



*First report of new pathogenic species of  
Streptomyces causing common  
scab disease on potato tubers  
in Egypt*

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**Abstract:**

Potato tubers showing the symptoms of common scab disease were collected from three different localities. Causal pathogens were isolated, and Morphological, Biochemical and Pathogenicity tests were conducted *in vitro* to preliminary identify the isolates. Moreover, partial 16S rDNA gene sequencing was used to genetically identify the isolates. Four new pathogenic species that have not previously been reported in Egypt were identified. The four species were *Streptomyces rochei*, *S. rutgersensis*, *S. lateritius*, and *S. bottropensis*. The strains (S1, S10, S14, S17, S18, S20, and S21) were *Streptomyces rochei*, strain (S11) was *S. rutgersensis*, strain (S13) *S. lateritius* and strain (S15) was *S. bottropensis*. To our knowledge, this is the first time to report the cause of common scab disease of potato plants in Egypt by *S. rochei*, *S. rutgersensis*, *S. lateritius*, and *S. bottropensis*. Different samples obtained 16S rDNA sequences were deposited at NCBI GenBank with the following accession numbers: (S1) MZ267260, (S10) MZ267264, (S14) MZ267268, (S17) MZ267271, (S18) MZ267272, (S20) MZ267274, (S21) MZ267275, (S11) MZ267265, (S13) MZ267267, and (S15) MZ267269. Four newly identified isolates showed different pathogenicity, morphological and biochemical characteristics.

**Keywords:**

Potato (*Solanum tuberosum*), common scab, 16S rDNA gene sequencing, new pathogenic species of common scab, *S. rochei*, *S. rutgersensis*, *S. lateritius*, and *S. bottropensis*