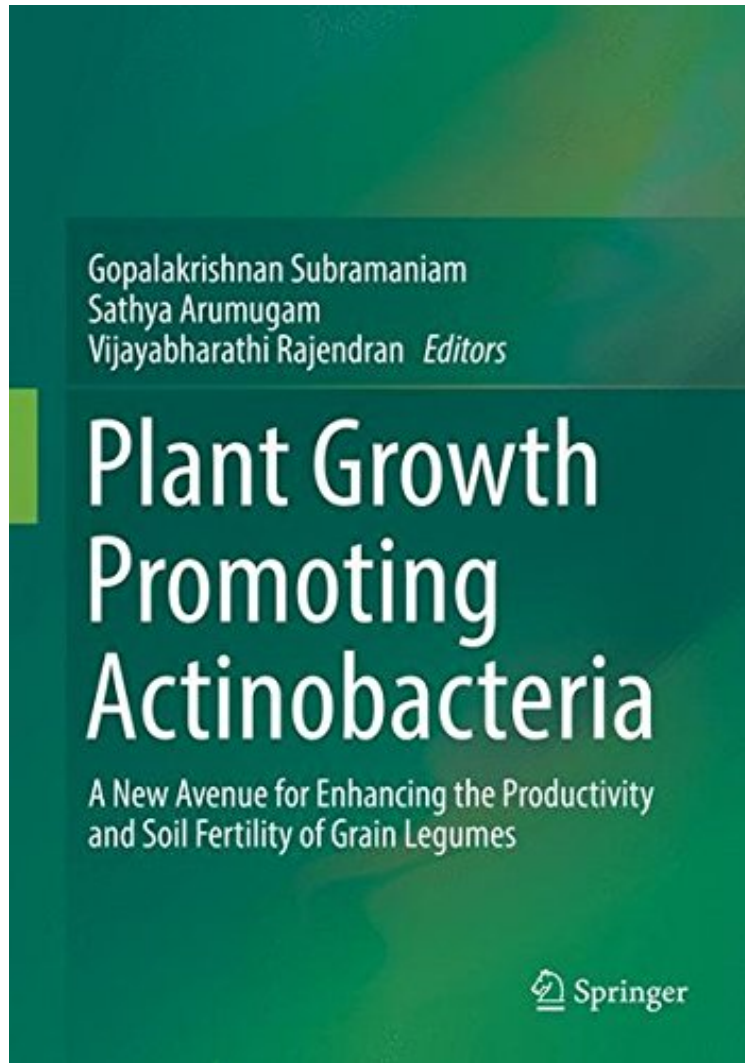


[Mobile book] Plant Growth Promoting Actinobacteria: A New Avenue for Enhancing the Productivity and Soil Fertility of Grain Legumes

# Plant Growth Promoting Actinobacteria: A New Avenue for Enhancing the Productivity and Soil Fertility of Grain Legumes

*From Springer*

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**From Springer : Plant Growth Promoting Actinobacteria: A New Avenue for Enhancing the Productivity and Soil Fertility of Grain Legumes** before purchasing it in order to gage whether or not it would be worth my time, and all praised Plant Growth Promoting Actinobacteria: A New Avenue for Enhancing the Productivity and Soil Fertility of Grain Legumes:

Global yields of legumes have been relatively stagnant for the last five decades, despite the adoption of conventional and molecular breeding approaches. The use of plant growth-promoting (PGP) bacteria for improving agricultural production, soil and plant health has become one of the most attractive strategies for developing sustainable agriculture. Actinomycetes are bacteria that play an important role in PGP and plant protection, produce secondary metabolites of commercial interest, and their use is well documented in wheat, rice, beans, chickpeas and peas. In order to promote legumes, the general assembly of the UN recently declared 2016 the International Year of Pulses. In view of this development, this book illustrates how PGP actinomycetes can improve grain yield and soil fertility, improve control of insect pests and phytopathogens, and enhance host-plant resistance. It also addresses special topics of current interest, e.g. the role of PGP actinomycetes in the biofortification of legume seeds and bioremediation of heavy metals.

This work focuses on actinobacteria in soil microbiota and their role in crop production, generally pulse crops such as peas and beans. Chapters show a consistency of style and format, all with meaningfully titled short subsections, frequent inclusion of tables, extensive cited reference . This work is strongly recommended for institutions with programs in agriculture, especially those with research soil science or legume cultivation. Summing Up: Recommended. Upper-division undergraduates through researchers and faculty; professionals. (J. Cummings, Choice, Vol. 54 (4), December, 2016)

From the Back Cover Global yields of legumes have been relatively stagnant for the last five decades, despite the adoption of conventional and molecular breeding approaches. The use of plant growth-promoting (PGP) bacteria for improving agricultural production, soil and plant health has become one of the most attractive strategies for developing sustainable agriculture. Actinomycetes are bacteria that play an important role in PGP and plant protection, produce secondary metabolites of commercial interest, and their use is well documented in wheat, rice, beans, chickpeas and peas. In order to promote legumes, the general assembly of the UN recently declared 2016 the International Year of Pulses. In view of this development, this book illustrates how PGP actinomycetes can improve grain yield and soil fertility, improve control of insect pests and phytopathogens, and enhance host-plant resistance. It also addresses special topics of current interest, e.g. the role of PGP actinomycetes in the biofortification of legume seeds and bioremediation of heavy metals.

About the Author Dr. S Gopalakrishnan is currently working as Senior Scientist in International Crops Research Institute for the Semi-Arid Tropics, Telangana, India. His publications are: 1. Gopalakrishnan S, Srinivas V, Alekhya G, Prakash B, Kudapa H and Varshney RK (2015). Evaluation of *Streptomyces* sp. obtained from herbal vermicompost for broad spectrum of plant growth-promoting activities in chickpea. *Organic Agriculture* DOI 10.1007/s13165-0099-1. 2. Gopalakrishnan S, Srinivas V, Alekhya G and Prakash B (2015). Effect of plant growth-promoting *Streptomyces* sp. on growth promotion and grain yield in chickpea (*Cicer arietinum* L.). *Biotech* DOI 10.1007/s13205-015-0283-8.