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**SHORT SCIENTIFIC NOTES**


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***STREPTOMYCES COLLINUS* LINBENBEIN—  
A NEW SPECIES CAUSING COMMON  
SCAB OF POTATO**

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A LARGE number of isolations made from the common scab affected potato tubers yielded several known pathogenic species of *Streptomyces* along with two isolates of *Streptomyces collinus* (C.M.I. Nos. 8231 and 8244) which are reported to be pathogenic for the first time.

The pathogenicity of the organisms was proved in the green house<sup>1</sup> and laboratory<sup>2</sup> and Koch's postulates satisfied. The isolates produced shallow to moderately deep type of scab symptoms on potato tubers (Cv. Kufri Chandramukhi) showing more or less concentric, corky lesions with slightly raised and cracked margins (Fig. 1).

The isolates possess d. narrow (Approx.  $1.4\mu$ ) grey to yellow substrate mycelium with light grey aerial mycelium bearing coiled spore chains (25–35 spores/chain). The spores were spherical ( $0.8-0.9 \times 0.9 \times 1.0\mu$ ) in isolate No. 8244 while slightly cylindrical in other isolate ( $0.7-0.9 \times 1.0-1.2\mu$ ).

The organism grew well on potato dextrose agar, Czapek-Dox, Litmus milk and potato plugs but good sporulation was obtained on yeast-malt-agar. The isolates were tyrosinase positive, aerobic, reduced nitrate, curdled milk and gave positive Voges-Proskauer



FIG. 1. Symptoms of common scab on potato tuber produced by *Streptomyces collinus*.

(V.P.), cellulolytic and lipolytic reactions; hydrogen sulphide and ammonia were produced but only one isolate (No. 8244) liquefied gelatin; produced acid without gas from galactose, glucose and arabinose and utilized sucrose with alkali production.

The authors are thankful to the Director, Commonwealth Mycological Institute, Kew, England, for the identification of the cultures.

September 4, 1980.

1. Taylor, C. F. and Decker, B., *Phytopathology*, 1947, 26, 287.
2. Lawrence, C. H., *Can. J. Microbiol.*, 1956, 2, 757.

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**TWO NEW ADDITIONS TO THE  
FUNGI OF INDIA**

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DURING the survey of microfungi at Gyanpur (Varanasi) the authors have isolated two fungi from decaying stems of *Oryza sativa* L. A perusal of the literature revealed that the following isolates were new addition to the fungi of India.

1. *Fusarium fusarioides* (Frag. and Cif.) Booth.

Isolated from the dead stems of *Oryza sativa* L. during November 1978. The specimen has been deposited in C.M.I., England, as I.M.I. No. 214998. Leg. S. K. Srivastava.

2. *Tritirachium rectidentatum* Matsushima

Isolated from the dead stems of *Oryza sativa* L. during January 1979. The specimen has been deposited in C.M.I., England, as I.M.I. No. 215001. Leg. S. K. Srivastava.

The authors express their thanks to Director, C.M.I., Kew, England, for help in identification of fungi, to the Principal and Head of Botany Department, K.N. Government Post-Graduate College, Gyanpur, Varanasi, for necessary facilities for work.

February 12, 1981,