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Virulence of Some Entomopathogenic Fungi on Cabbage Aphids, *Brevicoryne brassica* L.

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Abstract: The present investigation was carried out during two successive Cabbage seasons (2014-2015 and 2015 - 2016), to study the virulence of entomopathogenic fungi on Brevicoryne brassica L. The aphid populations were evaluated in the field early in the season in December 2014 which began to appear on cabbage plants. Thereafter the number of aphids increased gradually to reach a peak of abundance during December 2014 and January 2015. Three concentrations were used $(1 \times 10^2, 1 \times 10^3 \text{ and } 1 \times 10^4 \text{ spores/ ml.})$. Under laboratory conditions the results showed that V. lecanii, M. anisopliae and B. bassiana have a latent toxicity because mortalities were occurred after the third day from treatment. The maximum percent of mortality (100 %) occurred after the 10th day from treatment with the 3rd concentration in V. lecanii. The 3rd concentration (1 x 10⁴ spores/ ml.) was highly toxic in V. lecanii, M. anisopliae and B. bassiana to the adult of Brevicoryne brassica L. compared with the other two concentrations. Under field conditions the third concentration (1 x 10⁴) also, was the best concentration against Brevicoryne brassica L. after the third application in V. lecanii, M. anisopliae and B. bassiana. The percent of reduction ranged between 89.4 and 96.3% in all concentrations. V. lecanii and M. anisopliae were highly effective than B. bassiana against Brevicoryne brassica L. These results confirmed that V. lecanii, M. anisopliae and B. Bassiana isolates are promising agents for *Brevicoryne brassica* L. control in the field.

Key words: Entomopathogenic fungi, Brevicoryne brassica L..

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