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MICROWAVE AND RADIO-FREQUENCY TECHNOLOGIES IN AGRICULTURE

AN INTRODUCTION FOR AGRICULTURALISTS
AND ENGINEERS



Graham Brodie, Mohan V. Jacob, Peter Farrell
Microwave and Radio-Frequency Technologies in Agriculture
An Introduction for Agriculturalists and Engineers

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Managing Editor: Magdalena Golachowska



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Preface

Modern agriculture is the foundation of society and culture. Without adequate supplies of food and fibre, society has insufficient energy to do more than simply survive. Humanity's ability to produce enough food to sustain its current population is mostly due to adoption of new methods and technologies by the agricultural industries as they became available. Mechanisation transformed agricultural practices. In this modern era, new information, communication and high speed processing technologies have the potential to further transform the industry. Many of these technologies incorporate radio-frequency and microwave radiation into their systems.

This book presents an overview of some ways these parts of the electromagnetic spectrum are being used in agricultural systems. The book does not attempt to present every possible application because this field of study is progressing very rapidly. Neither does it attempt to explore every detail of the technologies. The main purposes of the book is provide a glimpse of what is possible and encourage practitioners in the engineering and agricultural industries to explore how radio-frequency and microwave systems might further enhance the agricultural industry.