

Green Lacewing Rearing

1. Prepare Containers.

Each is 80mm x 100mm, lined with yellow cardboard, and topped with tulle mesh. A half petri dish filled with cotton wool sits on top of the mesh. Paper towels are placed under the container to catch excrement.



Materials:

80mm x 100mm cylinders
Yellow Cardboard
Half Petri Dishes
Cotton Wool
Tulle mesh (1.4mm openings)
Rubber bands

Environmental Conditions:

Temperature: $20 \pm 2^{\circ}\text{C}$

Humidity: $65 \pm 5\%$

Photoperiod: 16:8h

Insect Diet Materials:

Honeybee pollen loads, or pollen.

Mealworms (*Tenebrio Molitor*)

2. Lacewing Eggs should be hatched individually to prevent larvae cannibalism. This will be done in a multi-celled container, or 25mm plastic cylinders.

They should get a drop of fructose solution after hatching. Otherwise, larvae are fed mealworms (*Tenebrio Molitor*). These can be provided already dead to simplify this process. They should get a drop of fructose solution after hatching

Each larva is fed 3 mealworms per week, plus more if they manage to eat all the remains before they are replaced.

Instar	Size (mm)	Weight (mg)
1	4-5	.5 -1
2	6-8	2-4
3	9-12	6-12

3. After the larva has formed a cocoon, a 30mm high piece of cardboard should be placed upward into the container as a support for emerging adults. These adults can then be sexed, and up to four pairs can be placed in the containers described above.

4. 300 mg of pollen should be placed at the bottom of each cage, and the cotton wool should be saturated with water, but not dripping.

This should be maintained about twice a week. Eggs should be isolated from the containers and transferred to larvae rearing units or more suitable cool storage (eggs can survive in bran medium at 8°C for a few weeks).

Adult lacewings are mature as soon as they emerge and can be released or transported for sale after that.

Conclusion: Although this is limiting for a large-scale operation, it is certainly doable on a small scale. It is straightforward with available materials and food for the insects, plus can be done without an intensive lab.

Storing the individual containers may need to be optimized, however I can work with the different storage types and figure out what works best for me.

