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NEW HOST RECORD FOR PSEUDOMONAS SOLANACEARUM E. F. SMITH

Pseudomonas solanacearum, the causal agent of bacterial wilt diseases attacks a wide range of host plants belonging to different families. The authors during the course of study came across a weed plant viz. Hyptis suaveolens, Poit, belonging to the family labiatae showing wilt symptoms. A large number of this weed plant were found affected by the wilt disease during July - August 1977 at the premises of the Coconut Research Station Kumarakom. The severity of the disease was found high during the rainy season.

Loss of turgidity of the growing shoot and drooping of the leaves which in turn takes an inward curve are the characteristic symptom of the disease. Wilting of leaves usually started from the tip and proceeded downwards. Typical bacterial streaming from the cut end? was noticed on examination of the root and stem cuttings of infected plants. The pathogen was isolated on triphenyl tetrazoliurn chloride agar medium (Kelman, 1954) and the pathogenicity was confirmed on H. suaveolens by inoculating the healthy plants by stem puncturing method with 24 - 29 hour old culture of the isolate. Under natural conditions it took 8-10 days for the appearance of symptoms in this weed host. The organism was also found pathogenic on tomato and brinjal seedlings. The bacterium was identified as Pseudomonas solanacearum, E. F. Smith, based on the cultural characters of the isolate on tetrazoliurn medium and its ability to produce wilt symptoms in tomato and brinjal Hyptis suaveolens, Poit. it is a new host record of Pseudomonas solanacearum, E. F. Smith. Further //. suaveolens, Poit, was also found as symptomless carrier of the pathogen in 20% of the plants tested.

സംഗ്രഹം

ഫിപ്റ്റിസ് സാവിയോളൻസ് ഒരു ബാക്ടീരിയയായ സുഡോമോണാസ് സൊളാനസീയോസ്തിന്റെ ആതിഥേയത്വം നൽകുന്ന ഒരു കളചെടിയാണിത്. കൂടാതെ ഈ ചെടി പ്രസ്തുത ബാക്ടീരിയയുടെ രോഗലക്ഷണം കാണിക്കാത്ത ഒരു വാഹകനായും കണ്ടിരിക്കുന്നു.

REFERENCES

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Coconut Research Station, Kumarakom, Kerala.

P. K. SATHYARAJAN P MATHAI

(M. S. Received 18-11-1977)