SUGAR BEET WEEVIL: KNOWLEDGE UPDATING ON A PEST AFFECTING FROM NOW ON EVERY KIND OF BEETROOT PRODUCTIONS

Ghislain Malatestа

ITB Institut Technique de la Betterave

Expansion in France and damages

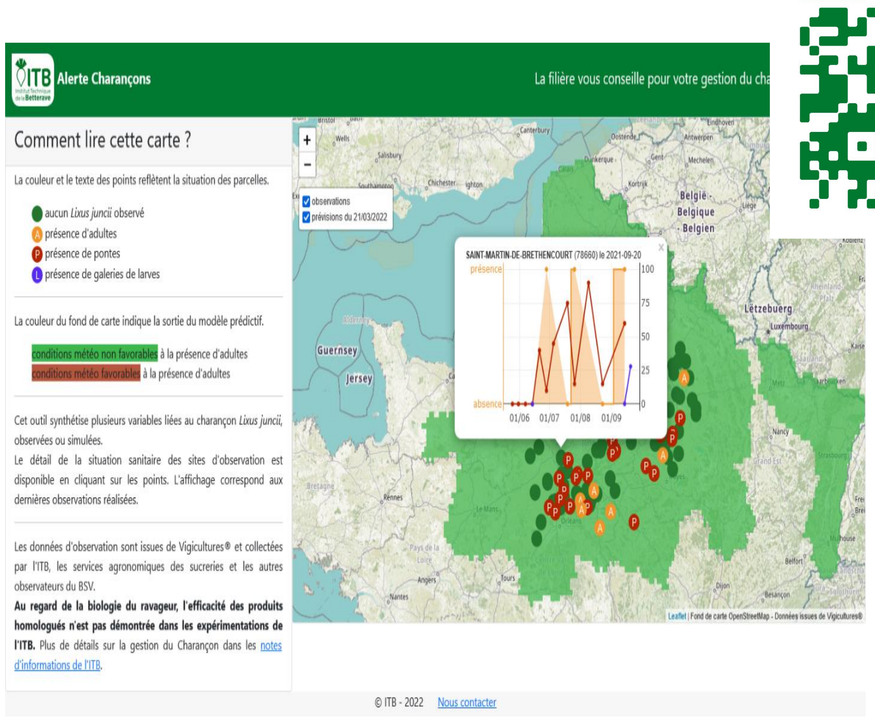
- Sugar beet weevil (*Lixus juncii Boheman*) is a coleoptera harmful to sugar and fodder beetroot seed productions. Initially present in the south of France, this pest has now reached northern production fields. It is currently observed in the South of Champagne, in Centre - Val de Loire and Ile-de-France regions, and its extension is expected to continue through the colonisation of different crops such as red beetroot seed, sugar beet and red beetroot. After a winter spent underground, and as soon as temperature increases, *Lixus Juncii* colonises the sugar beet fields.
- Economic impact is important for all of these productions in France.

1 generation per year

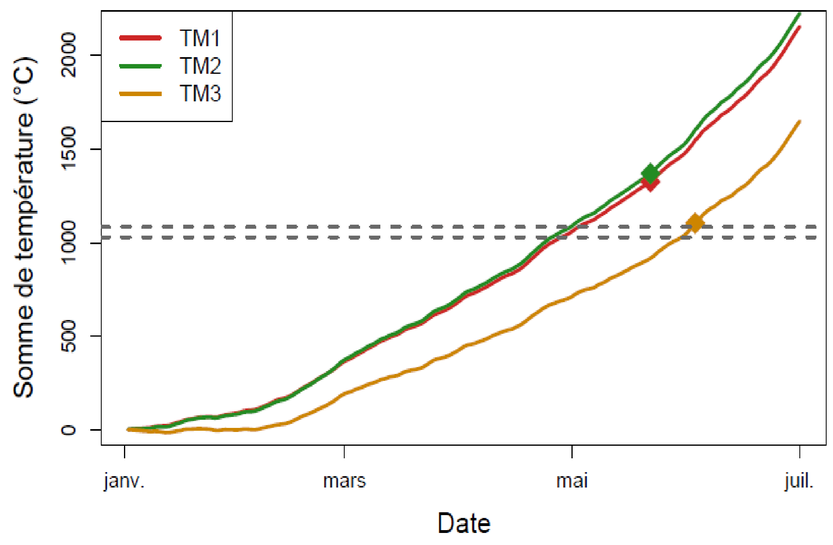
Pictures of (a) an egg, (b) a foraging larva, (c) lixus mating with female digging to lay an egg, (d) egg-laying scars on a stem, (e) larvae galleries in a sugar beetroot, (f) larvae in a red beetroot)

A tracking tool for the Lixus juncii weevil

This year, ITB offers a weevil pressure mapping tool associated with a first predictive model. The presence or absence of adults is regionaly monitored and their eggs in the petioles are counted. A simplified weather model gives an estimated date of adult weevil arrivals.

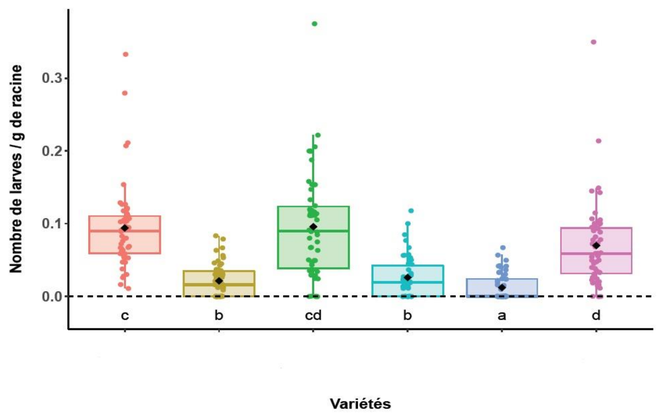


Temperature sums influence



The temperature sums is not an enough reliable index for the weevils appearance date.

Sugar beet varietes and weevil



Despite comparable bite densities, 3 varieties hosts significantly less larvae in their roots

Institut Technique de la Betterave
45 rue de Naples - 75008 Paris
www.itbfr.org - @ITBetterave
malatesta@itbfr.org

IIRB INTERNATIONAL INSTITUTE OF SUGAR BEET RESEARCH