is a major leak in the plumbing system. Should any major leak in the plumbing system arise, turn off the engine prior to closing this valve.
- 6) Turn on fuel cock and choke on the engine.
- 7) Turn on the ignition switch.
- 8) Pull recoil starter straight out and not at an angle. Do not release the rope suddenly, let the spring pull it back in.
- 9) Once the engine is running, turn OFF the choke.
- 10) Open the agitator valve all the way open by turning to the left.

- 11) Bring the engine R.P.M up half way with the throttle lever. This is a good time to inspect the unit for leaks in plumbing system.
- 12) Fill Hydrated Lime or Citric Acid in tank filler strainer (do not dump directly into tank). Always wear a mask and protection gear when handling chemicals. Open the dump valve at the top of the tank to allow the water in the tank to fill the basket and strain the chemicals thru the screen and into the tank. When all the chemical in the basket has passed thru the screen, turn OFF the dump valve completely.
- 13) Fill the rest of the tank with water to the desired level. Once the tank is filled, be sure to have someone holding the spray nozzle. Open the ball valve to the hose outlet that is being used.
- 14) Raise the engine R.P.M. to the desired operating pressure shown on pressure gauge. Do not exceed 80 P.S.I. Damage and or injury will occur. The ideal working pressure for spraying is 50-60 P.S.I.
- 15) Open the spray nozzle and start spraying.
- 16) After spraying is complete, drain and rinse out residue from the tank and suction filter. Fill tank with fresh water and run the system with clean water to flush out tank, hoses and spray nozzles. When flushing the system, rinsate water should be applied to non-crop area. Do not contaminate ground water, do not allow rinsate or runoff to enter drywells, storm drains or waterways. Drain all remaining water from tank before returning it to the issuing office.

WARNING

- 1) ALWAYS WEAR PROPER CLOTHING AND EYE PROTECTION WHEN USING THIS SPRAYER.
- 2) THIS IS A HIGH VOLUME CENTRIFIGAL PUMP. DO NOT RUN THIS UNIT WITHOUT WATER IN THE TANK OR WITH THE SHUT-OFF VALVE CLOSED. **PUMP DAMAGE WILL OCCUR. NEVER RUN THE PUMP DRY.** THIS IS THE MAJOR COMPONENT OF THE SPRAYER AND CANNOT BE OVERLY STRESSED. THE SHAFT HAS A MECHANICAL SEAL THAT IS LUBRICATED WITH WATER RUNNING THRU THE PUMP. IF THE PUMP IS RUN DRY, THE SEAL WILL NOT HAVE ANY LUBRICANT TO KEEP THE SEAL FROM WEARING PREMATURLY. AN INDICATION THAT THE PUMP HAS RUN DRY WILL BE A LEAK ON THE PUMP FROM THE HOLES ON THE SHAFT SIDE. THIS IS NOT COVERED UNDER WARRANTY AND THE USER WILL BE RESONSIBLE FOR THE REPAIR.
- 3) ALWAYS TURN ON THE AGITATOR VALVE WHEN THE ENGINE IS RUNNING TO AVOID THE CHEMICALS FROM SETTLING ON THE BOTTOM OF THE TANK.
- 4) ALWAYS CLEAN THE SUCTION FILTER AFTER EVERY TWO FILLS.
- 5) THE 1.5" FIRE HOSE IS VERY HEAVY WHEN FILLED WITH WATER. USE EXTRA CAUTION WHEN LIFTING OR MOVING THE HOSE.
- 6) NEVER POINT THE SPRAY NOZZLE AT ANY PERSON OR PROPERTY. SEVERE INJURY, DEATH, OR DAMAGE WILL OCCUR.

KEEP A FIRM GRIP ON THE SPRAY NOZZLE AND HOSE BECAUSE IT WILL PRODUCE KICK-BACK WHEN SPRAYING.



Pump Valve

Outlet Manifold

Pressure Gauge

**Agitator Valve: Turn Right– Close
Turn Left– Open**

**Suction Shut-off Valve
On: Horizontal (as pictured)
Off: Vertical**

Basket dump port should always face the dump valve



**Proper position
for lid strainer
basket.**

Dump Valve

Basket Dump Port

COQUI ERADICATION & CONTROL COMMUNITY FUND GRANT PROPOSAL FORM

Name(s) of your group(s): _____

Contact person: _____ Phone: _____

Address: _____

City: _____ Zip: _____

E-Mail Address: _____

Which category best describes your target population? (check one)

- Residential Commercial/ Industrial Open Space

Check the categories that best describe your project (check all that apply):

- Individual Homes Multiple Homes Community Block
 Open Space Community Parks Unoccupied / Vacant Land

Amount Requested: \$ _____ Expected Completion Date: _____

(Projects will not be funded retroactively)

1. PROJECT DESCRIPTION: What will you do? (Map Area? Locate Infestations? Spray?)

Where will your project take place? (District, Location, Area)

How will your project address coqui frog control and eradication?

Where is your target population (i.e. specific street names, site, area description, size of target)?
How many individuals, residents, community members will benefit from this project?

What will be different in your community because of this project?

Coqui Eradication & Control Community Grant

2. COMMUNITY GROUP DESCRIPTION: Describe your group. When, why, and how did you get started?

Who are the members? (**attach a list of their names**)

Do you have ongoing community projects?

What previous projects have you completed, if any?

Have you applied for a Hawaii County Community grant before?

In what ways do you plan to collaborate with others on this project?

Can we share your project and contact information with others? Yes No

3. BUDGET: How will this grant money be spent?

What other funding sources are available to you?

Coqui Eradication & Control Community Grant Proposal Form

Please use this section or attach a detailed budget.

Project costs or expenses: (ITEMIZED) Amount:

- 1. Purchased Supplies (gloves, boots, goggles, chemicals).....\$ _____
 - 2. Equipment Rental or Purchase.....\$ _____
 - 3. Publicity expenses, photocopying, postage, etc.....\$ _____
 - 4. Reimbursements (mileage, refreshments, etc).....\$ _____
 - 5. Other (please specify) **Alcohol and personnel costs**\$ _____
are not allowed.
- PROJECT TOTAL: \$** _____

Please list any "in kind" contributions such as labor, professional services, materials or other donations you expect to receive:

4. FINAL EVALUATION: Upon completion of your project a report is required. It should include a report of expenditures and a final evaluation of how your project made a difference.

How will you know that your project is successful?

Coqui Eradication & Control Grant Proposal Form

5. FISCAL RESPONSIBILITY: Who will oversee expenditures?

The **two unrelated persons** listed below shall accept fiscal responsibility, insuring that any grant monies received will be used for the activities described herein, and that otherwise funds will be **returned** to the Coqui Eradication & Control Community Fund.

1. _____ Signature: _____
Name (Print or Type)

_____ Date: _____
Position in Group

2. _____ Signature: _____
Name (Print or Type)

_____ Date: _____
Position in Group

4. FINAL EVALUATION: Upon completion of your project a report is required. It should include a report of expenditures and a final evaluation of how your project made a difference.

How will you know that your project is successful?