

Hawaii Island Rat Lungworm Working Group – Jarvi Lab

Biological Tissues Submission Protocol

Thank you for your interest and concerns regarding Rat Lungworm in Hawaii. Our facility uses a species specific biological assay to detect DNA of the nematode *Angiostrongylus cantonensis*, the parasite that causes Rat Lungworm Disease in humans and many animals. We are able to analyze a variety of tissue samples including slugs and snails, land crabs, prawns, land flatworms, produce or other biological sample. To have a sample analyzed, follow the directions below and complete the sample submission form. The shipment of infectious substances is highly regulated, be sure to follow the instructions exactly to avoid federal and/or state fines. We hope this service helps to create a safer environment for all of Hawaii's residents and visitors. Feel free to contact our lab if you have any questions.

Slugs, Snails or Other Biological Tissues Protocol

- 1) Never handle potentially infectious tissues with your bare hands. Use a ziploc bag like a glove to pick up individual samples (slugs, snails, crabs, prawns, produce, etc).
 - a. Be sure to use a ziplock bag that pressure seals, not a slide seal.
 - b. Use a new ziploc bag for each specimen to avoid cross-contamination.
 - c. Turn the ziploc bag inside out, place your hand inside the bag, and pick up 1 specimen. While holding onto the sample, flip the bag right side out, remove excess air, and seal the ziploc bag.
- 2) Freeze samples for no less than 24 hours to neutralize all infectious substances.
- 3) Place all specimens into a new, larger ziploc bag and pack with enough absorbent material (such as paper towels) to contain the samples. All samples are required to be triple packed in leak proof containers for shipping.
- 4) Fill out our sample submission form (see attached).
- 5) Ship specimens to our facility in a styrofoam box with ice packs or dry ice (no more than 5 lbs per package).
 - a. Be sure to complete and include the sample submission form and payment.
 - b. Your package MUST have the labels below. See attached form for shipping labels. Attach labels to a vertical side of the box (not the top or bottom).
 - I. Shipper and receiver name, address and telephone number.
 - II. UN 3373, Biological Substance, Category B
 - III. UN 1845 Dry Ice (only when dry ice is used)
 - I. Containers must release carbon dioxide gas (ie/ styrofoam box within a cardboard box).
 - II. Write in the weight of dry ice on the label.
 - c. Ship overnight mail to Dr. Jarvi, UHH DKICP, 722 South Aohoku Drive, Hilo, HI 96720



Dr. Susan Jarvi

The Daniel K. Inouye College of Pharmacy
University of Hawaii at Hilo

Mailing Address: 34 Rainbow Drive, Hilo, HI 96720

Shipping Address: 722 South Aohoku Drive, Hilo, HI 96720

808-932-7148

Genetics of Infectious Diseases – Jarvi Lab
Laboratory Sample Submission Form

Customer Information

Name: _____ **Date:** _____
Organization: _____
Phone: _____ **Email:** _____

Sample Information

Number of Samples: _____ **Type of Sample(s):** _____ **Species:** _____
General Sample Description: _____
Collection Location: _____ **Storage Conditions:** _____
Brief Description of Collection Methods : _____

Requested Analysis: (cost per sample)

Rat Lungworm Presence/ Absence (\$25.00)

Rat Lungworm Quantification (# larvae/ mg tissue)(\$38.00)

Microscopic Nematode Visualization (\$10.00)

Avian Malaria or Pox (\$28.00)

Estimated Total Cost: _____

Upon Completion:

Return the sample(s) to me (additional shipping cost may be included)

The sample may be used for research

Discard my sample (tissue and DNA)

Other Notes:

***The results of this analysis are exclusive for the sample provided
and cannot be extrapolated to other samples or populations.***



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808-932-7148 or ratlungworm@hawaii.edu

Internal Use Only

Samples were received by: _____

Date received: _____

Report and Invoice #: _____

Payment Type:

Pre-paid

cash

Invoice requested

check (made out to UHH)

internal UH transfer

Storage location: _____

Sample(s) were assigned to __ for processing: _____

Other Notes:



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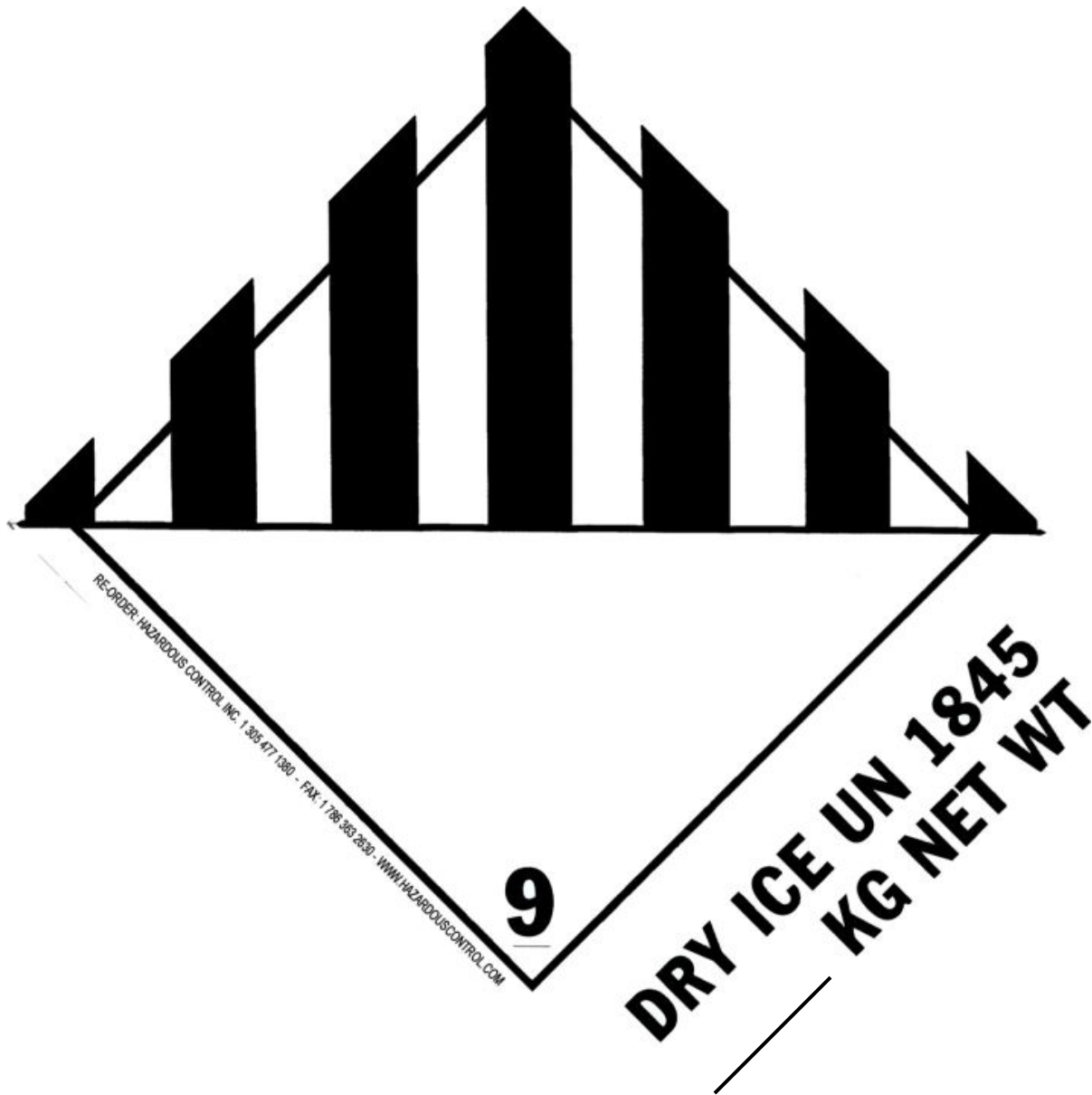
Exempt animal
specimen



Biological Substance, Category B

Do NOT resize or rotate these labels. Attach labels to a vertical side of the box (not the top or bottom). Each diamond must be 4" x 4" large, "square-on-point", ≥ 3 inches away from other markings that may reduce its effectiveness.

Shipping Labels for Rat Lungworm Samples



Do NOT resize or rotate these labels. Attach labels to a vertical side of the box (not the top or bottom). Each diamond must be 4" x 4" large, "square-on-point" with the #9 at the bottom, ≥3 inches away from other markings that may reduce its effectiveness. NOTE: USPS will not transport dry ice, use UPS or FedEx.