

21. Designing of Semi-Automatic Mass Rearing System of Corcyra

Name of Inventor Dr. Jamal Ahmad

Type: New

Year of development: 2014

Patent: NA

Description of Technology

An automatic *Corcyra* rearing system was designed and developed for enhanced mass production of factitious host i.e. *Corcyra cephalonica* to use the host for breeding of a number of biological control agents for field use. The double door almirahlike machine comprises 14 sliding trays and detachable *Corcyra* collecting cage. The latter is fitted with a bulb in the side to attract the adult *Corcyra* and under a sieve like bottom that allows only eggs to drop on the slide tray beneath.





(Clock wise): Corcyra rearing machine; door opened to show sliding racks; adult Corcyra trapping device, trapped adult Corcyra

Impact

The designed equipment is both economical and time saving in the sense that it does not require much man power, labour and energy for the production of the host. Additionally, it protects the culture of factitious host and breeding medium from rats and natural enemy such as Bracon hebetor of Corcyra cephalonica which otherwise cause substantial damage resulting in huge economical loss to all biocontrol laboratories worldwide. Enhanced production of Corcyra can boost the production of Biological control agents like Trichogramma spp., braconids, predators like coccinellids, lacewing bugs and anthocorid bugs and entomopathogenic nematodes for field use.

Commercial applicability

The designed equipment can be of great commercial importance in all the biological control labs of India or private industries so far as its marketing after patenting is concerned. The features of this equipment are better than all other prototypes or *Corcyra* rearing equipment designed so far.