COQUI FROG

Scientific name: *Eleutherodactylus coqui*
Order: Anura  Family: Leptodactylidae
Common names: Puerto Rican tree frog, coqui frog

**LIFE CYCLE**

**EGGS**
- Egg diameter averages 4 mm
- hatches in 14-17 days
- clusters of eggs (average 28 eggs) are laid every 2 to 4 weeks year-round
- no free-swimming tadpole stage.

**FROGLETs**
- can live up to a week after hatching on yolk reserve
- able to reproduce at 8-12 months old
- males begin calling from 6 months of age

**ADULTS**
- females (upper left) grow up to 2” in length, while males (lower right) grow up to 1.5” long
- entirely terrestrial
- adults may live 4-6 years
- males guard eggs to prevent drying and predation

**BEHAVIOR**
- As amphibians, coqui frogs need to keep their skin **moist** and can tolerate cold better than hot temperatures and direct sunlight.
- They are **nocturnal** and retreat during the day to sites that provide shade and moisture, such as crevices and rock walls (*pictured, top, irrigated nursery facilities, thick vegetation (circle), ground cover, and leaf litter (left)*).
- Coqui frogs “hitchhike” from infested areas on plants, construction, landscaping and gardening materials, trash, and vehicles (tire wells, truck beds) and are **spread along roadways** to refuse stations, construction sites, nurseries, garden shops, and residences.
- While adult males can be detected by their call, the presence of eggs, juveniles (< 6 months), and adult females often go **undetected for months** until males mature and begin calling.

### Options Available

**Monitoring Techniques**
- Use **sound-activated recorders** to detect calling males on-site at night on a monthly basis.
- Set out **PVC lures (pictured)**
  - Use 3/4” diameter pipe (8-9” length) with a tee-joint. Do not glue. “Weather” the pieces first to reduce PVC odor. Mount no higher than 2-3 ft off the ground at 2-ft intervals.
  - Check the PVC lures at least every 2 weeks; remove nesting adults and eggs.
- **Conduct visual inspection routinely.**
  - Scan plants, media, leaf litter beneath plants for adults and eggs.
  - Inspect building materials and nursery supplies before bringing them onto your property.
  - Inspect your vehicle (tire wells, truck beds) for hitchhiking frogs after leaving infested areas.

**Select Best Control Method**
- Minimize retreat and nesting sites
  - Avoid stockpiling discarded plant material.
  - Re-landscape with less broad-leaved plants.
- Install **screen barriers (pictured)** to keep frogs out of designated areas (fine mesh screen at a 90° angle that frogs cannot cross).
- **Hot water “sprench” (spray + drench)**
  - Set hot water heater to 120 °F and “sprench” plants for adults and eggs.
- **Chemical “sprench”** with weekly monitoring for frogs
  - Natural pyrethrins products plus 8% citric acid applied as a contact spray will control eggs and adults. Natural pyrethrins paralyze adults after 1 application but is fatal after 2 applications (1 hour apart).
  - 16% citric acid as contact spray (may burn sensitive plants, including orchids); can be rinsed off 1 hour after application to minimize phytotoxicity but will reduce effectiveness on treated eggs by 15%.
- Continue to inspect and listen for frogs **weekly after spraying**.

**Treatment Before Market**
- **Hot water shower**
  - 109 -113 °F for 5 min for eggs, juveniles, adults
  - Place treated plants in a coqui-free holding area to prevent re-infestation prior to transport.

**Final Inspection**
- Use **sound-activated recorders (pictured)** to detect calling males in shipments at night for at least two nights prior to movement/sale.
- **Visually inspect** for frogs and eggs in cryptic areas and plant parts.

**Precautionary Statement / Disclaimer:** These recommendations are provided only as a guide. Please read and follow all label directions.