Disease Note

PRESENCE OF *COLLETOTRICHUM ACUTATUM* CAUSING ANTHRACNOSE ON HOT PEPPER IN CENTRAL ITALY

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Colletotrichum acutatum J.H. Simmonds is the causal agent of anthracnose on a wide range of hosts including woody and herbaceous crops, ornamentals, and conifers. Recently, infections caused by several *Colletotrichum* species (mainly *C. acutatum*, *C. gloeosporioides*, and *C. capsici*) have caused serious problems to hot pepper production in tropical and subtropical regions (Liao *et al*., 2012). In October 2013, during a survey in chili pepper cultivations of central Italy, fruits of *Capsicum annuum* were collected, showing circular sunken lesion with concentric rings of acervuli that produced pink to orange conidial masses. Fragments of symptomatic tissues cut from the margin of fruit lesions were placed on potato dextrose agar (PDA) amended with streptomycin and ampicillin (100 ppm each). Fungal colonies were identified as *Colletotrichum acutatum* on the basis of morphological characters, such as size and shape of conidia, colony color and growth rate. DNA of one monosporic isolate (CRA-PAV ER1856) was extracted and amplified with primers specific for the internal transcribed spacer (ITS) region. Homology search of related sequences present in GenBank showed 99% identity with the sequence of isolate SPu2-1 of *C. acutatum* which was deposited in the European Nucleotide Archive with the accession No. HG972966. Pathogenicity tests on pepper fruits were successful, thus Koch's postulates were fulfilled. In Italy, *C. acutatum* causes damages to strawberries (de Clauser *et al*., 1990) and other crops, but it has never been found in hot pepper. *Colletotrichum* species are generally seed-borne, so infected seedlings and seeds may be a way for their introduction in new cropping areas. This pathogen represents a serious threat for pepper cultivation in hot and wet zones of our country.

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Disease Note

FIRST REPORT OF STEM AND POD BLIGHT OF HYACINTH BEAN CAUSED BY *SCLEROTINIA SCLEROTIORUM* IN BANGLADESH

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Hyacinth bean (*Lablab purpureus*) is an almost year round vegetable crop in Bangladesh. During January 2011, while surveying hyacinth bean fields in the Gazipur district, plants with light tan to brown blighted stems and pods were observed. Within the pod pith, large dark irregular sclerotia embedded in a white fluffy mycelium were found. Symptomatic tissues were excised, surface-sterilized in 0.5% sodium hypochlorite and placed on potato dextrose agar (PDA). Isolated fungal colonies consistently yielded white mycelium and produced a ring of large sclerotia near the edge of PDA plates. Under microscope, the hyphae were hyaline, branched and multinucleate. Sclerotia were induced to produce apothecia, asci and ascospores following a conditioning process (Smith and Boland, 1989). Based on morphology, the fungus was assumed to be *Sclerotinia sclerotiorum*. Pathogenicity of the fungal isolate was proven by placing seven-day-old PDA mycelial plugs (5 mm) on hyacinth bean stems. Seven days post inoculation, all inoculated plants started wilting and stem breakage were also observed for some dead plants. Dark sclerotia were found after splitting the dead stems of all inoculated plants. Identification of the fungus was confirmed by comparing the sequences generated from the internal transcribed spacer (ITS) region of the ribosomal DNA (ITS1 and ITS4 primers) (White *et al*., 1990). The nucleotide sequence was deposited in GenBank as accession No. KF791510. These sequences shared 100% nucleotide similarity with those of *S. sclerotiorum*. This pathogen has previously been reported on different crops (Huang *et al*., 2005). To our knowledge, this is the first report of *S. sclerotiorum* on hyacinth bean in Bangladesh.

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