## Azuki Bean: Botany, Production and Uses

T A Lumpkin and D C McClary, Department of Crop and Soil Sciences, Washington State University, USA

Azuki is one of the twelve most important grain legumes in the world and is grown widely in China, Japan, South Korea and Taiwan. It has also been produced or studied in several other countries, including the USA (Minnesota and Washington States), Argentina and Australia. In Japan, azuki is an essential ingredient of both *seki-han*, a festive rice dish, and *an*, a sweetened bean paste. Botanically, it formerly belonged to the genus *Phaseolus*, but it has recently been transferred to the genus *Vigna* with relatives such as mungbean, black gram and rice bean.

This book is the first comprehensive work on this crop. It draws extensively on the Chinese, Japanese and other East Asian literature and is based on a review of approximately 800 published references. It is a definitive reference work that should greatly enhance interest in the crop. It is aimed at researchers throughout the world working on grain legumes, as well as others in agronomy and plant science.

## **Contents**

- Foreword Kazumi Maeda (Kochi University, Japan)
- Introduction
- Botany of azuki
- · Physiological characteristics
- Production
- Insects and nematodes
- Diseases
- · Breeding and genetics
- · Food chemistry and processing
- · Uses and marketing

November 1994 260 pages

Hardback

ISBN 0 85198 765 6

Price: £35.00 (US\$59.50 Americas only) ABB-02

For further information or to order please contact CAB INTERNATIONAL headquarters or an exclusive CAB INTERNATIONAL distributor in your area.

Please add £2.00 per book postage and packing (excluding UK)

Headquarters
CAB INTERNATIONAL

Wallingford Oxon OX10 8DE,

UK

Tel: (0491) 832111 Fax: (0491) 833508 North America University of Arizona Press 1230 North Park Avenue, Suite 102 Tucson, Arizona 85719-4140

USA

Tel: (602) 882 3065 Fax: (602) 621 8899 Singapore and Malaysia

Publishers Marketing Services 10-C Jalan Ampas #07-01 Ho Seng Lee Flatted Warehouse

Singapore 1232 Tel: (65) 256 5166

Fax: (65) 253 0008

Australasia

DA Books 648 Whitehorse Road Mitcham 3132, Victoria

Australia Tel: (3) 873 4411 Fax: (3) 873 5679

## Seed Science Research

Research Papers	
Bruggink, T. & van der Toorn, P. Induction of desiccation tolerance in germinated seeds	1
Dickie, J. B. & Smith, R. D. Observations on the survival of seeds of <i>Agathis</i> spp. stored at low moisture contents and temperatures	5
García, F. C., Jiménez, L. F. & Vázquez-Ramos, J. M. Biochemical and cytological studies on osmoprimed maize seeds	15
Saracco, F., Bino, R. J., Bergervoet, J. H. W. & Lanteri, S. Influence of priming-induced nuclear replication activity on storability of pepper (Capsicum annuum L.) seed	25
Vertucci, C. W., Crane, J., Porter, R. A. & Oelke, E. A. Survival of Zizania embryos in relation to water content, temperature and maturity status	31
Vigil, E. L. & Fang, T. K. Comparative biochemical and morphological changes in imbibed cotton seed hypocotyls and radicles in situ and in vitro – Protein breakdown and elongation growth	41
Short Communication	
Egerton-Warburton, L. M., Griffin, B. J. & Kuo, J. Reserves of aluminium and mineral nutrients in seeds of <i>Eucalyptus calophylla</i> (Myrtaceae) with reference to the globoid inclusions	53
Book Review	59

Abstracted in Seed Abstracts (CAB ABSTRACTS), CABS (Current Awareness in Biological Sciences), Current Advances in Plant Science and BIOSIS

## © CAB INTERNATIONAL, 1995

All rights reserved. No part of this publication may be reproduced, in any form or by any means, electronically, mechanically, by photocopying, recording or otherwise, without prior permission of the copyright owner.