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**Author:** Lommen, Suzanne Theresia Esther

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# Exploring and exploiting natural variation in the wings of a predatory ladybird beetle for biological control

Suzanne Lommen

Exploring and exploiting natural variation in the wings of a predatory ladybird beetle for biological control **Suzanne Lommen 2013**



The central theme of this PhD thesis is natural variation in the wing length of the predatory two-spot ladybird beetle, *Adalia bipunctata*. 'Wingless' individuals of this species occur occasionally. They possess truncated wings and cannot fly, but the extent of the reduction is highly variable between individuals.

At one hand, I take a multidisciplinary approach to study the causes and consequences of this variation. It includes experimental work on the genetics, development, life-history traits and behaviour. On the other, I examine if using wingless ladybirds can improve biological control. This ladybird is released to control aphid pests, but is not effective when it flies away soon. Altogether, I link the field of fundamental (evolutionary) biology to that of applied biological control.