Disease Note

FIRST RECORD OF FIG BADNAVIRUS-1 IN FIG TREES IN IRAN

M.R. Alimoradian[1], F. Rakhshandehroo[1] and M. Shams-Bakhsh[2]

[1]Department of Plant Pathology, College of Agriculture and Natural Resources, Science and Research Branch, Islamic Azad university, P.O. Box. 14515-775, Tehran, Iran
[2]Department of Plant Pathology, Faculty of Agriculture, Tarbiat Modares University, Tehran, Iran

In May 2014, mottling and chlorotic spots with necrotic margins were observed on the leaves of fig plants growing outdoor and private gardens in the Karaj district of Alburz (Iran). Based on symptoms, the involvement of Fig badnavirus-1 [FBV-1 (genus *Badnavirus*, family *Caulimoviridae*)] in disease aetiology was suspected. Mechanical inoculations of crude sap from symptomatic leaves extracted in 0.1 M phosphate buffer, pH 7.2, containing 0.01% Na_2SO_3 induced a mild mosaic in *Cucumis sativus*, vein clearing in *Cucurbita pepo* and *Nicotiana tabacum* cv. Samsun, whereas *Phaseolus vulgaris* remained symptomless. Twenty leaf samples from five fig gardens were randomly collected and tested for the presence of FBV-1 by PCR using total DNA extracted from leaf samples (Dellaporta *et al*., 1983) and primers 580F/1650R as described by Laney *et al*. (2012). Two out of the 20 samples tested proved to be infected with FBV-1, as shown by amplification of a 1070 bp DNA fragment encompassing ORF1, ORF2 and ORF3 of the viral genome. BLAST analysis of the FBV-1 sequences from Iran (GenBank accession Nos. KM610208 and KM610209) showed 98% and 91-97% identity at the nucleotide and amino acid levels, respectively, with the corresponding FBV-1 sequences available in GenBank. The presence of FBV-1 was also confirmed by PCR in inoculated herbaceous indicators. FBV-1 is known to occur in fig trees in different countries worldwide (Minafra *et al*., 2012), however, to the best of our knowledge, this is the first record from Iran.

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Corresponding author: F. Rakhshandehroo
Fax: +98.21.44868445
E-mail: rakhshandehroo_fa@srbiau.ac.ir

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Disease Note

FIRST REPORT OF *BOTRYTIS CINEREA* CAUSING POSTHARVEST GRAY MOLD OF TEJOCOTE (*CRATAEGUS MEXICANA*) FRUIT IN MEXICO

E.H. Nieto-López[1], L.A. Aguilar-Pérez[1], V. Ayala-Escobar[1], D. Nieto-Angel[1], R. Nieto-Angel[2], S.G. Leyva-Mir[2] and J.M. Tovar-Pedraza[1]

[1]Fitopatología, Instituto de Fitosanidad, Campus Montecillo, Colegio de Postgraduados. Km 36.5 Carretera México-Texcoco. Montecillo, Texcoco, 56230. Estado de México, México
[2]Departamento de Fitotecnia y Parasitología Agrícola, Universidad Autónoma Chapingo. Km 38.5 Carretera México-Texcoco. Chapingo, Texcoco, 56230. Estado de México, México

In Mexico, tejocote (*Crataegus* spp.) is grown commercially on a total area of more than 900 ha. During November and December 2013, fruits of *Crataegus mexicana* var. *chapeado* showing a gray and firm rot were collected in commercial markets in Puebla. Small pieces of decayed fruits were surface-disinfected for 1 min in a 2% sodium hypochlorite solution, rinsed in sterile distilled water, and plated onto potato dextrose agar (PDA). A fungus was isolated whose colonies were initially whitish but turned gray with age. Black and irregular sclerotia were formed after 14 days of incubation at 20°C. Conidiophores were erect, subhyaline and dichotomously branched, and bore unicellular, ovoid-ellipsoid, subhyaline conidia measuring 7.7-12.7x6.1-9.5 µm. Based on morphology, the fungus was identified as *Botrytis cinerea*. Genomic DNA was extracted and the internal transcribed spacer (ITS) region of rDNA was amplified using the universal primers ITS5 and ITS4 (White *et al*., 1990). PCR products were purified and sequenced. The resulting sequence of 496 bp was deposited in GenBank (accession No. KM594622). BLAST search showed 100% identity with *B. cinerea* sequences KF010847 and KJ476697. To confirm the pathogenicity of the fungus, 10 tejocote fruits were surface-disinfected with 80% ethanol. A conidial suspension ($1x10^6$ spores ml^{-1}) was sprayed on the surface of non-wounded fruits. Control fruits were sprayed with sterile distilled water. Typical gray mold symptoms with gray sporulating lesions were observed only on inoculated fruits after eight days. Koch´s postulates were fulfilled when the pathogen was re-isolated from the diseased fruits. To our knowledge, this is the first report of *B. cinerea* causing postharvest fruit rot on tejocote in Mexico and worldwide.

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Corresponding author: J.M. Tovar-Pedraza
Fax: 52.595.9520200
E-mail: jmtovar@colpos.mx

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