



Status and Preservation of Medicinal Plants of India for Future Generation

A. Shalom Cruz¹, P. Parvathiraj², S. V. P. Easwari³ and Mahesh R^{3*}

1. Department of Botany, St. Jude's College, Thoothoor – 629 176, Tamil Nadu, India.

2. Department of Zoology, Sri Paramakalyani College, Alwarkurichi – 627 412, Tamil Nadu, India.

3 Department of Botany, S.T. Hindu College, Nagercoil, Kanniyakumari – 629 002, Tamil Nadu, India.

(Affiliated to Manonmaniam Sundaranar University, Tirunelveli - 627 012, Tamil Nadu, India
Corresponding Author rmaheshbio@gmail.com

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Abstract

Medicinal plants are considered as a rich resources of ingredients, which can be utilized in medication improvement either India highly populated possess great array of medicinal plant population for its glory. Meanwhile due to increasing drug resistance, there is always search for phyto-based drug compounds. This demand occurs due to the extent of its usage and export due to the demand of pharmaceutical industries. Thus, there is a great need to conserve medicinal plants for the future. In this review, we discuss the consideration strategies, licenses for medicinal plant trade and intellectual properties rights for the usage of medicinal plants.

Keywords: Conservation, Medicinal plants

Review Article

1. INTRODUCTION

India possess eight percent of world's biodiversity, has the competence of turning into a noteworthy worldwide participant in screening and creating herb-based plans, prescriptions and items. About 7500 plant species exist in India, out of which only 1700 have been reported in Ayurveda. This mirrors the deep hole that exists flanked by the recorded and the unrecorded plant species [1]. Now there is huge awareness among people towards natural products so there is a demand for plant species [2]. This demand is met through ex situ protection and development such as plant tissue culture and other advanced strategies [3]. India has likewise focused on sending out the crude material as plant and plant parts/extracted products [4]. With a specific end goal to be anoteworthy player, it is critical that we focus on sending out quality included items rather than the crude material. In any case, the non-attendance of fitting quality control measures or strategies has brought about our items missing out to better prepared rivals in the global markets [5].

Loss of biodiversity of restorative plants

There is loss of biodiversity in India especially medicinal plant due to over-exploitation. The species abundance of plants has declined throughout the years.

The Scenario of medicinal plant trade and its licenses

There has been exchange of therapeutic plants and its products for more than hundreds of billions every year. The significant merchants of therapeutic plants are the European Union, Russia and the USA while the real exporters of restorative plants or its extracts are India, China, Japan and Russia. These nations likewise indicate solid licensed innovation assurance. It is huge that dynamic Intellectual Property Right protection has assisted nations with great hand to build up matchless quality on the plant exchange. Forty five percent of all licenses on herb or natural based or related solution are with China nearly taken after by Japan with twenty eight percent offers [6, 7].

The Indian Scenario and Intellectual property rights for restorative plants

India, a virtual fortune portal of plant species development and restorative plant market, but still at minor level compared to other countries. The export business sector is becoming quicker than the domestic business sector. Then again, the export is being done in type of plants or their parts and not as



value added items. Nations that import plant and plant parts are constantly less bio diverse however are mechanically exceptional which demonstrate a higher capacity to create innovative value-added items from the imports [1, 5].

The Indian exporters face real limitations while sending out restorative plants. The patterned way of therapeutic plant business sector makes it troublesome for them to focus supply and request in the business sectors. Likewise, rivalry from manufactured substitutes, rebelliousness with guidelines and regulation of the importing nations, storing and control by substantial merchants, low quality control, deficient data on business sector patterns, utilization of outdated innovation and absence of built-up routines for development of vast number of plants, and so forth intensify the issue of export of restorative plants or their items from India [2].

It is intriguing to note that India has irrelevant licenses on plant-based details, concentrates and items. The current Patent Act gives just process assurance and along these lines just the technique for setting up a detailing can be secured and not the definition itself. The procedure licenses are in this way less compelling in situations where varieties are conceivable without fundamentally changing the adequacy. Customary learning held by groups, in the traditional sense, cannot be protected. A significant part of the customary information that is not listed is not a former's piece craftsmanship. In this way learning of the tribal and indigenous groups have oddity, non-conspicuousness and mechanical application which are the fundamental necessities for obtaining security under Trade Related Intellectual Property Rights assertion of the World Trade Organization. There are interrelated innovative, institutional, financial and biological issues influencing the therapeutic plant area that have blocked its development bringing about the exhaustion of plant differing qualities and asset bases, and the disintegration of universal piece of the overall industry [7].

Why depreciation? Ground-breaking Issues on therapeutic plant destruction:

- Inadequate innovation to extricate and break down bioactive material and items from the plant niches.
- Taxonomy is in a withering order and there is no corporate interest in the seats long-haul research on scientific classification. The taxonomists are so endangered than to study taxonomy from a well known is to put difficulty on behalf as very few and rare candidates with such calibre are available in India.
- Political influence on the life of medicinal plant users/preservers due to the over corruption of India is just another reason for her downfall besides a rich biodiversity. The Indian traditional are utilized and over used for collection despite the cultivation is fooled by corporate and developed nations more so by the own political situation as corruption is the only motto operating in all parties.
- The extraction of majority restorative plants happens from the normal biological community. The harvest constitutes mostly of plant parts, for example, trunk, roots and bark which pulverizes the plant all together.
- There are no strategies that comprehend relationship between soil mineral and different properties and their impact on the plants so that development of bigger number of species can be taken up with no quality disintegration. The researchers are available but no lab to land implementation is executed.
- There is an absence of deliberate push to strategize innovation improvement for worth expansion through duplication, quality control, preparing and bundling.
- Inadequate framework and energy about the testing system advanced by nearby conservators for getting to restorative plant assorted qualities that influence the capacity of concerned firm and groups to get fullest potential from the asset.
- Absence of national and provincial level databases of plant assorted qualities and asset wealth has made it hard to comprehend the reasonable evaluation of the quality and amount the asset we have.
- There should be a strict law enforcement that outfits the medicinal plant conservation.
- Inability of the non-scientific but promising pioneers, home grown specialists and home-grown healers to produce assets, connections and parkways for commercializing their insight.
- Distress in trusts to grow new fantastic restorative plant mixed products through biotechnology or create shabby engendering strategies.
- Monoculture spread of developed species results in hereditary misfortune. Synthetic inputs in the development of restorative plants may influence their remedial esteem unfavorably other than influencing nature.
- Poor knowledge on economical collecting/extraction prompting debasement, unsettling influence of natural surroundings, loss of differing qualities, lessened wealth and neighbourhood termination of plant species etc. to the common man makes it more vulnerable to get endangered soon.
- The nonattendance of legitimate impetus has driven more youthful individuals not to obtain, learn or master the contemporary or even the conventional information frameworks that have been enhanced over eras. The disintegration of information frameworks is genuine as a risk similar to the disintegration of assorted qualities. The scattered and segregated contemporary information frameworks with individual healer and groups have additionally endured difficulty because of absence of motivating forces.
- Poor payouts for grassroots gatherers and foundations in light of long appropriation channels



and unreasonable huge costs shown on its processing.

- Lack of comprehensive restorative plant studies and their potential curative properties due to the non-promising funding probability and less earning potential against the established and highly commercialized allopathic medicine. These de-motivate the interests of home-grown sellers that they won't be profitable and not to be moved for the next generation survival.
- Survival of exotic plants that dominate the environment due to its wide spread, hooks the natives in distress and fails its possibility to restore its condition in their own field.
- Poor knowledge of reproductive nature of the medicinal plants, environmental destruction and associated species death put forward a halt in the development and culture of designated species branded for overuse with high budget label in the international market.
- The aggregate absence of strategy activities for compensating contemporary individual advancements has paved a way for the development of selfish human being in the aesthetic sense but not on the holistic view. We delete more plants from the world than our forefathers did [8, 9].

What natural conditions underlying its poor development?

Casual variables

The main considerations undermining the species and hereditary differing qualities of restorative plants in India are as same as globally. Numerous variables both common and manmade have been in charge of constraining the appropriation of therapeutic plant species and are making them get to be uncommon or even wiped out.

Ecological variables

Precipitation

In many regions the yearly precipitation has diminished in the degree of two digits bringing about the demise of numerous herbaceous species amid summer months.

Deforestation

Deforestation to a high degree has been accounted in the course of the most recent two decades. The spread of farming, logging, kindling gathering, overwhelming brushing and so on, are the principle purposes behind diminishment in range under profitable and highly diverse therapeutic land [10, 11].

Siltation of water bodies

Siltation of water bodies in the livelihood areas has brought about the decrease of water holding limit prompting consumption of underground water.

Absence of pollinators

Insect states have declined in numbers to the high degrees so as not to compete with our chemical usage and electromagnetic usage. Loss of pollinators has brought about diminished seed set and dispersal of seeds [9].

Farming and ranger service techniques

Infringements

Infringements over the lands have accepted disturbing levels. Aside from felling of trees and clearing vegetation, the development practices took after on high sloppy terrains has brought on soil disintegration, and decay of restorative plant riches. Infringement is insignificant in most of the places of India. We destroy the nature and build multitudes and execute rivalry projects.

Over abuse

Over abuse being the most sited reason in all the regions of India has been due to the unlawful and un ethical practices of greedy corporate groups and an assortment of political parties [12, 13].

2. CONCLUSION

The restorative plant population of India is at the verge of conservation. If not pioneered to save it then will never be curative indigenously; its fast destruction alarms the need for a strict law enforcement and amendment from the government side to cater the preservation of therapeutic plants as well as their amenities for the future generation.

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CONFLICT OF INTEREST

Authors have no any conflict of interest.

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