

## 5. CLAIMS:

We claim:

1. A method for mass production of entomopathogenic nematodes comprising:

inoculating insect larvae with a first sodium alginate gel suspension comprising infective juveniles of entomopathogenic nematodes in a low cost container;

placing a sponge sheet over the inoculated insect larvae;

applying a second sodium alginate gel suspension comprising infective juveniles of entomopathogenic nematodes over the sponge sheet;

incubating the container at a temperature of about 25 to 27 degrees C for about 10 days thereby enabling infective juveniles of entomopathogenic nematodes emerging from the insect larvae to migrate into the sponge; and

harvesting the infective juveniles, wherein the sponge sheet with the infective juveniles is removed from the container and stored in a suitable bag.

2. The method as claimed in claim 1, wherein the first gel suspension has 2% to 3% sodium alginate.

3. The method as claimed in claim 1, wherein the second gel suspension has 1% sodium alginate.

4. The method as claimed in claim 1, wherein the concentration of the infective juveniles in the first gel suspension is about 100 IJs/ larva.

5. The method as claimed in claim 1, wherein the concentration of the infective juveniles in the second gel suspension is about 30 IJs/larva.

6. The method as claimed in claim 1, wherein the sponge sheet is a polyether polyurethane foam sheet.
7. The method as claimed in claim 1, wherein the yield is about 1.5 lakh IJs/infected larva.
8. The method as claimed in claim 1, wherein the insect larva is *Corcerya cephalonica*, *Galleria melonella*, *Tribolium molitor* or *Tribolium castinium*.
9. A biocontrol formulation for managing insect pests, comprising: infective juveniles of entomopathogenic nematodes embedded in a sponge sheet moistened with a sodium alginate gel suspension.
10. The formulation as claimed in claim 9, wherein the gel suspension has 1% sodium alginate.
11. The formulation as claimed in claim 9, wherein the sponge sheet is a polyether polyurethane foam sheet.

**6. DATE AND SIGNATURE:**

Dated this 24 Jan 2019,

Authorized Patent Agent's Signature: 

Authorized Patent Agent's Name: (USHARANI KS)

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