



HORSEGRAM IN INDIA

D. Kumar



**SCIENTIFIC
PUBLISHERS**

HORSEGRAM IN INDIA

Editor

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Published on behalf of

INDIAN ARID LEGUMES SOCIETY



Published by:

PAWAN KUMAR

Scientific Publishers (India)

5-A, New Pali Road, P.O. Box 91

JODHPUR – 342 001

Tel.: +91-291-2433323

Fax.: +91-291-2512580

E-mail: info@scientificpub.com

www.scientificpub.com

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ISBN: 978-81-7233-451-2

eISBN: 978-93-87913-47-9

Lasertype Set: Rajesh Ojha

Printed in India

PREFACE

Scientifically less known and under investigated, horsegram is an important arid pulse known for exceptionally drought hardy nature in concomitant with little aftercare and agronomic inputs. The crop has thus, become poor men's crop owned by marginal farmers on degraded and resource constraint soils. The popularity of the crop can be settled from its suitability towards a variety of soils: shallow red soils, gravelly soils, hard uplands, red sandy soils, acidic lateric soils (pH 5.5), black cotton soils, clayey, paddy soils, stony soils, cleared rough forest etc; in many states. This drought hardy crop is grown in almost majority the states with rainfall range of 250-700 mm. But almost 95% area of this legume is confined in five states of Orissa, Tamil Nadu, Karnataka, Maharastra and Andhra Pradesh. Besides, being loaded with high seed protein fraction, it posses high amount of calcium, iron, phosphorus and vitamins contents required for vegetatarian diets. The crop is reckoned with for its medicinal uses, particularly as a cheap and steady treatment against stone formation in kidney and gal bladder and many other less known ayurvedic treatments are also associated with this arid legume.

The crop ideal for a number of double/ sequence/ rotations combinations in different climatic and geographic zones with annuals, perennials, grasses etc; has, therefore, proved vital crop component in cropping system. Horsegram, has therefore, occupied the position of cheapest source of livelihood of the poorest of poor resource ridden peasants and farmers of arid zones in India.

This annual legume is also known for some inherited defects and demerits. For instance, slow growth and long maturity period coinciding with terminal stress, higher production of biomass with poor conversion, susceptibility to anthracnose, powdery mildew and certain virus diseases, therefore, rendering it in poor productivity.

Photo and thermo-sensitive nature of horsegram is biggest barrier in hampering expansion of its area, consequenting in poor adoption of promising strains across the zones and seasons. Research efforts attempted do not match with its large acreage, great social needs and uses in many ways. Thus, concerted efforts on initial technological advancements in horsegram are quite slow, therefore, depicting gloomy picture on its status of available research information. It is thus, desired that efforts are initiated to collect, compile and condense research results on this crop available in pieces and scattered at varied levels and sources. Present compilation on **Horsegram in India** is an attempt in this direction. The book is divided in ten chapters dealing with introduction, genetic improvement, crop production, quality aspects, plant protection and status of main horsegram growing states, contributed by the scientific personnels engaged in horsegram research in India.

It is hoped that the book in question will be of desired value and use to the scientists, scholars, administrators and planner engaged in improvement of horsegram growth in India in one way or other.

Place : Jodhpur
Date : May 15, 2006

D. KUMAR

ACKNOWLEDGEMENT

It always yields consistent pleasure and joy to me while writing any acknowledgement to all those who have ever rendered their help and support in bringing out any publication on arid legumes.

It is my foremost and immediate duty and desire to extend warmest gratitudes for helping and guiding hands extended by Dr. Mangala Rai, Secretary DARE & Director General, ICAR, New Delhi. His support in a variety of ways has been innumerable and unshapable for present publication and related acts and actions concerning Arid Legumes Network Project.

Rich words of thanks and inmost desire of mine always sprang spontaneously while I think to thank Dr. Gautam Kalloo, DDG, (Crop Science and Horticulture). He has been sole motivator and real encourager for arid legumes research activities and also in bringing out this compilation on horsegram.

Dr. Pratap Narain, Director, CAZRI, Jodhpur has been appreciative as and when required. He has been constantly watching, monitoring and guiding me and affairs related to this book and this project. He proved a source of inspiration. Therefore, I thank him.

Dr. N.B. Singh, ADG (Seed) and Dr. O.P. Dubey, ADG (O&P) brought me to the level of composing this book. They have always been source of mental promotion. I therefore, profusely thank them for their referred help. He was Dr. N.B. Singh who inspired and injected me to compile literature on Arid Legumes during arid legumes Workshop at S.K. Nagar Workshop in May 2000. Had he not reminded me regarding my conviction and dedication

towards publication related to Arid Legumes probably, I would have never come across. Thus, lion share of acknowledge goes to Dr. N.B. Singh.

My special, thoughtful and spontaneous acknowledgement goes in favour of all the writes and the contributors who have contributed their enormously valued research information generated after burning mid night oils. The name for instance can be mentioned of Dr. S.B.S. Tikka, Director of Research, Dr. S.D. Solanki, ARO, Dr. N.B. Patel, and Dr. R.M. Chouhan Professor, S.D. Agril. Univ. S.K. Nagar; Dr. H.S. Gupta, Director, Dr. V. Mahajan, Head of the Division and Dr. S.K. Shukla, Scientist, Vivekanand Parvartiya Anusandhan Sansthan, Almora; Dr. A. Henery, Principal Sciencist (Plant Breeding) CAZRI, Jodhpur; Dr. K.P. Vishwanatha, Professor (Plant Breeding), GKVK, Bangalore; Dr. S.K. Sharma, Dean, College of Basic Sciences, Dr. H.L. Thakur, ADR, Dhaula Kuan, Mrs. Daisy Basandrai and Ashwani K. Basandria from CSKHPKV, Palampur; Dr. S.M. Purusothaman, Asstt. Scientist (Plant Pathology). Mani Chellappan and K. Karthikeyan, KAU, Pattambi (Kerala) and . Dr. S.N. Sodani, Arjia, Bhilwara.

I may not forget mentioning the names of my colleaguers in PC Unit, helping and shaping this compilation in present form. They have always stood with me in referred regard. Mention can be made of Mrs. Arti Shekhawat, Mr. P.S. Bhati, and Dr. H.R. Mahala, Miss Deepa and Mr. J. Gaur.

In the end, I express my deep sense of willingness to feel obliged in writing a few lines for typing the script of this book many times by Mr. Surender Bhati. Name can also be mentioned of Mr. Harish Chandra Sharma for typing the script and giving final touch to it at the end.

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