

Resource Summary Report

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Modified diet assay for studying feeding RNAi in cotton leafhopper, *Amrasca biguttula biguttula*

DOI:10.17504/protocols.io.ksgcwbw

Type: Protocol

Proper Citation

Amritpal Singh Brar, Mridula Gupta, Gurmeet kaur, Suneet Pandher, Satnam Singh 2018. Modified diet assay for studying feeding RNAi in cotton leafhopper, *Amrasca biguttula biguttula*. protocols.io dx.doi.org/10.17504/protocols.io.ksgcwbw

Protocol Information

URL: <https://dx.doi.org/10.17504/protocols.io.ksgcwbw>

Authors: Amritpal Singh Brar, Mridula Gupta, Gurmeet kaur, Suneet Pandher, Satnam Singh

Summary: *Amrasca biguttula biguttula* (Ishida) commonly known as cotton leafhopper is a serious pest of cotton and okra. Nutritional requirements or growth physiology for this insect has not been much known till date. We developed artificial membrane feeding method for leafhopper which can be further used for RNA interference studies. Main components of this diet were L-cysteine (5.0 mg), glycine (2.0 mg), nicotinic acid (1.0 mg), sucrose (500 mg), K₂HPO₄ (50 mg), ZnCl₂ (0.04 mg), Thiamine HCl (0.25 mg), Vitamin B6 (0.25 mg), Becosules capsule powder (Pfizer Limited, USA) (2.0 mg), Green food dye (GanpatiSyn Food Colour, India) (2.0 mg) per 10ml of autoclaved double distilled water. To make diet accessible to the cotton leafhoppers the 1.5 ml of Microcentrifuge tube's (MCT) cap (Tarsons Products Pvt. Ltd. India) was removed and diet was filled in 2 layers of parafilm sachet (diet was poured on first layer of parafilm on cap and covered with another layer of stretched parafilm) into cap. The MCT's was cut 1/4th from bottom end, which was covered with muslin cloth (40 count mesh size). This MCTs with leafhopper was kept in incubator at 65-70% RH, 14:10 h light and dark photoperiod and 27± 2°C.

Affiliations: Punjab Agricultural University, Regional Research Station, Faridkot, Punjab Agricultural University, Regional Research Station, Faridkot, Punjab Agricultural University, Regional Research Station, Faridkot, Punjab Agricultural University, Regional Research Station, Faridkot, Punjab Agricultural University, Regional Research Station, Faridkot

External URL: [doi: 1371/journal.pone.0191116](https://doi.org/10.1371/journal.pone.0191116)

Version: 1

Publication Date: 2018

Proper Citation: Amritpal Singh Brar, Mridula Gupta, Gurmeet kaur, Suneet Pandher, Satnam Singh 2018. Modified diet assay for studying feeding RNAi in cotton leafhopper, *Amrasca biguttula biguttula*. protocols.io dx.doi.org/10.17504/protocols.io.ksgcwbw

Record Creation Time: 20210329T220545+0000

Record Last Update: 20210329T221158+0000

Data and Source Information

Source: