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**REVIEW OF ETHNOMEDICINAL USES OF *GLORIOSA SUPERBA*  
PLANT OF NANDURBAR DISTRICT, MAHARASHTRA**



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**ABSTRACT**

*Gloriosa superba* is a famous Ethnomedicinal plant of Nandurbar district. Beautiful, multicolour flowers attracts the tribal of study area in the month of July - October to collect the V and L shaped underground tubers. Due to presence of Colchicines in large quantity the collection of tubers turns into commercial practice. This affects the status of the plant. Ethnomedicinal approach towards species *Gloriosa superba* is a small attempt to realize the ethnic glory of plant in present study area. Large number of diseases prevailing in Nandurbar district was treated with this ethno medicine. Its medicinal potential is known to tribal's from long time and now the commercial over collection of tubers means starting of competition between pharmaceutical production of raw material based companies of other countries in our remote and tribal areas also. *Gloriosa superba* is widely distributed in India. But it becomes Endanger in present study area of Nandurbar district.

**KEYWORDS**

*Gloriosa superba*, Ethnomedicines, Nandurbar district

## RESEARCH PAPER

### Introduction:

*Gloriosa superba* is known as the Kal-Kutti or Kal-lavi in the Nandurbar district. The local name itself suggests its Ethnogaecomedicinal use as its tuber paste is applied externally to reduce labor pain during childbirth. (9). One of the myth also associated with the name of the plant that if the flower is thrown on the roof of the neighbors house, there will be quarrels within three days in the neighbors home. So while playing at the time of flowering, tribal children use to collect the beautiful flowers from there surrounding area and throw the flowers on the roof of each other's house. *Gloriosa superba* mainly found in forest area present in Nandurbar district, one can also find it nearby small hilly areas and surrounding the small patches of dense vegetation. It is also widely spread as weed in small Baries or Ghats of the district. The plant is common and known to each tribal's of the study area though its present status in the Nandurbar district is Endanger, due to its over-collection of tubers. Highly poisons tubers were collected at the time of flowering of the plant i.e. from month of July to October and kept aside for survival of the tribal's at the time of extreme draught conditions. Due to its poisonous nature it is carefully cooked for a long time like 14to 20 hours and then its thin slices kept in a curd for a night and then it is sundried for 4to 5 days and then only it is eaten. If unfortunately it is collected and eaten raw it will cause serious injury to throat as well it will kill the person. In spite of its poisonous nature in the Indian system of medicine, the tubers are used as tonic, antiperiodic, antihelmintic and also for snake-bites (3 ). Presence of alkaloids like Colchicines (  $C_{22} H_{25} O_6 N$  ) and its derivative like Gloriosin and Colchicocide (  $C_{27} H_{33} O_{11} N$  ) along with Benzene acid, Salicylic acid, Sterols and resinous substances and therefore the demand of this plant is increasing day by day.(8 ). Due to lack of awareness among the ethnomedicinal practitioner, traditional wisdom towards the conservation of medicinal plants and its sustainable utilization is in danger which may turns the pages of Red data book. (6 )

### Methodology:



A survey was conducted in 20 Padas from six talukas of Nandurbar district of Maharashtra from June 2016 to June 2017. From each pada five respondents were randomly selected. Category of respondents was defined as Maharaj or Bhagat from tribal population. With the help of semi - structured questionnaire and local dialect, frequent visits plan to confirm the authentic information and data collection from the study area. Local medicinal practitioner



selected carefully such as Gaur Banjara, Kokani, Chaure, Pawara, Bhill, Mavchi, Naik, Valvi, Raut from various tribal groups.

**I. Taxonomical classification of the plant :**

**Kingdom:** Plantae  
**Sub-kingdom:** Trachobionta  
**Super –division:** Magnoliophyta  
**Class:** Liliopsida  
**Subclass:** Lilidae  
**Order:** Liliales  
**Family:** Liliaceae  
**Genus:** *Gloriosa*  
**Species:** *superba* L.

**II. Ethnomedicinal uses of the plant :**

Sr.	Plant parts	Ethnomedicinal uses	Photos
1.	Leaf	<ul style="list-style-type: none"> <li>• Head-lice treated using leaf paste applied externally.</li> <li>• Scars treated using application of leaf paste externally.</li> </ul>	
2.	Whole plant	<ul style="list-style-type: none"> <li>• Skin disease cure using whole plant juice applied externally.</li> <li>• Spines are removed applying plant paste externally.</li> <li>• Omitting prevented taking plant juice in small quantity orally.</li> <li>• Indigestion, stomach-ache and intestinal worms treated using decoction of whole plant in small quantity.</li> <li>• In case of STD i.e sexually transmitted diseases decoction is given.</li> </ul>	

3.	<b>Flowers</b>	<ul style="list-style-type: none"> <li>Flowers are used in religious celebrations of Dongarya Dev.</li> </ul>	
4.	<b>Roots</b>	<ul style="list-style-type: none"> <li>Gonorrhoea cured taking root infusion orally.</li> <li>Snake –bite and scorpion sting cure using root paste applied externally</li> <li>Abortion done keeping small cut piece of root in vaginal passage.</li> <li>Labor pain induced using root paste application externally.</li> <li>Wet dreaming controlled using root infusion in small quantity.</li> </ul>	

### III. Result and discussion :

*Gloriosa superba* is a beautiful ornamental plant recognised by all the world as Flame lily. It is a national flower of Zimbabwe and State flower of Tamilnadu state of India. *Gloriosa* plant is used by Tribals of Nandurbar district from long time. The capital L and V shaped tubers are collected for its ethnomedicinal uses. It is kept with BHAGAT or MAHARAJ of the study area to treat Snake-bite and Scorpion bite. Root paste is applied on sting area. Medicinally useful content of plant root such as Colchicine, Gloriosine ,Superbine and other alkaloids make it valuable. One respondent provided information while interview that they use to collect roots and dried it and sell out to local herbal supplier at 15000 to 21000 per Quintal. Colchicine is extracted from this roots and used in study of cell division, as it can inhibit mitosis ,induce polyploidy.(10) .So dried rhizome becomes the source of income to local peoples. In the month of July to October extensive collection of roots done in present study area. Brown coloured mature rhizomes preferred to collect in spite of white coloured immature rhizomes. Some local herbal suppliers prefer to order red coloured seeds to collect. But all this activities make the plant Endanger in local area. The extensive collection of rhizome greatly affects the survival of the plant species in present study area as it is a potential plant part to grow and reproduce new plant. Two to Three year old roots are economically important. But due to over collection immature white roots are collected. It directly effects the plant population in the study area. Here is need to do conversations with

native to protect the plant. Economical benefits of plant can be achieved by local peoples with the help of scientific cultivation and collection from the region of study area. Small initiative from forest department or any competitive authorities of Nandurbar district could save the plant from endanger status.

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