

F-71 Genetic Relationship of *Colletotrichum gloeosporioides* and *C. acutatum* Isolated from Apple, Pepper and Black locust. Jung Nam Kim¹, Se Hoon Choi², Yoon Soo Do², Jae Youl Uhm², Jung Sup Shin³, Moo Ill Yeo² ¹Research Institute of Technogreen , Yongin 641-41, Korea; ²Department of Agricultural biology, Kyungpook National Unibersity Daegu, 702-701, Korea; ³Agricultural Research Center, HankookSamgong, Osan 235-6, Korea.

As the apple, pepper and black locust on which anthracnose occurs are sometimes grown in closely related area, the similarity of the pathogenic fungus was analyzed. The pathogenic fungi isolated from the three host plants were subjected to species analysis by the reaction against benzimidazole fungicides. Among the 390 isolates originated from apple, 35% were *Collectotichum acutatum* that is completely insusceptible to benzimidazole and others were *C. gloeosporioide* among which 7% were benzimidazole-resistant. The 101 isolates from black locust was divided into *C. gloeosporioides* and *C. acutatum* at the rate of 21% and 79%, respectively. In the reciprocal inoculation of the 3 host plants with nit-mutants derived from each of them, the inoculation of apple and pepper with the two fungal species from black locust and that of pepper plant with the two species from apple were successful, but other inoculations were unsuccessful. The genetic similarity among the isolates from the three hosts was examined by RAPD. The similarity among the isolates within the same species derived from same host plant was so high that formed a group. The group of *C. acutatum* from apple and that of *C. gloeosporioides* from black locust showed relatively high similarity at about 70% level. However, the isolates of *C. gloeosporioides* from apple showed lower similarity with those of *C. acutatum* from the same host than those from black locust. The *C. acutatum* from pepper showed low similarity with those from the other two host.

F-72 Attenuation of virulence of *Burkholderia glumae* and *Erwinia carotovora* by engineered endophyte containing AiiA gene. Hyun-Soo Cho, Soo-Young Park, Hoon Cheong, Seung-Hoon Kang, Jihyun F. Kim, Seung-Hwan Park Laboratory of Microbial Genomics, Division of Genomics and Proteomics Korea Research Institute of Bioscience and Biotechnology (KRIBB), Daejeon, 305-333

Quorum sensing regulates virulence factors depending on the population density manner in many plant pathogenic bacteria. In contrast, some bacterial species such as *Bacillus* spp. secrete counterpart enzymes (referred to as quorum quenching enzyme) that degrade acyl-homooserine lactones (AHL), Gram-negative quorum sensing signal