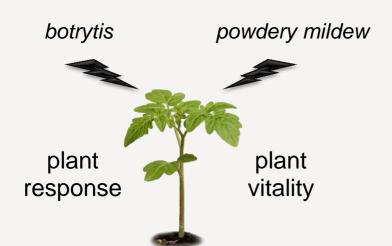


PLANT VITALITYTEST TO SHOW WHETHER A **PLANT IS DISEASED**

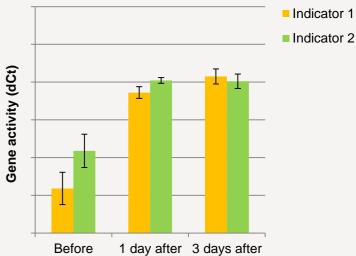
All biological processes in a living organism, including features such as growth, development and susceptibility to diseases, are directed by genes. Therefore, the activity of a gene is an important factor in the physiology of a plant. NSure has developed expertise in correlating specific physiological features with gene expression profiles. In order to do so, they make use of Next Generation Sequencing (NGS), a method in which the activity of ten thousands of genes can be determined and compared at the same time.



NGS

Within the Gezonde Kas project, NSure has identified a set of tomato specific genes which are activated upon an infection with botrytis or powdery mildew (Figure 1-3).

With help of those genes, NSure is able to detect at an early stage whether tomato plants are diseased even before it is visible from the outside.



inoculation inoculation inoculation

Figure 2. Two tomato genes which are activated after inoculation with powdery mildew.

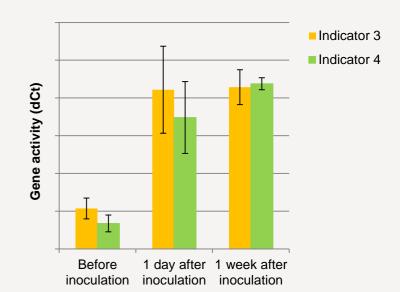


Figure 3. Two tomato genes which are activated after inoculation with botrytis.

Samplingkit

Figure 1. From test development to user-friendly test

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NSure PLANT VITALITYTEST

- Measures if the plant is diseased, before symptoms are visible
- Sampling on location by the grower
- NSure performs the analysis within 24h