

# Seed Technology



**2nd Revised & Enlarged Edition**

**Dhirendra Khare & M.S. Bhale**

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## About the Authors



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Laboratories of the University. He has published more than 75 refereed research papers, six books and nine manuals. **The Bharat Ratna Dr. C. Subramaniam Award of ICAR for Outstanding Teacher** in Agriculture and Allied Sciences for the biennium 2007-2008 was conferred on Dr. Dhirendra Khare, for excellence in teaching in the field of Seed Technology. **The Outstanding Team Research Award of ICAR** was conferred on Dr. D. Khare alongwith the team of JNKVV in 2007-2008 for the excellent research work done in the field of crop improvement and seed availability of soybean. He is life and Fellow member of Indian Society of Seed Technology and Indian Society of Genetics and Plant Breeding. He has organized several national training programmes on aspects on seed science and technology and performed the duty of resource person in many training programmes across the nation.



**Mohan S. Bhale** is the Associate Professor (Plant Pathology) at Seed Technology Research, Department of Plant Breeding & Genetics, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur (Madhya Pradesh). He received Master of Science in Agricultural Plant Pathology in 1978 and Ph.D. in 1992, both from Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur. He started his professional career in 1979 and involved with management of diseases of crops. Presently, he is working in National Seed Project (Crops) and dealing with the designated objectionable seedborne diseases of field crops.

His publications include research and review articles, book chapters, manuals and bulletins, working sheets and edited proceedings. He has educated personnel engaged with seed through mass and group trainings on Seed Health and Seed Production Management. At post graduate level, he is involved with teaching of Seed Health Management.

He has an active long association with several professional societies including Indian Society of Seed Technology, Association of Plant Pathologists of India and Indian Mycological Society. He has been honored as a Fellow of Indian Phytopathological Society, Indian Society of Mycology & Plant Pathology and Indian Society of Oilseeds Research. He is the recipient of ICAR Award for Outstanding Interdisciplinary Team Research in Crop Improvement for contributions in seed pathological aspects of soybean in 2007-2008. He has developed the detection techniques and approaches for the management of major seed associated pathogens of soybean.

He is the author of five other books: Seed Technology; A Handbook of Seed Certification; Seed borne Diseases Objectionable in Seed Production and their Management; Seed borne Diseases of Field Crops and their Management and Seed Pathology in Modern Agriculture. He is the Chief Editor of JNKVV Research Journal (ISSN: 0021-3721), an official publication of the University since 2002.

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The understanding of science is growing rapidly and generating efficient and economically viable technologies. It has influenced the seed production, seed certification and quality enhancement technologies tremendously. Therefore, it becomes essential to update the knowledge bank of the book after the span of 12 years.

With the greatest reception and acceptance of the first edition of the book Seed Technology among teachers, students, seed certification officers, seed analyst, field inspectors and people engaged in seed production and policies, the book required updation of information concurrently revision in the light of new concepts.

The first edition was published in the year 2000 with 40 chapters spread over 260 pages. The book was reprinted times to fulfil the need of users. Now, the second edition of the book has 80 chapters spread over pages with a strong glossary. In addition extensive alteration and addition have been made in all the chapters.

In persuasion of this book, we acknowledge, respectfully to the authors of different books and web sites of all over the world which provided information to bring the second edition. The manuscript has profited greatly from access to the very rich resources of Jawaharlal Nehru Krishi Vishwa Vidyalaya Library.

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We are confident that the information provided in the book shall be of practical use to many, including researchers, teachers, students and people engaged in ensuring availability of quality seed.

**Dhirendra Khare**  
**Mohan S. Bhale**

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