



POTATO PLANTS INFECTED WITH POTATO VIRUS Y.

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## BASIC INFORMATION

<b>TARGET</b>	Potato virus Y (PVY)
<b>CROP</b>	Seed potato
<b>SPRAY VOLUME</b>	200 l/ha
<b>LOCATION</b>	Zwaagdijk, The Netherlands
<b>TRIAL DATE</b>	July 2015
<b>RESEARCHER(S)</b>	Cebeco/ Agrifirm i.c.w. Proeftuin Zwaagdijk

## TREATMENT TABLE

T#	ACTIVE/DOSES
1	Untreated Control
2	0,2 l Somicidin® + 6,25 l Instral (standard treatment)
3	0,2 l Somicidin® + 6,25 l Olie-H® ( T1 + 2 in 3 - 4 days)
4	0,15 l Somicidin® + 0,25 % <b>WETCIT</b> + 4,70 l Olie-H®
5	0,2 l Somicidin® + 1,0 l Olie-H®/ day
6	Without Pyrethroid + 6,25 l Olie-H®
7	0,2 l Somicidin® + 6,25 l BCP
8	0,2 l Somicidin® + 6,25 l Olie-H®
9	Olie-H® 12,5 l
10	Building Somicidin® in Oil (50 - 100 %)
11	0,15 l Somicidin® + 0,25 % <b>WETCIT</b> + 0,75 l Olie-H®/ day

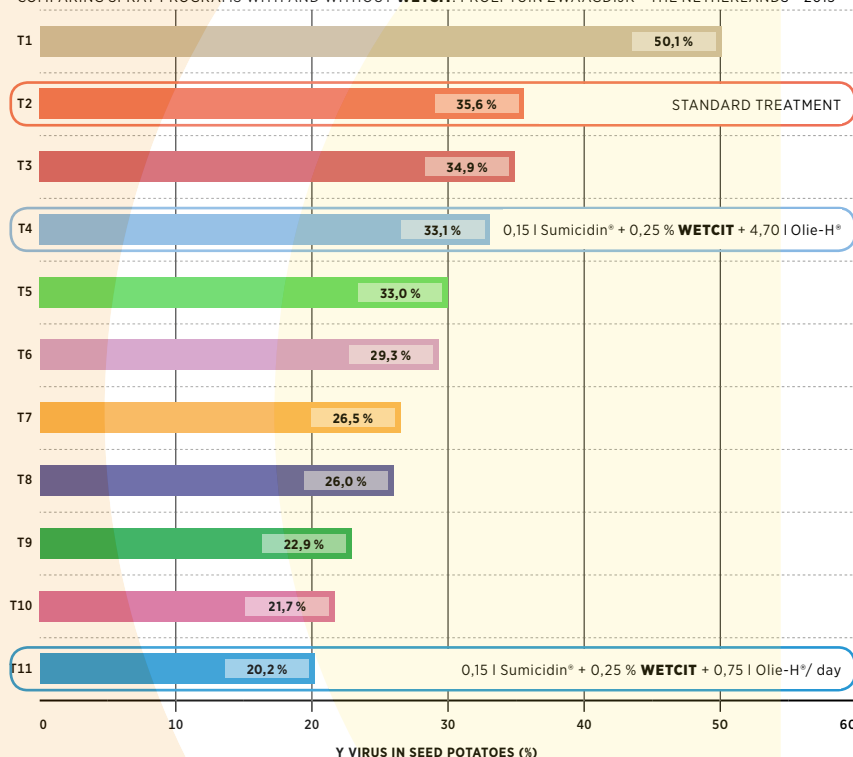
Somicidin® is a BASF insecticide containing 25 g/l esfenvalerate. Olie-H® is a Certis insecticide, acaricide containing paraffinic oil.

## CONCLUSIONS

- Treatment 11 (0,15 l Somicidin® + 0,25 % **WETCIT** + 0,75 l Olie-H®/ day) led to the best result achieved in the trial with the lowest % of virus presence on the seed potato field with an incidence **15,4 % less than the standard treatment** normally used; and **30 % less than UTC**. This treatment therefore was **43 % more effective** than treatment 2 (standard treatment).
- Treatment 4 (including **WETCIT** plus reduced rate of insecticide and reduced rate of Oil) also resulted in better control than treatment 2 (standard treatment). Thus, since input was reduced, there was a lower insecticide residue in the crop. That also happens comparing treatment 5 and treatment 11 leading to the conclusion that **the addition of WETCIT** in direct comparison with similar treatments **always provides better results even when we reduce the active partners by 25 %**.

FIGURE 1

### Y virus in Seed Potatoes (%)

COMPARING SPRAY PROGRAMS WITH AND WITHOUT **WETCIT**. PROEFTUIN ZWAAGDIJK • THE NETHERLANDS • 2015

- Comparing treatments 4 and 11 we can say that **applying small amounts of Oil per day combined with WETCIT is more efficient than a single spray of a large amount of oil plus WETCIT**. The result can probably be explained by the better and more homogeneous coverage of the oil spray providing better protection against the PVY vector.
- This leads to the conclusion that **a mix with WETCIT plus insecticide and small amounts of oil is the best way to control the vector (aphid) and prevent the infestation of PVY**, while simultaneously reducing the amount of chemical input and therefore reducing cost and also residue levels.
- Potato Virus Y (PVY) is a very important disease in potatoes, tomatoes, peppers and tobacco and this result indicates the most efficient way to control the spread and infestation of PVY.**