

Some Biological Characteristics of *Harmonia axyridis* (Col.: Coccinellidae) Adults According to the Color Pattern of Elytra

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Geographical variation in morph frequency has extensively been studied in the European coccinellid *Adalia bipunctata*, with physiological background to support the thermal melanism hypothesis. In contrast with described above, color pattern variation on genetic base has less attention in *Harmonia axyridis*. Variations between individuals may be the outcome of differences in their genetic constitutions, differences in the environments to which they have been exposed, or a combination of both.

As a result of sampling of field populations, color patterns of *H. axyridis* were classified into 5 color patterns: succinea 1 and 2 (orange or yellow elytra with some or no black spots), conspicua (black elytra with 2 red spots), spectabilis (black elytra with 4 red spots), and axyridis (orange or yellow elytra with some red spots or patch). As the number of spots on the elytra and occurrence frequency, succinea was divided into 2 groups, succinea 1 and succinea 2. Individuals which had an orange or yellow elytra with 19 black spots were decided on succinea 1. Succinea 2 type was an orange or yellow elytra with 0 to 18 black spot(s).

According to collection sites and color patterns, body size of females and males were investigated. Also, the daily aphid consumption of adult males and females on each color pattern was recorded, and their fecundity and hatchability were compared. Finally, it was carried out mating choice experiments in laboratory among color patterns of *H. axyridis*.