

Bean Beetles

A perfect live food for carnivorous plants with medium sized traps.

Feeding Carnivorous Plants.

Carnivorous plants grow in the nutrient-poor soils of bogs. The constant flow of water through a bog leaches away soil minerals including nitrogen, which is necessary for healthy plant growth. Carnivorous plants have adapted unique methods to lure, trap and digest insect victims to obtain nitrogen. When grown indoors there can be too few insects available for strong growth and it becomes useful to feed the plants. Bean Beetles are an ideal food, especially for carnivorous plants with medium size traps including venus flytraps, sundews, butterworts, cephalotus and pitcher plants. The bean beetles are easily sprinkled into the traps for quick, natural feeding. The beetles do not fly and are very simple to culture. They are clean and odorless. They need very little space, and can be grown year-round. Nothing beats live food for great carnivorous plant growth.

Culturing Bean Beetles.

Bean Beetles are very simple to culture. The only materials necessary are small vials, plugs and medium. Upon receiving the culture, remove the cap, but leave the foam plug in place. Keep them at room temperature, between 68-75°F (20-25°C) and out of direct sunlight. Lower temperatures will slow their growth, and higher temperatures will shorten their life cycle, but may promote the growth of mold, bacteria and mites. The beetles will do fine in the plugged vial for a month or more. Adults can be sprinkled onto carnivorous plant traps as needed. To start a new culture, add a few beetles into a clean vial with fresh black-eyed beans.

Bean Beetle Life Cycle.

Bean Beetles, *Callosobruchus maculatus*, are a small (about ¼”) tropical beetle from Africa. They do not survive freezing or winters. Adults do not require food or water. Eggs are laid on the beans, where the larva hatches and eats its way into the bean to continue feeding and development. Adults emerge in about 18 days and are sexual mature in 2 to 3 days. At room temperature, adults live for about 2 weeks. A single female can lay 100 eggs in a week. There are four distinct stages in the bean beetle life cycle: egg, larva, pupa and adult. Within one day the larva hatch from the egg and begin burrowing into a bean. Larva feed for about 2 weeks, and molt 4 times. Frequently it is possible to see a small “window” where the larva is feeding. Within three days after emerging a female can mate and start to lay eggs. Adults may live for several weeks.

Ideal Carnivorous Plant Food

1. Natural source of nitrogen.
2. Just sprinkle into traps.
3. Easy to use and keep.
4. Clean and odorless.
5. Lasts for years.

Creating New Cultures.

About once a month prepare a fresh culture.

Add about 100 beans (about 1” deep) to a clean dry vial. Blackeye peas or compeas, mung beand or adzuki work well. Simply shake a few beetles from an old culture into the freshly prepared vial. It only takes one fertile female, but adding about a dozen beetles works well. Plug the vial with a clean foam plug. Keep at room temperature in indirect light. Most adults are do not fly, when there is plenty of food. On occasion, a crowded culture or one with beans that have been nearly or fully consumed, may produced adults that can fly. Keeping cultures filled with fresh beans will reduce this situation.