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PRESERVATION OF RARE PLANTS

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In the 16th Century when the Europeans landed in India and the British gradually dominated our country, the Teak from the West coast forests was found to be very good for ship-building. They established a Dock yard in Bombay. Large quantities of Teak were cut from these forests every year for their ship-building works. This went on for a few decades. Finally, in 1820—when an order came to a Collector in Malabar to send Teak to the Bombay Naval dock yard and he asked his subordinates to go and fell teak; to his great surprise, they told him that there was no more teak to be felled. The British found that even such a common species like teak, can become rare if indiscriminately cut and exploited.

Another example is the "Montane sholas on the high altitudes in the Western Ghats in the Nilgiris and Palni hills. These patches of evergreen vegetation found in the protected folds of the range of hills consist of many species of plants, ranging from the unicellular algae to Bryophytes, Pteridophytes and flowering plants. But where are these sholas now? Only very few sholas are left in the original state. In their place Bluegum (*Eucalyptus grandis*) and wattle (*Acacia mearnsii*) plantations have come all over these areas. Further, the demand for one of the Minor Forest Produce, namely the stone and tree moss has nearby wiped out the Cryptogamic flora in these sholas.

The forests which contained the rare and interesting plants have been cut and removed for the sake of growing plantations of Teak, Eucalyptus, Wattle, Pines and Chinchona and a host of other exotics. As a result some of the native flora has become extinct. Even in the Coastal areas littoral vegetation and Mangrove vegetation have been removed to give way to casuarina plantations. As a result in a place where there were innumerable species of plants were living in harmony now there are plantations of only one species and that too of an exotic !

In addition, vegetation was cleared for agriculture, Industrial estates, Tea estates, Coffee estates, Cardamom estates, Rubber estates and now very little natural forests are left in virgin condition. So it is quite possible that we have lost a number of our wild species for ever.

Also the grazing of domestic cattle is playing havoc in the forests of our country. This grazing brings in its wake-fire, and many forest areas suffer annual fires and plant succession is stopped from reaching a climax stage.

So it is possible that in the past few centuries we may have lost quite a few species of plants from our soil.

Steps to preserve the rare plants :

How to stop this ever progressive extinction of various species of plants? Perhaps

following few suggestions may be considered and concrete steps taken to preserve our rare species.

1. Virgin areas that are still untouched by human hand should be left untouched and strictly protected from grazing and fires and cutting down. Though they may be small or large extent in area they should be left as they are.

2. Representative areas in all types, Tropical wet or moist or dry, littoral, mangroves—hydrophytes—Thorn forests, grass-lands, Alpine sholas, Sanddunes and any other types should be selected, demarcated and strictly guarded from human interferences. They should be permanent preservation plots.

3. We have very few botanical gardens. What do we have in these botanical gardens except a few exotic flowering plants? Excepting for ornamental purposes and for picnicing these botanical gardens do not serve the cause of science. Botanical gardens should have mostly properly labelled, local plants. Exotics should only be secondary. The botanical gardens should have appropriate literature.

In the district botanical garden, local trees, shrubs, climbers, herbs, xerophytes and hydrophytes should be represented. This will help the public to know the plants of their area.

4. Each District should have a herbarium.

5. A list of rare plants with illustrations so that they can be easily identified by any one should be prepared and widely published, to ensure appreciation of such plants and extending protection to them.

6. Though we have some illustrated floras like Fyson's flora, Bourdillon's flora, Mayuranathan's flora, they are all old and inadequate. So fresh, illustrated local floras must be prepared.

CONCLUSION

Pressure for more land for agriculture and Industrial Plantations and animal farming is gradually reducing natural forests to monoculture plantations. This prevents Nature from its progress of ecological succession. So it is suggested that some effective steps must be taken to preserve our rare and unique species of plants.