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CONSERVATION OF NOTHAPODYTES NIMMONIANA (GRAH.) MABB.

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Abstract:-

Nothapodytes nimmoniana (Grah.) Mabb. Syn Mappia foetida (Wight) Miers belongs from the family Icacinaceae having anticancerous and antitumorous properties. Because of this medicare properties it is highly harvested from its original habitat unscientifically and it is used for deriving the drug which is used to cure cancer. It is distributed in the region of Western Ghats of Maharashtra and northern part of Karnataka. Due to unseasitic over exploitation of this Nothapodytes plant the natural population of this plant from its habitat is worstly decreasing at alarming rate. As per the objectives of (Stockholm Conference, 1972) and guiding principles of UNEP (Earth Summit, 1992) and Paris summit (2016) the conservation, protection and regeneration of plant and animal resources is necessary at global level in its ecological habitat. Ex-Situ conservation of the plants is a better method of restoration of the species. Ex-Situ conservation methods of Nothapodytes nimmoniana have been discussed in the present paper.

Keywords : Nothapodytes nimmoniana, habitat, medicare properties, ecosystem.

INTRODUCTION

From the beginning India is considered as store house of medicinal plants. It is harbours over 2000 medicinal plant species of which 443 have been recorded for the state of Maharashtra (Lakshminarsimhan and Moorthy, 2000). Survey of plant wealth of Kolhapur district resulted in enumeration of over 600 plant species of some theraputic value. Out of this all plant species Nothapodytes nimmoniana (Grah.) Mabb. is important plant species for its use in modern medicines. Due to misuse and unscientific over exploitation of such plant-species, the natural population of the plant is found decreasing at alarming rate from its habitat. Due to this the total number of 251 species are reported to be threatened from the state of Maharashtra (Singh and Karthikeyan, 2000) of which 136 are found in the Kolhapur district (Yadav and Sardesai, 2002). This decline number of plant species gives signals to ecologist and environmentalist to take in hand work for its conservation, protection and regeneration of valuable plants for future generation.

OCCURRENCE :

Nothapodytes nimmoniana are a small medium tree which is commonly found in Western Ghats of Maharashtra & Karanataka forest. Generally this plant species occuring in patches along the upper elevation of the Ghats, above 500 meters altitude in main range of Sahydri. Nothapodyates nimmoniana plants mostly found in the region of Western Ghats at Gaganbavada, Tillari, Barki, Borbet, Dajipur, Amba, Udegiri, Dhangarmola, Manoli, Suleran and Patgaon. This Ghat zone of vegetation is known as tropical semievergreen forest.

MORPHOLOGY :

Nothapodytes nimmoniana (Grah.) Mabb. is a small tree which having branches with wrinkled bark. Leaves of this tree are crowded at the end of branches. Flowers are in terminal panicles. Petals are yellow and densely sericio-villus on the both surfaces. Disk is shallow, cup shaped and villous within. Drupes are ellipsoid, glabrous and become purple at maturity. The flowers of the tree are strongly foul scanted.

MEDICINAL USE :

Nothapodytes nimmoniana (Grah.) Mabb. is medically very important. The wrinkled bark of this plant is used for extraction of drug. This drug is used to cure cancer because it has anticancerous and antitumorous properties.

NEED OF CONSERVATION :

The plant Nothapodytes nimmoniana (Grah.) Mabb. is widely distributed in various regions of Western Ghats in Maharashtra and local peoples commonly using the forest plants for fuel, timber and fodder purposes. Because of this misuse and unknown for its important use, the plant species like Nothapodytes nimmoniana and other plants are found fastely declining in its habitat. Some of the peoples are well aware about its medicinal use and they have continuously started to exploit it unscientifically. Considering its medicinal importance at present it is needed to save, protect and regenerate this plant with using scientific technique and methods. Some of the following Ex-situ methods and techniques are very useful in conservation and regeneration of Nothapodytes nimmoniana.

Methods for conservation and regeneration of Nothapodytes nimmoniana are as follows:

- i) Regeneration through stem cutting.
- ii) Regeneration through air layering.
- iii) Regeneration with seeds.

i) Regeneration through stem cutting :

This method is commonly used for fast regeneration of new plants to meet the demand of society. For the practices it is needed to select matured and healthy stem of mother plant. This selected stem to be cut into about 25 cm in length. Then it is soaked in a fresh water for 5 to 10 minutes. This soaked stem can be rooted in to ground soil up to the depth of 10 cm. The best time for this practices of plant regeneration is July and August months. After the 20 to 25 days these cuttings will start to grow and gets the leaves.

ii) Regeneration through air layering :

This method is economically not that much suitable than the another two methods. For this practices in the summer season we have to collect the seeds from the mother plants and after starting the raining the seeds to be spread from the air on a mountainian areas which will be helps to increase the population of such type of endangered plant species.

iii) Regeneration with seeds :

This another method of regeneration of plants. In this method it is needed to collect uninfected and healthy matured seeds from mother plants or original habitate of plant species. Then the selected seeds can be directly put into soil for germination. For this type of practices the best period is June and July months where rainy season will be start. After the 8 to 10 days seedling will be grow above the ground soil.

Above both the methods are convenient and most useful for conservation, protection and restoration of medicinally and economically important plant species. It is also very needful for meet the demand of drug and medicine processing industries. As well as it can helps to improve the health of people who suffered with cancer and tumor problems. As well as it is essential for to maintain the balance of our ecosystem and environment. For the conservation and regeneration of this plant species State Government as well as Central Government and NGOs and local peoples have to motivate for conservation and regeneration of such medically highly valuable plant species. This practices can be helpful for achieve the goal Earth Summit (1992) and Paris Summit (2016).

REFERENCES

- 1.Kakshminarsimhan, P. and S. Moorthy 2000 : In Flora of Maharashtra State, Dicotyledones - Vol.-I by N. P. Singh and S. Karthikeyan, P. 71.
- 2.Singh N. P. and S. Karthikeyan (eds) 2000 : Flora of Maharashtra State Dicotyledones - Vol.-I (Ranunculaceau-Rhizophoraceae), B.S.I., Calcutta-1-898.
- 3.Yadav S. R. and M. M. Sardesai 2002 : Flora of Kolhapur District, Published by Shivaji University, Kolhapur (M.S.), 1-679.

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