

Achieving sustainable cultivation of grain legumes

Volume 1: Advances in breeding and cultivation techniques

Edited by Dr Shoba Sivasankar, Dr David Bergvinson, Dr Pooran Gaur, Dr Shiv Kumar, Dr Steve Beebe and Dr Manuele Tamò



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Achieving sustainable cultivation of grain legumes Volume 1

Advances in breeding and cultivation techniques

Edited by Dr Shoba Sivasankar, International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), India, et al.

Endorsement:

'This reference will greatly improve the visibility of, and access to knowledge about crops that play such a critical role in sustainable cropping systems, nutrition and income, yet which often remain under the radar of governments and policy makers and which do not always receive the investment they deserve.'

Jeff Ehlers, Program Officer in Agricultural Development, Bill & Melinda Gates Foundation

Description:

Grain legumes are characterised by their nutritional value, an ability to grow rapidly and improve soil health by fixing nitrogen. This makes them a key rotation crop in promoting food security amongst smallholders in particular. However, yields are constrained by factors such as pests and diseases as well as vulnerability to poor soils, drought and other effects of climate change.

This collection reviews the wealth of research addressing these challenges. Volume 1 focusses on breeding and cultivation. Part 1 summarises advances in understanding crop physiology and genetic diversity, and how this understanding has informed the development of new varieties. Part 2 reviews improvements in cultivation techniques to make the most of these new varieties, from variety selection and seed quality management, through pest and disease management to storage and quality assessment.

With its distinguished editorial team and international range of expert authors, this will be a standard reference for the grain legume research community and farmers of these important crops as well as government and other agencies responsible for agricultural development. It is accompanied by a companion volume which reviews particular grain legumes.

Key features:

- Reviews key developments in understanding crop physiology and genetic diversity and how they have informed advances in breeding new varieties
- Coverage of advances across the value chain for grain legume cultivation, from variety selection to post-harvest storage
- Discusses the latest trends in disease, insect pest and weed management

Audience:

Grain legume scientists; growers; government and non-governmental agencies supporting cultivation of grain legumes as a food security crop

Editor details:

Dr Shoba Sivasankar is Director of both the CGIAR Research Program on Grain Legumes and the Research Program on Dryland Cereals. She is based at the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) in India.

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