

**(PE Q) ON
MI GENE.**

², F. BEITIA¹

Selección Vegetal.

iae has been related to
behaviour to that ob-
tainers carrying the *Mi*

and Moneymaker
ious cultivars, respec-
er at 24°C:21°C
ers analyzed were: de-
f eggs laid by each

ween cultivars. Simi-
eggs laid per female
d that the presence of
onditions. However,
rying the *Mi* gene.
an earlier phase of
tomato plant.

**TABACI
DAE) IN
IN PANAMA**

Viriquí, Panama;

ie

asitoids of *Bemisia*
pecies. The parasitoids
ie). *Eretmocerus* sp.
abundant parasitoids.
re *E. porteri* and *E.*
0.4% ± 14.8. In gen-
alities were from high

**ENVIRONMENTALLY BASED MATERNAL EFFECT ON
REPRODUCTION OF *ADALIA BIPUNCTATA*:
IMPACT OF APHID PREY SPECIES**

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Food quality of ladybirds is known to influence the biological performances of the aphidophagous predators. Development (larval and total durations, mortality) and reproduction of the beetle are modified by changes of both prey species and their relative host plants. Suitability of many aphid species was already studied and was observed to induce lower consumption until complete rejection of preys by some aphidophagous predators. Even if polyphagous insects are considered, some aphid species provide only low quality food including sometimes toxic compounds.

In response to low nutritional value or food limitation, many insects have evolved developmental plasticity in which larvae mature more rapidly, leading to smaller body size adult. Here we investigate the effect of food quality represented by aphid species on *Adalia bipunctata* reproduction after having relaxed the nutritive selection from adult emergence. Reciprocal crosses between emerging adults fed with *Acyrtosiphon pisum* (optimal diet) or *Aphis fabae* (unappreciated diet) demonstrated that negative effect of the latter aphid species was maternally inherited. Female fecundity (egg laying and egg numbers per female) and egg viability was observed for each cross and compared to a full *A. fabae* nutrition (for both male and female at larval and adult stages) and *A. pisum* references. This environmentally based maternal effect was directly linked to developmental parameters induced by larvae nutrition. Influence of aphid prey constitute an important change of predator environment which was discussed in relation to biological control efficacy.