

2. *Colletotrichum graminicola* in Leaf and Fruit Tissues of Sweet Persimmon. Y. S. Lee¹, K. S. Kim¹, B. K. Chung² and T. H. Lim³, T. H. Chang³, H. J. Kim¹ ¹Kangwon National University, Chuncheon 200-701, Korea, ²Chungbuk National University, Korea, ³Dae Yu Co., Ltd, Kyungsan, Korea.

Sweet persimmon (*Diospyros kaki* Thunb.) has been widely cultivated in southern part of Korea and its cultivation areas are increasing. However, anthracnose disease caused by *Colletotrichum* species is one of the major hinderances for the cultivation and the production of sweet persimmon.

We used PCR to detect specifically *Colletotrichum graminicola* by analysing the sequences of ITS II regions in rDNA of *Colletotrichum* species. Based on the sequence data, CO-1 was designated to detect *Colletotrichum* together with ITS4 primer. A single ca. 500 bp segment was observed in *Colletotrichum* only, but not in other fungal and other bacterial isolates. The two factors, annealing temperatures and template DNA quantities, were investigated to find optimal conditions. Using these species-specific primers, we obtained a unique band at the range of annealing temperatures from 55°C ~ 61°C and at the levels of template DNAs from 10pg ~ 100µg