

MEDICO-BOTANY OF ANDAMAN AND NICOBAR ISLANDS – III AYURVEDIC DRUGS – I

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ABSTRACT: Ayurveda is not exploited to the maximum extent in the islands. In order to provide a basic data for establishing Ayurvedic and allied pharmaceutical based industries, information of on fortyfour drugs available in the islands are provided in this first paper of the series,

Introduction

The Andaman and Nicobar islands consisting of a chain of 321 islands and islets harbor a very unique and rich flora (Yoganarasimhan al, 1983a). But, so far, there has been no attempt to utilize the rich potential floristic elements in Ayurveda through many plants are used by the local aboriginies viz, the Onges, the Nicobarese and the Shompens. The authors have collected more than 200 species from these islands during a medico-botanical programme; out of this, 44 drugs which can be used in Ayurveda are presented in this paper along with the different Ayurvedic preparations, different botanical sources of the drug are the available source/species in the islands. This basic data will be much useful for establishing and carrying-out any work contemplated in ayurveda in these islands which is at present lacking to a great extent. Besides this, the natural forest wealth of the island can be utilized for establishing Ayurvedic and allied pharmaceutical based industries in the islands.

Materials and Methods

Every drug is given the classical Ayurvedic name, followed by different botanical sources, with an asterisk (*) mark given for the plants found in the islands (Chunekar and Pandey 1962); Sharma 1969; Singh and Chunekar 1972). A few major Ayurvedic preparations in which the drug is used are mentioned following *Ashtanga hridaya* (Gupta 1972) and *Sahasra Yoga* (Kurup 1972) while the therapeutic properties are followed as per *Bhavaprakasa Nighantu* (Chunekar and Pandey 1962). All the plants with asterisk mark were collected during February to May 1980 and are deposited at RRCBI.

ENUMERATION OF DRUGS

1. Sahacara

Bot Source: 1. *Barleria prionitis** (Acanthaceae). *Sahachara* is an important vatahara drug and is used in preparations like the *sahacharadi taila*, *sahacharadi kashaya*, *ashtavarga kashaya*. It is *thikta rasa*, *ushna vierya*, *katu vipaka* and *laghu guna*.

2. Nirgundi

Bot Source: 1. *Vitex negundo** (Verbenaceae); 2. *Gendarussa vulgaris** (Acanthaceae); 3. *Vitex altissima* (Verbenaceae).

It is a *krimihara* (against worms) drug in Ayurveda. *Sakapallavadi kashaya*, *Nirgundyadi kashaya* are the two important preparations made out of this drug *Nirgundi* is *kashaya katu rasa*, *laghu guna*, *katu vipaka* and *ushna vierya*.

3. Kajutaka

Bot. Source: 1. *Anacardium occidentale** (Anacardiaceae). This drug is not found in *Brihatrayee* but included in the *nighantus*. The seed kernel is used as a tonic (rejuvenator) and the oil is used to cure *pata daru* Kernel is *madhura rasa*, *ushna vierya* and *madhura vipaka*.

4. Gingini

Bot. Source: 1. *Lannea crromandelica** (Anacardiaceae) This is one of the ingredients of *lodhradigana* of *vagbhata* which is mainly given for *kapha* and *meda samana*.

5. Amarataka

Bot. Source: 1. *Spondias pinnata** (Anacardiaceae)

This drug is one of the important ingredients in *Dadhika ghritha* and *virechana kalpa*. It has *Amla rasa*, *snigdha guna*, *sieta vierya* *madhura vipaka* properties.

6. Bhallataka

Bot. source: 1. *Semecarpus anacardium* (Anacardiaceae); 2. *Semecarpus kurzii** (Anacardiaceae).

This is an anticancerous drug (*Arbhadahara*) mentioned in ayurveda. *Bhallataka taila*, *Bhallataka ghritha* are a few preparations in which it is used. It has *kashaya madhura rasa*, *madhura vipaka*, *ushna vierya* and *laghu thiekshna guna* properties.

7. Saptacchada

Bot. source: 1. *Alstonia scholaris* (Apocynaceae); 2. *Alstonia kurzii** (Apocynaceae); 3. *Alstonia macrophylla** (Apocynaceae).

The bark of this drug is one of the ingredients of the antimalarial drug and forms one of the components in preparations like the *chandanadi ghritha*, *Mahapanchagavya ghritha* and *Amrutarishta*. Some of the attributed properties are *kashayakatu rasa*, *katu vipaka*, *ushna vierya* and *laghu guna*.

8. Sarpagandha or Nakuli

Bot. Source: 1. *Rauvolfia serpentine* (Apocynaceae); 2. *Raugolfia sumatrana** (Apocynaceae).

In *Ashtanga hridayam*, it is used as ingredient in *Hingvadi yoga* which is prescribed in *Graha* and *Bhuta diseases* (mental diseases). It is used to suppress *Rakta atimarda* (hypertension) and possess *katu thikta rasa*, *ruksha guna*, *katu vipaka* and *ushna vierya* properties.

9. Pindaluka

Bot. Source: 1. *Colocasia antiquorum** (Araceae). This drug is included as a food material in *Ashtanga hridayam*. It is *anna svarupa vijnanya*.

10. Gajapippali

Bot. source: 1. *Scindapsus officinalis** (Araceae); 2. *Piper chaba* (Piperaceae).

This drug is used in preparations like the *Agastya harietaki* and as one of the *Lepa* drug in the treatments of *vataja udararoga* (dropsy).

11. Ishwari

Bot. Source: 1. *Aristolochia indica*; (Aristolochiaceae); 2. *Aristolochia tagala** (Aristolochiaceae).

One of the *Visha hara* drugs mentioned in ayurveda; used in *kita-loota* visha chikitsa. The drug is *tikta kashaya rasa, katu vipaka, ushna vierya* and *laghu rukshaguna*.

12. Ananta muola

Bot. source: 1. *Tylophora indica* (Asclepiadaceae).

The drug is given in the treatment of *tamaka svasa* (bronchial asthma). Some use it in the name of *Rasna*.

13. Agragrahi or Aakarakarabha

Bot. source: 1. *Spilanthes acmella** (Asteraceae); 2. *Anacyclus pyrethrum* (Asteraceae); 3. *Lodoicea maldivica* (Arecaceae).

The flower heads are chewed to get relief from tooth ache; it has the properties like *katu rasa, katu vipaka, ushna vierya* and *ruksha guna*.

14. Bhringaraja

Bot. source: 1. *Eclipta alba* (Asteraceae); 2. *Wedelia biflora** (Asteraceae).

Bhringaraja taila, Nieli Bhringadi taila are the preparations made out of this drug which is claimed as a good hair growth promoter.

15. Samudraphala

Bot. source: 1. *Barringtonia acutangula* (Barringtoniaceae); 2. *Barringtonia asiatica** (Barringtoniaceae). 3. *Barringtonia racemosa** (Barringtoniaceae).

This is one of the ingredients in *pramehanasaka ghrita, Nielinyadi yoga*. The fruits are toxic to fish.

16. Varuna

Bot. Source. 1. *Crataeva religiosa** (Capparaceae). This drug is one of the ingredients of the *Varunadigana*. It has *tikta rasa, laghu guna, ushna vierya* and *katu vipaka* properties.

17. Prasarini

Bot. Source: 1. *Paederia foetida** (Fabaceae); 2. *Merremia peltata** (Convolvulaceae); 3. *Merremia umbellata** (Convolvulaceae).

Prasarini is an important *vata hara* drug, used for preparations like *prasaranyadi kashaya, kubja prasarani taila, prasarani taila*. It has properties like *thikta rasa, katu ripaka, ushna vierya* and *guru-sara guna*.

18. Visala

Bot. Source: 1. *Citrullus colocynthis* (Cucurbitaceae); 2. *Trichosanthes palmate** (Cucurbitaceae).

This drug is mentioned in the *virechana gana* and *vamanoushadha gana*. It is used in preparations like *sakapallavadi kashaya, vatankuradi kashaya* and has *tikta rasa, katu*

vipaka, ushna vierya and *laghu sara guna* properties.

19. Vidari

Bot. Source: 1. *Pueraria tuberosa* (Fabaceae); 2. *Ipomoea digitata* (Convolvulaceae); 3. *Cyeas rumphil** (Cycadaceae); 4. *Modecca palmatta* (Cucurbitaceae).

Vidari is one of the drugs mentioned in *Vidaryadi gana* which is *vata pitta samana, brimhana* and a good tonic for heart diseases (*Hridya*). *Vidaryadi kashaya, vidaryadi ghrita* are prepared in which it is found as one of the ingredients. *Madhura rasa madhura vipaka, sieta vierya* and *guru snigdha guna* are the properties of *Vidari*.

20. Varahi kanda

Bot. sources: 1. *Dioscorea bulbifera* (Dioscoreaceae); 2. *Dioscorea vexans** (Dioscoreaceae).

All the wild species of *Dioscorea* are used as *Varahi kanda* as per availability. It is *katu-madhura, tikta rasa, katu vipaka, ushna vierya* and *snigdha guna*.

21. Asana

Bot. Source: 1. *Pterocarpus marsupium* (Fabaceae); 2. *Bridelia tomentosa** (Euphorbiaceae).

Asana is used for preparations like *Asana Bilwadi taila, Vasishta haritaki. Kashaya tikta rasa, katu vipaka, ushna vierya* and *laghu ruksha guna* are the properties of this drug. *Bridelia tomentosa* known as *Mullu venga* in Malayalam is used as *asana* in kerala and the same is available in plenty in the islands.

22. Pashana bheda

Bot. Source: 1. *Saxifraga ligulata* (Saxifragaceae); 2. *Aerva lanata* (Amaranthaceae); 3. *Rotula aquatic* (Boraginaceae); 4. *Homonoia riparia** (Euphorbiaceae).

This drug is mainly given in the treatment of *Asmari* (urinary calculi); used in the preparation *pathya gokushuradi kashaya*. It has properties like *kashaya katu rasa, katu vipaka, seta veerya* and *laghu guna*.

23. Kampillaka

Bot. source: 1. *Mallotus philippinensis* (Euphorbiaceae); 2. *Mallotus andamanicus** (Euporbiaceae).

It is used in preparations of *krimivikara* (worm troubles). It has *katu rasa, katu vipaka, ushna vierya* and *laghu ruksha guna* properties.

24. Tamalaki

Bot. source: 1. *Phyllanthus fraternus** (Euphorbiaceae). *Amrutaprasa ghrita* and *Nimbadi kvatha* are a few preparations made out of this drug. It has *madhura kashaya rasa, madhura vipaka, sieta vierya* and *laghu ruksha guna* properties.

25. Saptarangi

Bot. source: 1. *Salacia prinoides** (Hippocrateaceae); 2. *Salacia fruitcosa* (Hippocrateaceae); 3. *Hippocratea andamanica** (Hippocrateaceae).

The drug is used in preparations like *Nisakatukadi kashaya* and *Darvikapitadi kashaya* and has properties like *tikta kashaya rasa, katu vipaka* and *ushna vierya*.

26. Bala

Bot. Source: 1. *Sida retusa* (Malvaceae); 2. *Sida acuta** (Malvaceae); 3. *Sida*

*rhombofolia** (Malvaceae); 4. *Sida cordifolia** (Malvaceae).

Bala is udeful in many preparations like *kshierabala taila*, *bala saharadi kashaya* and *Bala satavari kashaya* and possess *guru snigdha guna*, *madhura rasa*, *madhura vipaka* and *sieta vierya* properties.

27. Atibala

Bot. Sourvces: 1. *Sida cordifolia** (Malvaceae); 2. *Urena lobata** (Malvaceae); 3. *Abutilon indicum** (Malvaceae).

Atibala has similar properties and used in same preparations as that of *Bala*.

28. Rohitaka

Bot. Source: 1. *Tecomella undulate* (Bignoniaceae); 2. *Aphanamixis polystachya** (Meliaceae).

It is used in preparations like *rohitakarishtha* and *rohitaka ghritha* and has *katu kashaya rasa*, *katu vipaka*, *sieta vierya* and *laghu snigdha guna* properties.

29. Kakodumbara

Bot. Source: 1. *Ficus hispida** (Moraceae).

It is used in preparation like *kakodumbaradi kashaya* and possess *tikta kashaya rasa*, *katu vipka*, *sieta vierya* and *laghu ruksha guna* properties.

30. Sakhota

Bot. Sourc: 1. *Streblus asper** (Moraceae); 2. *Tectona grandis* (Verbenaceae).

This forms one of the ingredients in preparations like *Sakapallavadi Kashaya*.

31. Punarnava

Bot. Source: 1. *Boerhavia diffusa** (Nyctaginaceae); 2. *Boerhavia vericellata* (Nyctaginaceae).

An important drug in preparations like *punarnavasava*, *punarnavadi kashaya*. *Madhura kashaya rasa*, *madhura vipaka*, *ushna vierya* and *laghu ruksha guna* are its properties.

32. Yudhika or Jati

Bot. Source: 1. *Jasminum acuminatissimum* (meliaceae); 2. *Jasminum auriculatum* (Meliaceae); 3. *Jasminum ritchiei** (Meliaceae); 4. *Jasminum officinale* (Meliaceae).

Jatyadi gritha, *Jatyadi taila* are some of the preparations where this drug is one of the ingredients. *Kashaya tikta rasa*, *katu vipaka*, *ushna vierya* and *loghu snigdha mrudu guna* are the properties attributed.

33. Chandana

Bot source: 1. *Santalum album* (Santalaceae); 2. *Ximenia Americana** (Olacaceae); 3. *Dysoxylum malabaricum* (Meliaceae).

Chandana is used in preparations like *chandanaadi taila*, *chandanasava* and has properties like *laghu ruksha guna*, *tiktha rasa*, *katu vipaka* and *sieta vierya*. The plants at nos.2 and 3 are used as adulterants to the plant at no.1.

34. Gunja

Bot. Source: 1. *Abrus precatorius** (Fabaceae).

Bhallatakadi taila, *Indraluptasamana lepa* are the preparations made out of this drug

which possess properties like *laghu guna*, *ushna vierya*, *tikta kashaya rasa* and *katu vipaka*.

35. Saliparni

Bot. source: 1. *Desmodium gang eticum* (Fabaceae); 2. *Desmodium umbellatum** (Fabaceae).

Dasamuola kvatha, *Dasamuolarishta*, *Dasamula rasayana* are some of the important preparations in which this drug is found as one of the ingredients. The properties are *madhura tikta rasa*, *madhura vipaka*, *guru snigdha guna* and *ushna vierya*.

36. Prisniparni

Bot. source: 1. *Uraria picta* (Fabaceae); 2. *Uraria lagopodioides** (Fabaceae); 3. *Pseudarthria viscida* (Fabaceae).

Preparations and properties similar to *salaparni*.

37. Tambula

Bot. source: 1. *Piper betle** (Piperaceae). *Tambula rasayana* is an important preparation of this drug. It has *katu thikta rasa*, *katu vipaka*, *ushna vierya* and *laghu tikshna guna* properties.

38. Sarpakshi

Bot. source: 1. *Ophiorrhiza mungos* (Rubiaceae); 2. *Ophiorrhiza andamanica** (Rubiaceae); 3. *Andrographis serpyllifolia* (Acanthaceae).

This drug is mentioned in *susruta samhita* (kalpasthana) and is reported to be used in the treatment of poisonous bites by the tribal people.

39. Madanaphala

Bot. Source: 1. *Xeromphis spinosa* (Rubiaceae); 2. *Randia densiflora** (Rubiaceae); 3. *Randia forbesii** (Rubiaceae).

Madanaphala is one among the *Vamanakaraka* and *Niruhana gana* of *vagbhata*. *Thikta kashaya rasa katu vipaka*, *ushna vierya* and *ruksha guna* are the properties of this drug.

40. Bilva

Bot. source: 1. *Aegle marmelos** (rutaceae)

One of the drugs in *Dasamula*, used in preparations like *Bilwadi gutika*, *Bilwadi kashaya* and other yogas of *Dasamula*; *kashaya thikta rasa*, *katu vipaka*, *ushna vierya* and *ruksha guna* are the properties.

41. Brahati

Bot. source: 1. *Solanum indicum** (Solanaceae); 2. *Solanum torvum** (Solanaceae).

One of the ingredients of *dasamula* and possess properties like *katu tika rasa*, *katu vipaka ushna vierya* and *laghu ruksha guna*. Major preparations are *Brahatyadi kashaya*, *Dasamuola kata traya kashaya* in which *brahati* is one of the ingredients.

42. Vana surana

Bot. Source: 1. *Tacca lentopetaloides** (Taccaceae).

Bahusala gulam and *Arsoghna kashaya* are the important preparations.

43. Agnimantha

Bot. source: 1. *Premna latifolia** (Verbenaceae); 2. *Premna corymbosa** (Verbenaceae); 3. *Clerodendrum phlomidis* (Verbenaceae).

This is also one of the important drugs in *Dasamula*. *Dasamula kashaya* and *Agnimantha kashaya* are some of the preparations. The important properties are *katu tikta rasa*, *katu vipaka*, *ushna vierya* and *ruksha guna*.

44. Priyangu

Bot. source: 1. *Callicarpa macrophylla* (Verbenaceae); 2. *Zanthoxylum budrunga**

(Rutaceae); 3. *Zanthoxylum ovalifolium* (Rutaceae).

Priyangu is used in preparations like *priyangu taila*, *Priyangu churna* and is *guru ruksha guna*, *tikta kashaya rasa*, *katu vipaka* and *dsieta vierya*.

Note:- The asterisk mark denotes regarding the availability of the plant in the islands out of the collections made by the authors during 1980 only.

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