

## Achieving sustainable cultivation of maize

Volume 1: From improved varieties to local applications

Edited by Dr Dave Watson, CGIAR Maize Research Program Manager, CIMMYT, Mexico



 burleigh dodds  
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## New title information

# Achieving sustainable cultivation of maize Volume 1

## From improved varieties to local applications

Edited by: Dave Watson, CGIAR Maize Research Program Manager, CIMMYT, Mexico

### Endorsement:

"This publication promises to be a path-breaking contribution to agricultural research and development."

*Professor Mankombu (M. S.) Swaminathan, Recipient of the first World Food Prize in 1987 and listed by Time magazine as one of the 20 most influential Asian people of the twentieth century*

### Description:

Maize is one of the most important and widely grown cereal crops in the world and is a staple food for almost a billion people, particularly in the developing world. It has been estimated that maize yields need to increase by 60% by 2050. There is an urgent need to increase yields in the face of such challenges as climate change, threats from pests and diseases and the need to make cultivation more resource-efficient and sustainable.

Drawing on an international range of expertise, this collection focuses on ways of improving the cultivation of maize at each step in the value chain, from breeding to post-harvest storage. Volume 1 reviews research on breeding and its use in improving nutritional quality and agronomic performance. It then goes on to discuss the challenges in translating these advances into effective outcomes for smallholders in the developing world.

Achieving sustainable cultivation of maize Volume 1: From improved varieties to local applications will be a standard reference for cereal scientists in universities, government and other research centres and companies involved in maize cultivation. It is accompanied by Volume 2 which reviews improvements in cultivation techniques as well as the management of pests and diseases.

### Key features:

- Reviews key challenges and advances in maize breeding methods;
- Discusses the development of varieties with enhanced nutritional and other properties such as improved protein content and abiotic stress resistance;
- Summarises key steps being taken to support smallholders growing maize in developing countries

### Audience:

Academic researchers in cereal science; International and national agencies supporting agricultural development; Cereal processors and companies supplying the agricultural sector (e.g. seed companies)

### Editor details:

Dr Dave Watson is Programme Manager for the CGIAR Research Program on MAIZE, based at the International Maize and Wheat Improvement Center (CIMMYT). Dave has worked for nearly 30 years in the transformation and sustainable intensification of agrarian systems, in both developed countries and developing countries. During the last decade, he worked as manager of the Innovative Partnership Programme for the International Livestock Research Institute (ILRI) and as the Director for Project Development and Management at the International Institute of Tropical Agriculture (IITA)

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