

# Protocol for Rearing Southern Green Stink Bugs

## Rearing Procedures

### Care of Egg Mass

- Place stink bug egg mass on a 55 mm filter paper in bottom of a Petri dish
- Place water-soaked 2" cotton dental roll in the dish near egg mass, but not touching filter paper (moisten daily)
- Once nymphs emerge, place a 2" segment of pole bean in dish near insects

### 2<sup>nd</sup> Instars

- Tape a 4 × 4" paper towel in the bottom of a 7" w × 7" l × 3" h Rubbermaid container with a screened (4" × 4") lid
- Place 4 water-soaked 6" cotton dental rolls on each side of the bottom of the container (moisten dental rolls every day and replace as needed)
- Put bottom of a Petri dish in the bottom center of the container. Place 2-3 2" segments of pole beans and sprinkle 10 unsalted, raw, hulled sunflower seeds into the dish.
- Gently brush nymphs into new container
- Vacuum exuviae from container and replenish food twice weekly

### 4<sup>th</sup> Instars

- Tape a paper towel in the bottom of a Bug Dorm
- Put a small plastic plate in the bottom center of the Dorm. Place 4-6 whole pole beans and slices of squash onto the plate
- Place the bottom of a Petri dish with a thin layer of unsalted, raw, hulled sunflower seeds into the box
- Punch 2 holes (~ 1" apart) into the lid of a 4 oz. plastic solo soufflé. Run a 6" cotton dental roll down through one hole from the top of the lid and then back up through the other from the bottom of the lid making a "U" shape. Add water to the cup and then cover it with the modified lid. Place two of these water dispensers into opposite corners on the bottom of the Dorm (replace weekly).
- Lay a 6" water-soaked cotton dental roll on each side of the bottom of the Dorm (moisten daily; replace when needed)
- Vacuum exuviae from container and replenish food twice weekly

### Adults

- Tape a paper towel in the bottom of a Bug Dorm
- Put a small plastic plate with 4-6 whole pole beans and slices of squash onto the plate in the bottom center of the Dorm
- Place the bottom of a Petri dish with a thin layer of unsalted, raw, hulled sunflower seeds into the box and (food should be replaced twice weekly)
- Place two of the water dispensers (like those above) into opposite corners on the bottom of the Dorm (refill as needed; replace weekly)
- Hang two strips of sleeve cage material (8×8") from top of Dorm for egg laying. Eggs should be collected daily.
- Dorm should be cleaned as needed and cadavers removed twice weekly

## Instructions on Washing Pole Beans and Squash

- Pour 1 cap full of Fit for every ½ gallon of water. Make enough solution to completely cover pole beans. Soak pole beans in Fit for 2-3 minutes. Rub beans gently with your fingers as the beans soak. Rinse

under running tap water. Lay beans out on a paper towel (one layer high) to dry. After beans and squash have been washed and dried, place beans and squash to be stored in a 10" x 10" seal closure bag with two folded paper towels in the bottom for storage in the refrigerator.

Notes:

Beans and squash can be stored in the refrigerator for up to 1 week. Always use distilled water to slow down the molding process. Replace all disposable items. For all items that are not disposable, soak with 10% bleach and water solution, rinse, and then wash with Dawn dish detergent.

**Items for Rearing:**

- Petri Dishes - 100 × 15mm, polystyrene
- Rubbermaid microwave reusable plastic 5 cups container 3871  
Rubbermaid Incorporated, Ohio, USA
- Bug Dorm – 11 ¾" cube. The cage is made of plastic-injected white polypropylene, nearly transparent with visibility on all sides, top, and bottom. Three side panels have 16 × 24" mesh plastic screen. The fourth side provides easy access from an opening 6 1/8" diameter with nylon sleeve.  
Bio Quip Products, 17803 LaSalle Avenue, Gardena, CA 90248-3602 USA, (310) 324-0620
- Paper towels – Bounty – 27.9 × 27.9" white, no print, two ply
- Plastic Plates – Solo 7" round red
- 4 ounce Solo cup and lid – clear  
Solo Cup Company, Baltimore, MD
- Cotton Dental Rolls – 6" medium, 3/8" diameter, white, 100% cotton, braided, sterile  
Richmond Dental, P.O. Box 34276, Charlotte, NC 28234
- Pole Beans and Squash – Winn Dixie or Harvey's of Tifton, GA
- Sunflower Seeds – Unsalted, raw, and hulled 1 lb. reseal able bag  
Healthgenesis.com, Now Foods, Bloomingdale, IL 60108
- Bean Wash – Fit Fruit and Vegetable Wash, 100% natural  
HealthPro Brands, Inc., Cincinnati, OH 45242
- Storage Bags – Skilcraft 10" × 10" Seal Closure Bag, linear low density polyethylene and low density polyethylene  
Envision Inc., Wichita, KS 67213