Colletotrichum acutatum associated with pepper anthracnose in Thailand

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Pepper anthracnose isone of the major constraints of pepper production in Thailand. Base on conidial morphological characteristics, *Colletotrichum capsici* and *C. gloeosporioides* were identified as the major causal agents of pepper anthracnose in Thailand in the past years. Recently a total of 24 *Colletotrichum* isolates were collected from typical anthracnose infected fruit samples and identified as 13 isolates of *C. capsici* and 11 islolates of *C. gloeosporioides*. However, different culture characters of *C. gloeosporioides* were found on media. Thereafter, we run PCR analysis with species-specific primers and analyze protease activity in casein hydrolysis medium, we have found that the primer CgINT (5'-GGCCTCCCGCCTCCGGGCGG-3')(Mills et. al. 1992) amplified (450 bp) 5 isolates of previous 11 isolates as *C. gloeosporioides*, and the primer CaINT2 (5'-GGGGAAGCCTCTCGCGG-3') (Sreenivasaprasad *et. al.* 1996) amplified (490 bp) 4 isolates of the remained *C. acutatum* isolates. Four *C. acutatum* isolates showed protease activity strongly than *C. gloeosporioides*. Based on the morphological, biochemical and molecular characteristics, *C. acutatumwas* firstly confirmed as the causal agent of pepper anthracnose in Thailand.

Key words : anthracnose, chili pepper, *Colletotrichum* spp.