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**Inheritance of anthracnose resistance to *Colletotrichum* spp.
in chili pepper**

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Pepper anthracnose caused by *Colletotrichum* spp. is an economically important disease that causes serious yield loss and quality deterioration in many Asian countries. Recently, several genetic resources resistant to anthracnose were identified and used for genetic analysis and resistance breeding. Since 1980, anthracnose resistance has reported to be controlled dominantly and quantitatively. In contrast, a recent report demonstrated that the resistance of 'PBC932' to *C. capsici* was controlled by a single recessive gene. In this study, we tried to analyze the inheritance of anthracnose resistance to *C. capsici* and *C. acutatum*. Two different pepper lines, 'Daepoong-cho' (*C. annuum*) and 'AR' (*C. annuum*) were used as resistant resources. To analyze the inheritance mode of resistance, F₂ and BC segregating populations derived from the cross between 'Yeaju' and 'Daepoong-cho' and the cross between 'HN 11' and 'AR' were inoculated with *C. capsici* and *C. acutatum*, respectively. In addition, to determine whether the resistances were controlled by the same gene or not, reciprocal crosses between 'Daepoong-cho' and 'AR', which resistant line was derived from 'PBC 932' (*C. chinense*), were made and their F₁ progenies were inoculated with *C. capsici* and *C. acutatum*. As the result, the resistance of 'Daepoong-cho' and 'AR' seems to be controlled by a single recessive gene because segregation ratio of resistance to susceptibility in F₂ and BC_R generation was fitted to 1:3 and 1:1 mendelian model, respectively. In addition, both resistant sources seem to have the same resistance gene to *C. capsici* because all the F₁ progenies between 'Daepoong-cho' and 'AR' were resistant to *C. capsici*. However, 'AR' seems to have an additional resistance gene to *C. acutatum*.

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Inheritance of Long Husk Leaves in Maize

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Husk leaves (or "flag leaves") extend from the tips of ear husks in maize (*Zea mays* L., corn). They are typical of temperate sweet corns, where they facilitate machine-handling and removal of husks prior to canning. Most field corns lack or have very reduced husk leaves, and husk leaves are rare in tropical field and sweet corns. The inheritance of husk leaves was studied by generation mean analysis of progenies derived from crosses of the inbreds Hi38c1 and Ia453sh2. Hi38c1 is a tropical Hawaiian supersweet that lacks husk leaves and is based on the gene *brittle-1*. Ia453sh2 is a conversion to *shrunk-2* of Iowa inbred Ia453 (su) with long husk leaves.

Husk leaf extension was scored in winter and summer seasons on a scale of 1 (no husk leaves) to 9 (very long extension). The parents average scores were 1.2