

Sugar beet virus yellows

Additional information for note of September 2017

Yield impacts – October 2017 (Observation 934BE)

Technical itinerary of Plot 934BE (Normandy):

- "Standard" seed
- Sown on 5th April
- 3 insecticides (pyrethroids/carbamates) during crop growth:

treatment 1: 15th May 2017treatment 2: 24th May 2017treatment 3: 11th June 2017

- First symptoms of virus yellows observed end of June (early outbreak of virus yellows)
- Harvest on 10th October 2017 in two modalities:
 - healthy beets,
 - beets affected by virus yellows.
 - elementary/basic plot size: 3 rows of 5 m with 4 repetitions.
 - Implementation: one repetition corresponds to 1 plot in a virus outbreak and 1 plot in the contiguous healthy zone. We took the samples from the same rows for each repetition.

Table of trial results - 934BE (Factor 1: virus yellows)

	Beet weight t/ha	Sugar content %	Sugar / ha t /ha	Sugar / ha index
No virus yellows	109.30	18.43	20.14	100
Virus yellow	75.57	17.09	12.92	64

In this example/trial, 25 % of the plot was affected* and 75 % was unharmed on 10th October, date of harvest.

- Incidence/effect of the disease on infected zones compared to uninfected control: 36% decrease
- Incidence/effect on the entire plot : 9% decrease
- * Estimated area affected by virus yellows: 25.17 % (using PREVIBET ITB image analysis)

Symptoms of virus yellows observed in September 2017



