PROJECT FACTSHEET

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TRIP 2

Testing a mix of early flowering cultivars as trap crops for oilseed rape in order to reduce damage from the Pollen Beetle, Brassicogethes aeneus.

Inspiration

Although oilseed rape (Brassica napus) is an important crop for Luxembourg, it is highly affected by insect pests. In accordance with the Sustainable Development Goals of the UN and the Green Deal of the EU, sustainable control methods must be developed to avoid the use of synthetic pesticides. Trap crops have the potential to attract insect pests, thus keeping them away from nearby cash crops. This approach can reduce insecticides, fuel and time, among others, and can foster pollinators and other beneficial insects. In a former project (TRIP, 2021-2022) conducted by LIST, preliminary, promising results were obtained, paving the way for further investigations.

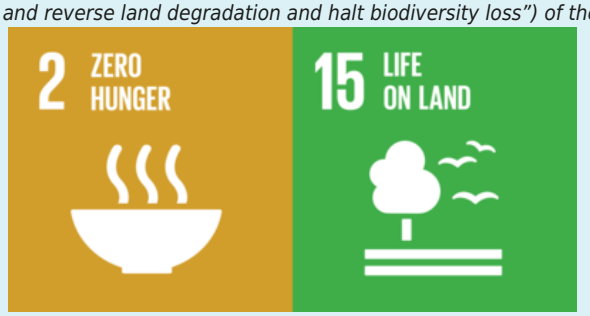
Innovation

Based on multi-site field experiments, TRIP 2 aims to provide a deeper understanding of the trap cropping effect on pest activity and distribution within the field by varying the amount of the early flowering cultivar (0, 10 and 20%) planted among the cash cultivar. Different field observations (pest abundance, bud loss, larval migration for pupation, etc.) will be made to gain a better insight into the effectiveness of this specific approach.

Impact

Based on this understanding, trap cropping will fit better in an integrated crop management strategy. Our strong collaboration with farmers, as well as with the Lycée Technique Agricole, will guarantee the easy integration of trap cropping into agricultural practices.
TRIP 2 will help to reduce the number of insecticide applications necessary for a sustainable production of oilseed rape. It will also foster pollinator insects for better crop pollination, resulting in a higher yield. Furthermore, it will also help to protect parasitic wasps like the Tersilochus heterocherus, an antagonist of pollen beetle larvae, in order to reducing the pest population in general.

The TRIP project is aligned with the Sustainable Development Goals No. 2 (“Zero hunger, achieve food security and improved nutrition and promote sustainable agriculture”) and No. 15 (“Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss”) of the United Nations.



Partners

Lycée technique Agricole (LU)

Financial Support

Ministère de l’Agriculture, de la Viticulture et du Développement Rural

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