# Molecular method for detection of Cercospora Beticola sacc

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The most important foliar disease of sugar beet (Beta vulgaris L.) is Cercospora leaf spot, caused by Cercospora beticola Sacc. Losses caused by this pathogen appear insignificant at first but in reality heavy pressure from the disease which is caused by Cercospora beticola Sacc. results in significant loss in root weight and reduction of recoverable sugar in sugarbeet. This work present an protocol for the detection of Cercospora beticola from sugar beet plants. This method is based on PCR (Polymerase Chain Reaction) and is useful for identification of Cercospora beticola and can determine how early in the growing season sugarbeet tissues are colonized by the fungus. A rapid detection of disease and accurate  identification of the causal agent is necessary for the development of an effective control system. Leaf disks from sugar beets plants were used for this PCR method. After DNA purification, aliquts of the homogenate were added to PCR reaction and amplified using the Cercospora actin gen specific. Fragment size of the amplified products was correlated with the size of that amplified from DNA extracted from Cercospora beticola cultures to identify the fungus.