Ragweed leaf beetle: a friend or a foe?

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What we have done?

The aim of this survey was to investigate the potential of ragweed leaf beetle (*Ophraella communa* LeSage, *Coleoptera: Chrysomelidae*) association with the alternative hosts (out of *Ambrosia artemisiifolia*) in the field. The most examined non-target plants were *Artemisia vulgaris* L., *Conyza canadensis* (L.) Cronq., *Helianthus annuus* L., *H. tuberosus* L., *Inula graveolens* (L.) Desf., *Persicaria maculosa* S. F. Gray, *Xanthium strumarium* L. and *Zea mays*. Investigations were carried out in North Italy (Lombardia) and South Switzerland (Ticino) in 2014. The 50 selected plants were visually scouted to determine potential occurrence of any developmental stages and feeding symptoms of *O. communa*.

What have we learned?

O. communa is able to feed (as larva and adult) under field condition on *A. vulgaris*, *I. graveolens*, *H. annuus*, *H. tuberosum* and *X. strumarium*. There were only negligible records from sweepings over *Conyza* and *Persicaria*. No records out of corn.

A. vulgaris was affected especially as young plant. It was possible to see larvae and adults to feed. No eggs on *Artemisia* were found yet.

We found only one site (Altavilla Monferato) with *O. communa* feeding (few larvae and adults) on sunflower in the field.

***X. strumarium* was heavily infested!** Many adults, larvae and eggs were noticed. Infestation was recorded especially along Po River.

There were almost all plants of ***I. graveolens* infested and damaged!** at Balerna site (CH)- adults, larvae and eggs found.

Hovewer *O. communa* frequently visited *H. tuberosus* at some sites, the feeding of adults and larvae was rare.

What to do with it?

Even if O. communa is regarded as a successful biological control agent against *A. artemisiifolia* in China, it seems that it is not so clear as it looks like. The collected data suggests that additional experiments are needed to assess both the impact and the risks of non-target attack by this potential biological control agent under field conditions.

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