



DIVERSITY OF COWPEA FROM AKRANI TAHSIL, DIST:NANDURBAR,MAHARASHTRA,INDIA

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ABSTRACT

The tribals of Nandurbar district have their own Traditional landraces of Cowpea. Cowpea landraces are discussed here with their morphological characteristics along with their ethnobotany.

Keywords: Tribals, Cowpea, ethnobotany , Akrani, Nandurbar, etc.

Figure -01 showing no of land races of cowpea collected from Akrani tehsil, Nandurbar district



INTRODUCTION AND REVIEW OF LITERATURE :

Cowpea is considered to have been domesticated in Africa from its wild ancestral form *V. unguiculata* ssp. *dekindtiana* (Harms) Verdc. The region of its genetic diversity is considered to be Nigeria. Verdcourt (1970) sub-divided the cultivated species *V. unguiculata* into three sub species i.e. ssp. *unguiculata*, ssp. *sisquipedalis* and ssp. *cylindrica*. *V. unguiculata* shows widest geographical distribution and the largest genetic diversity. It has been in cultivation in Ethiopia and Senegal for centuries. It was classified into two distinct groups of landraces in Senegal. A short day cowpeas which is extremely sensitive to photoperiod and a group that is either insensitive or only slightly sensitive to day length with respect to flowering (Ndiaga and Anthony, 2004). They reported that the landraces of cowpea grown in Senegal have some extremely useful traits such as -1) substantial adaptation to drought, 2) high potential to biologically fix nitrogen in marginal soils with low organic matter, high sand content and a broad range of pH (4.1-9.0), 3) tolerance to high temperature during the vegetative stage, 4) tolerance to shade, 5) rapid vegetative growth and 6) tri-purpose utilization producing vegetable leaves and pods, dry grain and forage. All these characters can be observed in any cowpea plant grown in any part of the world. However, its high adaptability to drought-prone conditions, relative to other crops is the most considerable character for harsh environments.

METHODOLOGY :

Ethno-botanical principles were followed for the collection of different landraces of crops grown by tribal people of the district. The criteria for the selection of these crop plants were simple, such as: (a) they are being grown from ancient times, (b) they are grown in large areas and relished and consumed by most of the tribals and (c) they are the subsistence crops of the tribals i.e. the produce is generally not sold to others. The legumes crops studied were hyacinth bean and cowpea. They were given accession numbers and field notes were recorded on farm itself. The seed samples were stored in polyethylene bags, herbarium of inflorescence twigs were prepared in cases where morpho-genetic differences were found among the landraces. The crop species collected were identified with the help of standard work of Cook (1967).

RESULTS AND DISCUSSION:

Morpho-genetic characters:

Table-01 gives local name, locality and morpho-genetic characters of 11 landraces of cowpea from Nandurbar district and Sakri tahsil of Dhule district. A total of 21 accessions of these landraces are collected. The *pawra* community also called *chavli* as *bhangra*. Most of the *bhangra* landraces were collected from Toranmal region (Legapani) where *pawra* is a dominant community. The flower colour of the landraces showed variation, seven landraces had white coloured flowers, two landraces with yellowish flowers, while three landraces had blue flowers. The pod colour also varied and showed no relation with flower colour. Landrace *pivli bhangra* (CH-107) gave yellow coloured flowers and pods but in *damni mothi bhangra* the flowers are yellow, while the pods are purple coloured. In *safed mothi bhangra* and *safed lahan bhangra-II* (CH-101 and CH-106) both flowers and pods are white coloured. But in *damni mothi bhangra* (CH-103) the flowers are white, while pods are pale purple in colour. Similarly, in *kali mothi bhangra* (CH-108) the flower colour is blue and pod colour is dark purple. The name *kali mothi* is after this pod colour and size. Its seed is white. On the other hand, *kali chavli* (CH-110) gives blue flowers and yellow coloured pods. Its seed is black coloured. CH-111 landrace from Kakarda gives red coloured seeds, while its pod remains green in colour. Its pod shows constrictions and the dry pod makes sound, due to this reason it is named as '*wadla*' *chavli*.

From the above information there is wide range of variation in wal landraces in the tribal area. This should be collected and documented for further evaluation and conservation.

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