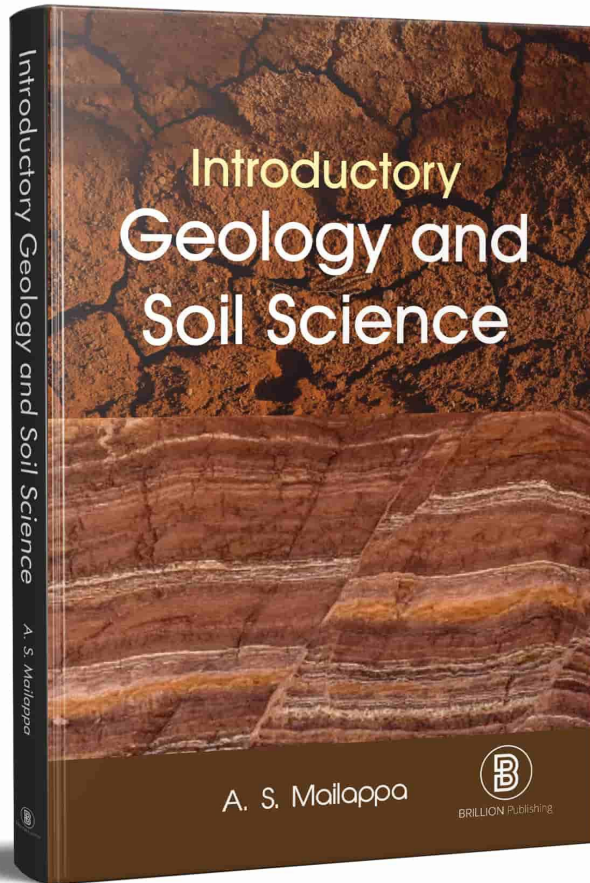




BRILLION Publishing

Introductory Geology and Soil Science



This book *“Introductory Geology and Soil Science”* brought out by Dr.A.S.Mailappa, is truly a ‘tour de force’ of condensation of the essentials of scientific knowledge and approaches to soil science and describes the genesis and development of soils, their characteristics and functions, their importance for plant growth.

This present book is an authentic treatise, written in a very simpler and lucid manner covering all aspects of geology and soils in 28 well-defined chapters, following the syllabi of latest Fifth Deans’ Committee for undergraduate programmes of Agriculture, Horticulture and Forestry, being following in various Agricultural Universities in India, to ensure easy and clear basic understanding about various spheres of geology and soil science.

This book has as its focus the development of an introductory geology and soil science text, which covers in great detail a broad spectrum of the elements of soil science to include: origin of earth, rocks, parent material, soil formation, pedogenic processes, the morphological, physical, chemical properties, soil classification, and special aspects like soil colloids, buffering capacity, soil degradation and laboratory safety which are unavoidable in the continuum from basic to applied soil science principles.

This book is primarily intended for the students of undergraduate level for having a better understanding about fundamentals of soil science, a prerequisite for progressing ahead in acquiring in-depth knowledge on the application aspects of soil science in relation to crop growth, but it can also serve as a guide for postgraduate students and scientists associated with agriculture and allied disciplines. As a whole, this book will appeal to those working within soil science, agriculture, forestry, plant nutrition and soil management, and environmental issues.

Readership: Students / Teachers / Researchers / Practitioners of Agricultural Universities / Institutes, engaged in Teaching, Research and Extension activities related to Agriculture, Horticulture, Forestry and other allied disciplines.

ISBN: 978-93-86658-16-6

e-ISBN: 978-93-86658-17-3

Pages: 188

2020

 Printed Copy

Hardbound ₹ 1995/-

A. S. Mailappa

(Contents)

- Soil Science
- Origin of Earth
- Soil Forming Rocks
- Soil Forming Minerals
- Weathering of Rocks
- Weathering of Minerals
- Soil Forming Factors
- Soil Forming Processes
- Development of Soil Profile
- Physical Properties of Soil
- Soil Texture
- Bulk Density and Particle Density of Soil
- Pore Space and Porosity of Soil
- Soil Colour
- Soil Structure
- Soil Consistency
- Soil Air
- Soil Temperature
- Soil Water
- Soil Colloids, Organic Colloids and Humus
- Soil Organic Matter
- Humus
- Ion Exchange
- Soil pH and Nutrient Availability
- Buffering Capacity of Soil and its Importance
- Soil Degradation
- Laboratory Safety - General Safety Rules
- Recommended Safety and Emergency Equipments for the Laboratory
- Glossary
- Appendices

For e-version of the book or sample chapter for personal perusal contact:
info@brillionpublishing.com
www.brillionpublishing.com

ISBN: 978-93-86658-16-6



9 789386 658166