



HORSEGRAM IN INDIA

D. Kumar



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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, Maharashtra 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.

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D. KUMAR

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