NEW RECORDS

New records of groundnut viruses from Madhya Pradesh

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Groundnut (Arachis hypogaea L.) plants showing symptoms of bud necrosis on terminal buds, leaves and stems were collected from Seed Production Unit, Indira Gandhi Agricultural University, Raipur during spring 1993 and sent to Legume Virology Lab, ICRISAT (A.P.) for identification. The symptoms of the disease appeared in the form of distinct chlorotic ring spots or chlorotic speckings on the quadrifoliate leaves immediately below the terminal bud. The fully expanded quadrifoliate leaf often becomes flaccid. The infected plants remain stunted and bushy if infected at seedling stage. The newly arising leaves were smaller in size. A wide range of symptoms like distortion, mosaic mottling and general chlorosis were noticed. Frequently, the necrosis of petioles, stems and primarily the terminal buds was observed which result in final death of the plant. Infected plants sometime showed proliferation of the branches but leaves showed extreme reduction in size and get distorted. The incidence of disease varied from 18-23 percent. The organism associated with such symptoms was identified as bud necrosis virus (BNV) from ICRISAT, A.P. (Courtesy : Dr. R.A. Naidu). Virus identification was confirmed by indirect ELISA (DAC-ELISA) and infectivity assay on diagnostic host i.e. cowpea cv. C - 152. This is the first confirmed report of BNV on groundnut from Madhya Pradesh.

Groundnut plants exhibiting severe leaf spotting symptoms during spring 1993 were collected from research farm, Indira Gandhi Agricultural University, Raipur. The symptoms of the disease appeared as small chlorotic lesions which gradually expand to 4-5 mm in diameter and become bright yellow. Frequently adjacent lesions coalesce covering a large area of the leaves which later became necrotic. These necrotic spots were also observed on petioles. The symptoms of the disease often confused with jassid injury or leaf spot caused by fungi. These symptoms under Raipur conditions were mostly observed in spring sown groundnut with the temperature range of 36-40°C. The causal agent found associated with these symptoms was peanut yellow spot virus (courtesy : Dr. R.A. Naidu). The virus was confirmed by indirect ELISA (DAC-ELISA) and biological assay. It constitutes a new record of peanut yellow spot virus from Madhya Pradesh.

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Three new host records of fungi from India

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Two new diseases of Allium hoockeri

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Allium hoockeri L. was observed to suffer from leaf blight and wilt disease in Imphal. The symptoms of leaf blight were characterised in the beginning by the appearance of several pinhead sized, water-soaked spots either in clusters or scatter on the under surface of leaves during May and June 1994 resulting in the blighting of leaves. Isolations on PDA consistently yielded Pestalotiopsis dissiminata Thuman.

The appearance of wilt and drying of affected plants were the typical disease symptoms of another disease. White mycelium and several reddish brown sclerotia were observed in or around the affected plants and soil surface. The disease was noticed during February and March 1993. The fungus isolated from the diseased parts was identified as Sclerotium rolfsii Sacc. Pathogenicity of both the fungi was proved.

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Leaf blight of Terminalia tomentosa caused by Coniella terminaliae

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Terminalia tomentosa (W. & A.) Lurel (Combretaceae) is one of the important timber yielding forest tree occurring in the deciduous forests. The high quality timber is used in buildings, implements, railway sleeper and numerous other purposes. The leaves of this plant are used as fodder. A severe leaf blight disease was observed during the rainy season in the months of September to December in the forest of Sagar. The disease was found to be caused by Coniella terminaliae Firdousi and Vyas which is a first record in India on this host.

Minute brown spots on the lamina and the margins leading to the complete rolling of the leaf and premature defoliation were observed. The infected branches became naked. Pathogenicity of the fungus was established.

The specimen has been deposited in the Herbarium as FV-20, Isotype, IMI-323384 Holotype.

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