



Wheat Crop Management

N.R. Das



WHEAT CROP MANAGEMENT

Professor N.R. Das

M.Sc. (Ag.), Ph.D., D.W.P. (CIMMYT-MEXICO), FIBR (INDIA)

Ex-Professor of Agronomy,

Bidhan Chandra Krishi Viswavidyalaya,

Mohanpur, Nadia, West Bengal

Formerly,

Director of Research, Director of Farms and Head, Department of Agronomy;
Faculty of Agriculture, Wheat Agronomist and Officer-in-Charge, All-India Co-ordinated
Wheat Improvement Project (ICAR) and Research Agronomist,
Bidhan Chandra Krishi Viswavidyalaya, West Bengal



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Prof. N.R. Das

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*In memory of late Dr. R.B.L. Bhardwaj,
Wheat Project Co-ordinator (Agronomy),
ICAR, who was interested for
development in 'wheat programmes'
in eastern India, with my help.*

— Author

PREFACE

Wheat, the winter loving crop, was previously grown in the areas where temperatures were very low, for a long time. Actually those were the traditional wheat growing areas. But with the arrival of 'dwarf wheats', the situation has changed a little bit. The dwarf wheats are being grown in such non-traditional areas, where wheat was not grown at all in earlier days. Wheat in both the areas (traditional and non-traditional) behaves differently. Research activities are also growing heavily in different parts of the country, differently, for the improvement of wheat production technologies, under different situations and conditions.

The agronomy students, spread all over the country, must know the growing conditions / situations of wheat, other than his/her own areas.

Now-a-days, wheat is not the single-crop cultivation; it is directly connected with other crops in the multiple cropping systems, provided irrigation facilities are available. Wheat and rice, the two major cereal crops are providing the major foods for the people of the country. So, production technologies should be improved, under different cropping systems. Now, 'wheat-rice' rotation gives the maximum cereal production in the country. But for this, efforts should be made to maintain soil fertility in those rotations by growing green manuring crops or by growing jute for the next generation to come. Therefore, studies on these aspects, are emphasized both in agricultural colleges and universities and for this, the students should have the wider ideas of the vast country and huge number of crops. For this purpose, the book on, 'Wheat Crop Management', has been written, covering all aspects, giving emphasis on eastern part i.e. non-traditional wheat growing area of the country, where 'wheat-jute-rice' is now practised.

The book that has been written, will be very helpful for both the undergraduate and postgraduate students of Agronomy of all agricultural college and universities of the country. This will be required for all the students of the agricultural training centers of all the states of the country. All the Research Institutes, all over the country, run by the ICAR, will be in need of this book for references.

The book, 'Wheat Crop Management' has seventeen chapters, containing (i) Introduction, (ii) Production and distribution of wheat in the world and

India, (iii) Botany, morphology and physiology of wheat plant, (iv) Improvement of wheats in the past and present in India, (v) Climatic conditions needed for production of wheat, (vi) Soil and its management for wheat production, (vii) Sowing of wheat, (viii) Varieties of dwarf wheat and their yield potentialities, (ix) Fertilizer management in wheat, (x) Irrigation management in wheat, (xi) Management of weeds in wheat fields, (xii) Problem and prospects of wheat cultivation in eastern India – after rice, (xii) Crop rotation and cropping system with wheat, (xiv) Pests and diseases, (xv) Harvesting and yields of wheat and quality of wheat seeds, (xvi) Production economics of wheat and (xvii) New strategies for wheat production improvements.

Some of my colleagues of Bidhan Chandra Krishi Viswavidyalaya, West Bengal; Calcutta University, West Bengal, Tamil Nadu Agricultural University, Tamil Nadu, Birsa Agricultural University, Jharkhand, North Bengal Agricultural University, West Bengal, Viswa Bharati (University), West Bengal and Central Research Institute for Jute and Allied Fibres (ICAR), Barrackpur, West Bengal, encouraged me to write such book on ‘wheat’, for utilizing my experience as Wheat Agronomist in the All-India Co-ordinated Wheat Improvement Project of ICAR. I am very much thankful to them.

I am also very much thankful to the Director, PDCSR, Modipuram, Meerut 250110, UP, for kindly permitting me to utilize the crop-sequences under different ecosystems in the country, from the Annual Report, 1998-99 of *‘All-India Co-ordinated Research Project on Cropping System (ICAR)’*.

At the end, I thank my son Partha, daughter Aparna and wife Arati for their direct or indirect helps in writing this book.

Sabuj Niketan,
Kalyani, West Bengal

N.R. Das

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