

**Research Note :****CHENOPODIUM CRAFT: CREATIVITY TO HANDLE THE PROBLEM OF PLENTY****Shri Niwas Singh\* and Shyam Narayan**

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**ABSTRACT :** Tall type primitive *Chenopodium* species are producing huge amounts of biomass under high input agriculture. If not managed properly, this biomass is becoming a problem of plenty. To handle this problem, the stems of these species were articulated in to a number of artefacts like bangle stands, ecofriendly pens, pen stands, pot stands, flag stands, *agarbatti* stands, various types of hangers and letter stands etc. Such diversified uses will make these chenopods more acceptable to society and remunerative to farmers.

**Keywords:** *Artefacts, Chenopodium, craft, ecofriendly.*

Species of *Chenopodium* genus have diverged and evolved in to various forms taking advantage of environmental heterogeneity and niche diversification. Man has been using these species for his benefit in various ways like food, fodder, feed and medicine etc. Recently, colour potentials of some promising *Chenopodium* species have been explored by Singh *et al.* (1). Finding diversified uses would make these plants more acceptable and remunerative. Stems of some species of *Chenopodium* have hard and soft tissues suitable enough to be used as various artefacts for the benefit of man. However, one has to imagine how judiciously to use the hardness and softness of various tissues of these stems to make different types of artefacts. While working with these species, we visualized that proper canopy management of these species could yield stems that could be shaped into various types of useful and decorative artefacts. The present paper is the result of such an effort and the products of this effort are in the form of bangle stands, pen stands, walking sticks, pot stands and hangers of various types etc.

The tall growing chenopods (*Chenopodium species*) are the materials that we have been growing since last three-four years in our breeding experiment plots. These species have a bit hard stems compared to the common weed, the *Chenopodium album* L. When the canopy of these tall chenopods is managed as per needs of various

companion crops, we get hard sticks that could be used as walking sticks. When the apical meristem of the main stem is picked up at an early stage and the side branches are allowed to grow, the plant attains a bushy look. At certain stages, the side branches could be picked at suitable lengths to make the skeleton of the main stem and side branches tight enough to be used as bangle stand. Two types of bangle stands were made with such skeletons: 1. hanging type and 2. standing type (Fig. 1a and 1b, respectively). Similarly, the pith of the main stem and side branches is soft enough to be pressed and pipes of suitable diameters could be made. Therefore, the *Chenopodium* sticks were cut into pieces of pen size and piths were poked with needle. Refills were inserted into the holes of such pieces to make pens (Fig. 2). Gum, tape and thread etc. were also used in preparing the pens. Similarly, pins, knives and a number of other tools could be used to unleash our creativity using *Chenopodium* stems.

Artefacts like bangle stands, pens, pen stands etc. made from *Chenopodium* stems are the products that could be considered as results of this experiment. A number of decorative and other useful, household items could be made from the stems of *Chenopodium*. This depends on the imagination, creativity and workmanship of the users. *Agarbatti* stands (Fig. 3), flag stands, medal trees, medal stands and letter stands could also be made from *Chenopodium* stems. Thus, tall type

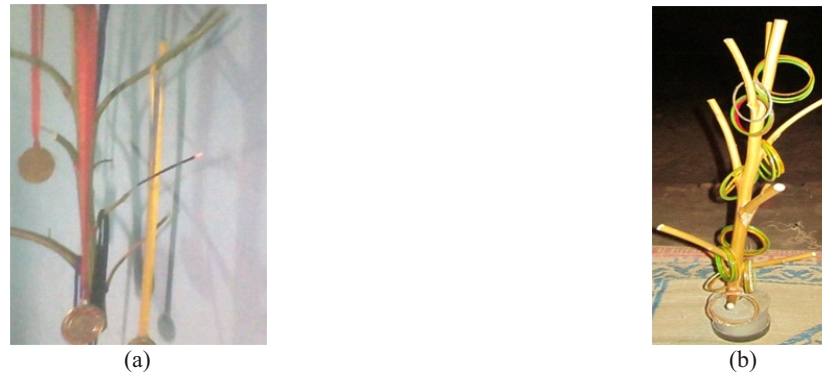


Fig. 1: Bangle stands : (a) Hanging type and (b) Standing type.



Fig. 2: Ecofriendly pens.



Fig. 3: Agarbatti stand

chenopod stems provide a judicious blend of hardness and softness that could be articulated into a variety of artefacts so as to diversify and widen the use of *Chenopodium* species. All these artefacts are ecofriendly to a large extent as compared to their counterparts that are non-biodegradable and are made almost completely from polymers. Bamboo and so many other crafts add to the livelihood of millions of people world-wide. If proper extension services promote this new area of idea, the *Chenopodium* craft will also add to the *Chenopodium* revolution and livelihood of millions of people.

Branching pattern of *Sesbania* (Dhaincha) is also suitable for artefacts like bangle stands. Plants grown at wide spacing yield main stem and branches of suitable thickness, strength and angle. Similarly, many other plant species may be searched for their suitability to various kinds of

artefacts that could be designed for the benefit of mankind. While travelling in various parts of India, it was realized that *Ochlandra* of Western Ghats, certain bamboos of North-East, Ringal bamboo of the Himalayas and certain reeds may be used in making ecofriendly pens. Pens made from bamboo and paper are already available in the market. With proper effort, these ecofriendly pens could replace the non-biodegradable ones.

## REFERENCE

1. Singh, S.N., Narayan, S. and Nath, A. (2013). Colour potentials of promising chenopods (*Chenopodium* species). Poster paper presented at International Conference on Impact of Technological Tools on Food Security under Global Warming Scenario (ITTFS-2012), Meerut.