



Euphresco Success story

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The collaboration allowed more than 100 isolates of *C. parasitica* to be collected from different countries; the material is now stored in the fungal collection of the Walloon Agricultural Research Centre (BE). This collection was used to study the genetic diversity of *C. parasitica* populations. A new technique called Genotyping By Sequencing (GBS) was used for the analysis of the genetic diversity of the isolates, and its performance compared to classic microsatellite based assessment (Simple Sequence Repeats, SSR). The first results of the GBS-analysis showed that the technique is more sensitive than SSR-analysis. With GBS, scientists were able to obtain information on the isolates: the 139 samples were grouped into 10 different clades. Remarkably, it appeared that the genetic diversity of *C. parasitica* isolates from countries (e.g. Britain and Belgium) only recently invaded by the fungus, was higher than expected. Such a diversity could only be explained by multiple introductions. The pathogen might also have been present for a longer time than was known.

A test performance study (TPS) to obtain validation data for the real-time PCR of Pilotti *et al.*, 2012¹ was organised in 2017 and involved 9 laboratories in Belgium, France, Italy and the United Kingdom. The results of the TPS will be published in the next months.

Project ID: Identification and early detection of *Cryphonectria parasitica* and *Ceratocystis platani* occurring on trees in Europe ([CERACRY](#))

¹ Pilotti M., Lumia V., Di Lernia G. and Brunetti A. Development of Real-time PCR for in wood-detection of *Ceratocystis platani*, the agent of canker stain of *Platanus* spp. European Journal of Plant Pathology 134, 61–79 (2012).