

The background of the book cover is a detailed microscopic image of soil, showing various sized particles, organic matter, and mineral grains in shades of yellow, orange, and brown. A prominent red rectangular box with a yellow border is centered on the cover, containing the title and author information.

# **SOIL: THE DYNAMIC NEXUS OF LIFE, SCIENCE AND SUSTAINABILITY**

**Specially Crafted Concise Guide for Students of Higher Education**

**Dr. S. GNAANA SARASWATHI**

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Science and Sustainability**

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## About the Author



**Dr. S. Gnaana Saraswathi** is an Assistant Professor in the Department of Botany, The Madura College, Madurai, with a good educational background and research experience in the field. She holds a Bachelors degree in Botany (First class with distinction) from Holy Cross College, Tiruchirapalli, Master's degree in Botany (First class) from The Madura College, Madurai, and a M.Phil in Life Sciences (Specialization: Botany) from Pondicherry University, where she was honored with the Pondicherry University Gold Medal for her exceptional performance in M.Phil. The medal was presented to her by the late Dr. A.P.J. Abdul Kalam, a renowned scientist and former President of India. Dr. S. Gnaana Saraswathi further pursued her Ph.D. in Plant Ecophysiology at Madurai Kamaraj University, focusing on Plant Physiology in response to changing diurnal and seasonal patterns with specific reference to Photosynthesis, as well as Soil Respiration as part of an Indo-German collaborative project jointly funded by DST, India and DAAD, Germany. With this good educational and research background, Dr. S. Gnaana Saraswathi has developed a solid foundation in the field of plant sciences. With a featured article on soil respiration that received recognition in the scientific community, she is well-regarded for her contributions to the field with 100 plus citations.

As a passionate and caring teacher in her Almamater of postgraduation, she is dedicated to imparting knowledge and nurturing a love for botany among her students. She has a genuine interest in their academic growth and strives to inspire the students with her expertise. As the author of this book, she takes pride in her contributions to academia, and beyond as she had the privilege of designing and offering two highly acclaimed programs: a 45-hour Certificate Course in Etiquette, catering to students from various disciplines at the Undergraduate and Postgraduate levels, and a comprehensive one-year Diploma Program in Gardening. Both of these programs have been warmly welcomed by students, and she is delighted to have witnessed a significant number of students benefit from these enriching educational opportunities.

Beyond teaching and research, she finds joy in gardening and has a copious hands-on experience in this area. Her connection with nature and love for plants have further enriched her understanding of botany and fostered a passion for ecotherapy.

Currently working on her first book, Dr. Gnaana Saraswathi aims to expand scientific knowledge in the field of botany and inspire readers with valuable insights. With a strong research background and plans for future literary endeavors, she is poised to make a significant impact in the field.

Dr. S. Gnaana Saraswathi is a dedicated Assistant Professor with expertise in Plant Ecophysiology and a focus on soil science and soil respiration. Her passion for teaching, research contributions, and practical experience in gardening make her a valuable addition to the field of botany, inspiring students.

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