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# Horse Gram [Macrotyloma Uniflorum (Lam.) Verdc.]: A Focus on its Tapestry in Indian Context

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### **ABSTRACT**

The voluminous records of origin, domestication and spread of pulses is mirrored in Indian civilization since pre-Harappan and Vedic period of India. Horse gram [Macrotyloma uniflorum (Lam.) Verdc.] is one such valuable pulse in India. It is indigenous crop species for Indian subcontinent and has ingrained in Indian culture. It finds place in ancient Sanskrit scriptures like Vedas and Samhitas and even in Sangam literature of Tamils in south India. Two centres of its domestication has emerged in India—onein western and another in Southern part of India. Information in respect of its culinary preparations, agricultural practices and archaeobotanical history, apart from its origin and domestication is presented in Indian historical perspective. Totality of evidences, both hard and soft, reflects its nativity in Indian subcontinent.

**Keywords:** Horse gram, *Macrotyloma uniflorum*, History, India.

## INTRODUCTION

Horse gram [Macrotyloma uniflorum (Lam.) Verdc. is an important food legume in South Asia being a hardy and multi-functional crop. Still, it has received entrenched bias against it. It was thought a low status food of the poor especially in south India (Ambasta, 1986; Kadam et al., 1985). It has been under cultivation through millennia as an indigenous crop in India. Its domestication is reported in Saurashtra (India) during the pre-Harappan Padri/Anarta cultural tradition in Western India (Fuller, 2006, 2011; Fuller and Murphy, 2018). The present communication is an attempt to highlight the historical tapestry of Horse gram, an indigenous and ancient crop of India.

## **METHODOLOGY**

The literary review revealed vast information about Horse gram in the context of ancient Sanskrit literature, Sangam literature, archaeological data, dietary recipes, agriculture, husbandry, etc. All these sources of information are rather scattered and hence Horse gramwas interpreted and discussed in isolation. On account of these fact, the present is an analysis based on historical evidences from both hard and soft. The literary sources are as mentioned against such sources in the text.

## **Systematic Enumeration:**

- (1) The 'Brahadarnyayaka' (C.5500 BC.), a commentary on the Rigveda (C.8000 BC.) refers it as 'Khutakula' (original Sanskrit name for Horse gram) (Sarma, 1989).
- (2) Horse gram is indigenous to India (Nene, 2006; Fuller, 2006).
- (3) Archaeological findings revealed utility of Horse gram as food around 2000 BC (Mehra, 2000).
- (4) In Yajurveda, it is mentioned as 'Kulattha' (Acharya, 1998).
- (5) It is so referred also in Kautilya's Arthashastra (Sharmasastry, 1961; Patil, 2021).

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- (6) It is referred as 'Vanyakulattha' by Susruta (C.400 BC.) in his 'Susruta Samhita', as a wild species (Patil, 2024).
- (7) It is named as 'Kollu' in the Sangam literature of the Tamils (Acharya, 1998). It appears derived from 'Kulattha' (cf. Nene, 2006).
- (8) Panini (520-460 BC.) in his 'Astadhyayi' mentioned its Sanskrit name 'Kulattha' (Patil, 2021; Agrawala, 1953; Sharma, 1987).
- (9) Kashyapa (800 AD.) in his 'Kashyapiyakrishisukt' advised moistening of its seeds prior to broadcast sowing. Weeding is needed for it. (Ayachit, 2002).
- (10) Kautilya (321-292 BC.) mentioned its sowing as the post-rainy season.
- (11) Intercropping Horse gram with *Pappalum scrobiculatum*L. is described in the Sangam literature of Tamils (Acharya, 1998).
- (12) According to Watt (1889) it was fed as fodder to horses for centuries.
- (13) 'Yusa', a soup prepared from Horse gram seeds was consumed in the Sutra period (C.1500-800 BC.), to which we call 'Rasam' today today (Acharya, 1998).
- (14) In the 'Varanaka Samuchaya' (1520 AD.) in Gujarati language 'Vadas' are mentioned made from Horse gram (Acharya, 1998).
- (15) Surapala's Vrikshyurveda mentioned its application in horticulture. Its decoction was used for flower and fruit drop (Sadhale, 1996).
- (16) It is mentioned as 'Kulattha' is Surapala's Vrikshayurveda (Patil, 2024a).
- (17) Horse gram is domesticated in Indian Peninsular and / or Western India (2600-2000 BC.). (Fuller &Harvey, 2006).
- (18) Mehra (1997) also suggested this region as the region of origin. Horse gram is widely reported from archaeological sites in South Asia, and also considered to have been cultivated from Southern India to Haryana (C. 2500 B.) and the middle part of the indigenous Southern Neolithic package.
- (19) Saraswat (1998) recorded its plant remains at archaeological site *viz.*, Rohira (Punjab, India) (Ca.2000-7000 BC.) in pre-Harappan period.
- (20) Pokharia (2011) recorded complete and broken carbonised seeds of Horse gram at archaeological site *viz.*, Lahuradewa in the Ganga Plain. It is a contribution to the 2<sup>nd</sup> millennium BC.

## **RESULTS & DISCUSSION**

Horse gram [Macrotylom uniflorum (Lam.) Verdc.]is presently important dietary source in India. It was regarded a food of poors and thus it recognized low status in past. It is native of India (Nene, 2006; Fuller, 2006) and also domesticated in Indian subcontinent (Fuller and Murphy, 2018). The literary resume is suggestive of its domestication at two centres in India viz., North-Western India (about 4000 BP.) and Southern India (around 3500 BP). This review reflects its historical records about its origin, domestication and spread in Indian perspective. It highlights sources of information in these contexts from different disciplines like archaeobotany, culinary or dietary literature, ancient Sanskrit literature from Vedic and Samhita periods in northern part of India and Sangam literature of Tamils in South India. Its all-pervasive analysis is certainly indicative of being native to India and as also initial beginning of its domestication in Indian territory.

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