

PRIORITIZATION OF MEDICINAL PLANT FOR THEIR DEVELOPMENT

Criteria for prioritization

The National Medicinal Plant Board initially prioritized 32 medicinal plants at national level for their conservation and development. Recently, the list has been revised and 82 species have been included in the list. For the overall development of the medicinal plant sector in the state, there is a need to prioritize various medicinal plant species. This prioritization has to be based on different criteria such as (i) criteria for economic development, (ii) Prioritization to address the primary health care of the local community, (iii) medicinal plants prioritized for home and institutional garden, and (iv) prioritization of medicinal plants with conservation value. In the following section we have tried to touch upon different priorities relevant to the state.

Medicinal Plants prioritized for trade for high income.

The most important criterion they need to be considered while prioritizing the species for high income is that the plants should be suitable to grow in the prevalent agroclimatic conditions of the state. The species should have high trade value. It should have consistently high demand. The collection, harvest and post harvest technology should suit to the site conditions of Meghalaya. There should have easy access to planting material and it should be comparatively easy to grow. Preference will also be given to those species which are suitable to grow in multi-tier plantations. The selected species should not get easily deteriorated on storage and continued cultivation. They should have enhanced scope for value addition either through primary processing or through secondary processing. A list of top ten prioritized species for obtaining high income through cultivation and trade is given in Table 18. While deciding the top ten species for the state, following criteria were also considered:

- i. Considering the limited market of medicinal plant in the state and meager return the farming get from domestic market, the commercial viability of the species was assessed based on the trade information outside Meghalaya that would ensure a stable market and a good price.
- ii. The species with fast growth rate were preferred.
- iii. The species having high market value, but relatively less cultivated elsewhere because of specialized agro-climatic requirements for growth, were preferred over others.

Symplocos racemosa, *Homalomena aromatica* and *Rosa damascene* are three new species listed in the top ten priority medicinal plants of the state which have not been included in the national priority list. Incidentally, all the three species to high elevation areas and not cultivation much in the rest of the country.

In total, one hundred and twenty one medicinal plant species having potentials for high value trade in Meghalaya have been categorized under four priority classes in Table 19.

Table 18 : List of top ten prioritized Medicinal plant species for trade and high income in Meghalaya.

SL.No	Botanical name	Common name	Areas of occurrence
1.	Cinnamomum tamala	Tejapat/bay leaf	Sohra, west Khasi Hills, Ri Bhoi and War areas of Khasi Hills
2.	Piper longum	Pippali	Throughout the state
3.	Aloe barbadensis	Greekwar	Through out the state
4.	Rauvolfia serpentine	Sarpagandha	Garro Hills, Ri-Bhoi
5.	Symploco racemosa	Lodh/lodh Pathani	Garro Hills, Ri-Bhoi, Grampanni
6.	Swertia chirayita	Chirayita	Shillong, Jowai
7.	Acorus calamus	Vaach	Marsh, Tropical
8.	Homalomena aromatica	-	Ri-Bhoi, East /Khasi Hills and Garo hills
9.	Rosa damascena	Gulab Phool	Shillong, Lowai
10.	Saraca asoca	Ashoka	Garro Hills, Ri-Bhoi

Table 19 : List of 121 Medicinal Species Prioritized for Trade and high income in Meghalaya

SL.No	Botanical name	Common name	Areas of occurrence/Potential areas
Priority			
1.	Cinnamomum tamala	Tejpat/Bay leaf	Sohra, West Khasi Hills, Ri-Bhoi and War areas of East Khasi-Hills
2.	Piper longum	Pippali	Throughout the state
3.	Aloe barbadensis	Greekwar	Throughout the state
4.	Rouvolfia serpentina	Sarpagandha	Garro Hills, Ri-Bhoi
5.	Symploco racemosa	Lodh/Lodh pathani	Garro Hills, Ri-Bhoi, Grampanni
6.	Swertia Chirayita	Chirayita	Shillong, Jowai
7.	Acorus Calamus	Vaach	Marsh, Tropical
8.	Hamalomena aromatica	-	Ri-Bhoi, East Khasi Hills and Garo Hills
9.	Rosa damascene	Gulab phool	Shillong, Jowai
10.	Saraca asoca	Ashoka	Garro Hills, Ri-Bhoi
11.	Emblica officinalis	Amla	Garro Hills, Ri-Bhoi, Garampani
12.	Asparagus racemosus	Shapawar/Satawar	Garro Hills, Ri- Bhoi, Garampani
13.	Tinospora cordifolia	Giloe	Garro Hills, Ri-Bhoi,
14.	Andrographis paniculata	Kalmegh	Garro Hills, Ri-Bhoi,
15.	Plumbago zeylanica	Chitrak/Sheetraj Hindi	Garro Hills, Ri-Bhoi,

16.	Mucuna Pruriens	Kawanch	Garro Hills,i-Bhoi,
17.	Embelia ribes	Vayavidanga/Baobarang	Shillong
18.	Aquilaria malaccensis= A.agallocha	Agaru/agar	Garro Hills,Ri_Bhoi
19.	Valeriana wallichii	Tagar	Shillong peak
20.	Caesalpinia sappan	Patanga	Garro Hills
21.	Taxux wallichiana= T.baccata	Dieng Blei	East and West Khasi Hills
22.	Hedychium spicatum	-	Ri-Bhoi,East Khasi Hills and Garro Hills
23.	Panax wangianus = p pseudoginseng	Ginseng	East and West Khasi Hills
Priority 2			
1.	Baccopa monnieri	Brahmi	Marshy areas up to 800m
2.	Ocimum sanctum	Tulsi	Homstead
3.	Solanum nigrum	Mokoya/Inab-Us-Saleb	East Khasi Hills
4.	Phyllanthus niruri	Bhumi amala	Garro Hills, Ri-Bhoi
5.	Hemidesmus indicus	Sariva	Garro Hills,Ri-Bhoi
6.	Berberis aristatus	Darvi/Daruharidra	Shillong,Jowai
7.	Terminalia arjuna	Arjuna	Garro Hills, Ri-Bhoi
8.	Curcuma zedoaria	Kachor/Zarambat	Garro Hills,Ri-Bhoi
9.	Rubia cordifolia	Manjisthma/Majith	Shillong,Jowai,Cherrapunjee
10.	Cyperus rotundus	Motha/Saaad Kufi	Marsh, tropical
11.	Santalum album	Chandan	Garro Hills,Ri-Bhoi
12.	Cinnamomum zeylanicum	Twak/Dalchini	Garro Hills,Ri-Bhoi
13.	Solanum indicum	Barikatai	East Khasi Hills
14.	Mesua ferrea	Nagkesara	Ri-Bhoi
15.	Operculina turpethum	Trivert	Garro Hills Ri-Bhoi
16.	Oroxylum indicum	Shayonak	Garro Hills, Ri-Bhoi
17.	Garcinia indica	Kokam	Garro Hills, Ri-Bhoi
18.	Piper cubeba	Kababchina	GarroHills
19.	Vetiveria zizanoides	Usir/Khas	GAro Hills,Ri-Bhoi
20.	Smilax china	Chobchini	Ri-Bhoi
21.	Bterocarpus santalinus	Raktachandan	Garro-Hills
22.	Curculigo orchiodes	Kali musli	Garro Hills
23.	Uraria picta	Dabra	Garro Hills,Ri-Bhoi
24.	Centella asiatica	Manduk parni	Khasi Hills, Jantia Hilla,Ri-Bhoi
25.	Baliospermum montanum	Danti	Garro Hills
26.	Crataevia nurvala	Varun	Garro Hills,Ri-Bhoi

27.	<i>Gloriosa superba</i>	Langli	Garro Hills, Ri-Bhoi
28.	<i>Gymnema Sylvestre</i>	Mesasringi	Garro Hills,Ri-Bhoi
29.	<i>Piper Chaba</i>	Chab/Peepal chab	West Khasi Hills
30.	<i>Zanthoxylum alatum</i>	Tejbal	Garro Hills
31.	<i>Microstylis wallichii</i>	Rishwak	GAro Hills,Ri-Bhoi
32.	<i>Elaeocarpus sphaericus</i> = <i>E. ganitrus</i>	Rudra	Garro Hills,Ri – Bhoi
33.	<i>Prunus cerasoides</i>	Paddam	East Khasi Hills and West Garo Hills
34.	<i>Phytolacca Americana</i>	Poke root	
35.	<i>Piper mullesua</i>	Pippali	West Khasi Hills and East Khasi Hills
36.	<i>Gaultheria fragrantissima</i>	Jirhapiong	West and East Khasi Hills
37.	<i>Houttuynia cordata</i>	Jamyrdoh	East Khasi Hills
38.	<i>Garcinia cowa</i>	Rengran	East Khasi Hills
Priority 3			
1.	<i>Terminalia chebula</i>	Harar/Halelal Zard	East Khasi Hills
2.	<i>Aegle marmelos</i>	Bael/Belgiri	Garro Hills , Ri-Bhoi
3.	<i>Adhatoda zeylanica</i> = <i>A. Vasica</i>	Adusa/Arusa	East Khasi Hills and Garo Hills
4.	<i>Boerhaavia diffusa</i>	Purnava	Garro Hills
5.	<i>Bambusa Bambos</i>	Vanslochan/ Tabasheer	Garro Hills,Ri-Bhoi
6.	<i>Cassia fistula</i>	Amaltas, Khiyarshamber	Garro Hills,Ri-Bhoi
7.	<i>Achyranthes aspera</i>	Apamarga	Garro Hills,Ri-Bhoi
8.	<i>Holarrhena antidysenterica</i>	Kutaja	Garro Hills,Ri-Bhoi
9.	<i>Vitex negundo</i>	Nirgundi	Garro Hills,Ri-Bhoi
10.	<i>Cherodendrum serratum</i>	Bhaharangi	Garro Hills,Ri-Bhoi
11.	<i>Calandula officinalis</i>	Marygold	Cultivated
12.	<i>Celastrus peniculatus</i>	Malkangri	Khasi Hills
13.	<i>Artemisia absinthium</i>	Afsanteem	
14.	<i>Crateva nurvala</i>	Varun	Garro Hills,Ri-Bhoi
15.	<i>Cissampelos pareira</i>	Patha	Garro Hills
16.	<i>Malva sylvestris</i>	Gul Khair	
17.	<i>Cryptolepis</i>	Karantha	Garro Hills

	buchananii		
18.	Clerodendrum phlomoidis	Ami	
19.	Rhus parviflora	Raitung	East Khasi Hills
20.	Piper sylvaticum	Mountain Long Pepper	War area,Ri-Bhoi
21.	Potentilla fulgens	Lynning	Upper Shillong
22.	Stephania glabra		Upper Shillong
23.	Alpinin galangal	The Greater Galangal	Ri-Bhoi,West and East Khasi Hills,Garo Hills
Priority 4			
1.	Withania Somnifera	Ashwagandha	Drier areas
2.	Sida cordifolia	Kanghi	Garo Hills,Ri-Bhoi,Road side weed
3.	Azadirachta indica	Neem	Garo Hills
4.	Litsea monopetala	Boldokakki	Garo Hills,Ri- Bhoi,Garampani
5.	Gmelina arborea	Gambhari	Garo Hills,Ri-Bhoi
6.	Desmodium gangeticum	Salprari	Garo Hills
7.	Sida rhombifolia	Atibala/Safed Barda	Khasi Hills,Jaintia Hills
8.	Datura metel	Dhatura seed	Garo Hills,Ri-Bhoi
9.	Albizia lebbeck	Shirisa	Garo Hills,Ri-Bhoi
10.	Inula racemosa	Pushkarmul	Khasi Hills,Ri-Bhoi
11.	Tylophora indica	Antamul	Garo Hills,Ri-Bhoi
12.	Butea monosperma	Dhak/desu	Garo Hills, Ri-Bhoi
13.	Indigofera tinctoria	Wild indigo	Khasi Hills,Jaintia Hills
14.	Onosma echioides	Ratanjot	
15.	Bombax ceiba= Salmalia malabarica	Semal/mocharas	Garo Hills,Ri-Bhoi
16.	Mallotus phillippensis	Kmila	Garo Hills,Ri-Bhoi
17.	Alstonia scholaris	Saptparna	Garo Hills,Ri-Bhoi
18.	Callicarpa macrophylla	Priyangu	Garo Hills,Ri-Bhoi Garampani
19.	Thuja occidentalis	Arbor vitae	
20.	Vernonia cinerea	Sahadevi	Garo Hills,Ri-Bhoi
21.	Polygonatum cirrhifolium	Mahameda	
22.	Madhuca indica	Mahua	
23.	Aralia racemosa	America spikenard	
24.	Lavandula officinalis	Ustukhudus	Shillong
25.	Scindapsus	Gajpippali	Garo Hills, Ri-Bhoi
26.	Sedum palustre	Marsh tree	
27.	Sphaeranthus	Mundi	Garo Hills

	indicus		
28.	Shorea robusta	Sal	Garro Hills,Ri-Bhoi
29.	Lobelia inflata	Indian tobacco	Shillong
30.	Urtica urens	Stinging nettle	Shillong
31.	Cenothus americanus	New Jersey tea	
32.	Passiflora nepalensis	Passion fruits	Khasi Hills
33.	Convolvulus scammonia	Saqmonia	
34.	Paederia foetida	Gandh prasarni	Khasi Hills,Garro Hills
35.	Doronicum hookeri	Sajaposa/Kasam	
36.	Lycopodium cernuum		
37.	Pinus kesiya	Dieng ksen	Khasi Hills,Jantia Hills

4.2. Medicinal plants prioritized based on traditional health care system.

Meghalaya is rich in traditional health practices. The numerous folk healers serve the population in the primary health care sector and reach them with life saving treatment in areas where communication is difficult.