

Is the Parasitization Rate of *Diaeretiella rapae* Influenced When *Brevicoryne brassicae* Feeds on *Brassica* Plants?

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The development time and parasitization rate of *Diaeretiella rapae* (M'Intosh) on *Brevicoryne brassicae* (L.) feeding on different *Brassica* cultivars was studied in the laboratory at 20°C. The shortest development time from egg to adult parasitoid was 11.6 days on cabbage cv. 'Yalova 1' and the longest was 12.1 days on turnip cv. 'Antep' and rapeseed cv. local variety. Females lived significantly longer than males on the host plants used in the study. Females and males had the shortest longevity on rapeseed at 11.1 and 5.1 days, respectively. The highest percent parasitism of *B. brassicae* by *D. rapae* was found on cabbage (40.20%), and the lowest was recorded on turnip (32.64%). Our results demonstrate that parasitism rate could be influenced by the plant quality, probably due to the nutritional status of the aphids or to toxic compounds ingested through the plant. Cabbage, cauliflower and broccoli were found to be suitable plants for the parasitoid, considering the development time of pre-adults, and the parasitization rate of *D. rapae* on *B. brassicae*.

KEY WORDS: *Diaeretiella rapae*; *Brevicoryne brassicae*; *Brassica* plants; parasitization rate; tritrophic relationships.

Received May 17, 2006; accepted Sept. 1, 2006; <http://www.phytoparasitica.org> posting Jan. 23, 2007.

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