

## **Brevicoryne brassicae Compatibility with Maize in Multiple Cropping System**

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**Abstract :** *Brevicoryne brassicae*, aphid feeds on cabbage and Brassica sp. as preferred host. Brassica plants usually ripen when maize starts growing in multiple cropping systems. Experiment was conducted to observe suitability of *B. brassicae* by rearing it on maize as host. In a tritrophic eco-system, predator coccinellids can be found in the fields of brassica and maize. This experiment emphasized on issue of aphids growing incidence in a cropping system. Brassica is sown and harvested earlier than maize and is attacked by aphids, while maize is also attacked by aphids. Five mortality tests were conducted of *B. brassicae* fed on maize. Out of five mortality tests, 3 tests were conducted using 1st instar, while in two mortality tests, 2nd instars of aphids were used. Mortality tests revealed that first instar mortality was quite high on the second day, while in second instar larvae mortality was delayed up to third to the fourth day. These experiments reveal that aphids can use maize as substitute host at later instars as compared to young ones. These experiments can be foundation for studying further crop-insect interaction and sampling techniques used for this purpose.

**Keywords :** host suitability, *B. brassicae*, maize, tritrophic interaction

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