



## Crop Pathogens Quantification

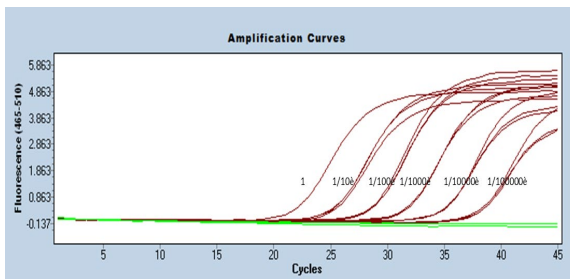
### Technology

#### Innovation

- Quantitative multiplex PCR-based analysis method
- High-speed and less expensive method
- Tool for measuring the health status of a sample (plants, soil) at a given time

#### Results

Development of the high-speed qPCR quantification method for : **5 LIN pathogens - 10 TOMATO pathogens - 3 ALLIUM pathogens**



**Amplification curves (Primers couple amplifying the TMV virus / 6 dilutions of DNA (tomato))**



### Advantages

- High-speed analysis
- Reliability and Specificity
- Targeting a large spectrum of plant pathogens simultaneously
- Reduced cost
- Possible update based on pathogen evolution
- Possible quantification before symptoms appear on the plant

### Applications

- Variety selection resistant to plant pathogens
- Health control of plants (plants, seeds), for Seed Growers, Breeders and Technical Centres
- Quantification of pathogens of flax, tomato (seeds, leaves), alliums
- Other possible applications: grasses, vines



#### Keywords

- qPCR analysis
- Seeds
- Pathogens
- Cultures
- Selection



#### Intellectual property

Know-how



#### Development level

Development at laboratory level:

Validation of pathogen detection protocols,

Quantifications by qPCR methods for flax, tomato and allium



#### Partnership's

Co-investment

SATT NORD & Industrial

For licensing purpose

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