



# SIGNIFICANCE OF EXTRA PHARMACOPOEIAL DRUGS IN *AYURVEDA*

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## ABSTRACT:

The Literatures have emphasized the use of locally available flora for prevention as well as treating diseases. Folklore practitioners are successfully treating majority of disease with their vast knowledge by using extra pharmacopoeial drugs which are not yet documented. There is an exigency to authenticate these drugs by using both traditional and scientific methods since use of herbal medicinal products and supplements has increased tremendously over the past three decades with not less than 80% of people worldwide relying on them for some part of primary healthcare due to which there is an over exploitation of many species. Extra Pharmacopoeial drugs also called as *Anukta dravyas* in *Ayurveda* are the contribution of the various ethno-medicinal survey studies.

**KEYWORDS:** Herbal medicine, *Anukta dravyas*, *Ayurveda*, Extra Pharmacopoeial drugs

## INTRODUCTION:

*Ayurveda* has laid down various principles for the maintenance of health as well as eradication of the diseases. History of *Ayurveda* exhibits there is a chronological encroachment of medicinal plants in *Ayurveda* from *Vedic* period to *Samhita* period and from *Samhita* period to *Nighantu* period. *Ayurvedic* texts described many drugs in terms of their names, properties and therapeutic usage etc.

*VEDA KALA- Rig Veda* 67 plants

*Yajur Veda* 81 plants

*Atharva Veda* number increases to 189<sup>1</sup>

SAMHITA KALA- Charaka Samhita 1100 plants<sup>2</sup>

Susruta Samhita 1270 plants<sup>3</sup>

Ashtanga Hridaya 1150<sup>4</sup> (approximately)

NIGHANTU KALA- Addition of around 400 new medicinal plants<sup>5</sup>

Due to innumerability of plant species, many plant drugs were not recorded in Classical treatise though they have the medicinal properties. Such undocumented drugs are known as *Anukta dravya* (Extra pharmacopoeial drugs).

Ayurvedic pharmacological principles of drug i.e. *Rasa, Guna, Virya, Vipaka* etc. are not evaluated and no classical guideline is directly available which provides the evaluation method of such kind of unexplored drugs. So, stepwise methods should be adopted for correct authentication, identification of microscopic and macroscopic characters, and determination of its *Rasapanchaka*, preclinical studies on animals to fix toxicity, LD and ED. Reverse pharmacological studies to bring out the exact nature of the work of the particular herb. Clinical studies help to EBM based Extra Pharmacopoeial Ayurveda drugs.

For eg: *Bridelia stipularis* (L.) Blume is an extra pharmacopoeial drug its *Rasa* and *Virya* were evaluated using *Rasa* analysing proforma and endothermic and exothermic reactions respectively. The drug was administered to 30 participants and their responses after the intake of drug were recorded. On analyzing the data it was found that the drug possesses predominantly *Kashaya* (Astringent), *Tikta* (Bitter) *Rasa* and *Madhura* (sweet) as *Anurasa*. The *Virya* of the drug was found to be *sheeta* (Coldness)<sup>6</sup>

Some of the *Anukta dravyas* are as follows:

*Arogya pachha* (BN: *Trichopus zeylanicus*)<sup>7</sup>

Belongs to family *Dioscoreaceae*. Tribal people believe that regular consumption of fruit can prevent ageing also enhances immunity. Traditional practices also reveal role of this herb in treatment of Liver ailments and Gastric ulcers.

*Noni* (BN: *Morinda citrifolia*)<sup>7</sup>

Belongs to the family *Rubiaceae*. Whole plant is useful like its fruit, root, bark, seed oil, flowers, and leaves are used in various diseased conditions. *Noni* fruit is used internally and externally for its untold medicinal properties. Experimental studies reveal that *Noni* fruit exhibits properties in various tumor pains and improves the immune system.

*Chassalia curviflora* (Wall.) Thwaites

It is commonly known as *Kaadu garudpatala* in *Kannada* belongs to the family *Rubiaceae*. It is used as a source plant for the drug *Sarpagandha* in certain areas. The *Kani* tribal folklore in Aarukani hills, Kerala used the root and leaf of this drug to treat jaundice and wounds.

*Chassalia curviflora* (Wall.) Thwaites is an evergreen, erect shrub<sup>8</sup>. It is found in eastern Himalaya from Sikkim eastwards to Assam in Peninsular India from Orissa and Maharashtra southwards and in Andaman and Nicobar Islands. The leaves and root are used as a poultice. The juice of leaves boiled with oil is used for ear and eye diseases, ulcers and sore throat. Decoction of root is given as a remedy in Phlegm, rheumatism and pneumonia<sup>9</sup>.

The Extra pharmacopeia is an authorized reference book on drugs was first produced by William Martindale in 1883 and is still known as 'Martindale'. It provides all sorts of latest information on drugs.

## MATERIALS AND METHODS:

A search of multiple bibliographical databases and traditional *Ayurvedic* text books was conducted and the articles analyzed under various key themes.

## DISCUSSION:

India has a rich floral diversity depending on different geographical areas which decides the potency of a drug. It is mentioned in the Classic texts that there is no plant which is devoid of medicinal property and should be used efficiently through one's knowledge<sup>10</sup>. These drugs are used in *Ayurveda* on the basis of their Pharmacological properties such as *Rasa*, *Guna*, *Virya*, *Vipaka* and *Prabhava*. Many traditional plants enriched with various medicinal properties are being overused due to which they are becoming endangered or are on the verge of extinction. So, there is an immense need to know about the extra pharmacopoeial drugs which can serve as substitutes and fulfill the ever increasing demand of herbal medicines in the current era. According to a survey conducted by the Ministry of environment and forest, Government of India, over 8000 species of plants are used by the people of India<sup>11</sup>.

Government of India constituted *Ayurveda* Pharmacopoeia committee in 1962, to work on the preparation of monographs which gives a clear picture on standards like identity, quality, purity, safety and efficacy profile of different parts of pharmacopoeial as well as extra pharmacopoeial drugs.

These drugs can be known through Traditional as well as scientific methods

Traditional method:

- 1) Nature of the plant (*Prakriti*)
- 2) Inherited Properties (*Guna*)
- 3) Special Action (*Prabhava*)
- 4) Habitat
- 5) Useful part collection
- 6) Method of preservation
- 7) Therapeutic indication
- 8) Dosage
- 9) Individuals to whom it can be administered
- 10) Action on doshas etc<sup>12</sup>

Scientific methods:

- 1) Collection of information from Folklore experts
- 2) Botanical identification with the help of Taxonomist
- 3) Identification of a plant- Macro/Micro
- 4) Observation of the plant in-situ
- 5) Extensively study of Literature to find any suitable tag with available Dravya
- 6) Detailed pharmacognostical studies
- 7) Determination of Rasapanchaka

- 8) Safety Studies- Acute/Sub-acute/Chronic studies
- 9) Detailed Pharmacological studies
- 10) Biological studies
- 11) Evaluation and validation of Ethnobotanical claims
- 12) Nomenclature
- 13) Inclusion in API Monographs<sup>13</sup>

## CONCLUSION:

The study and evaluation of such extra pharmacopoeial drugs which are also used by folklore practitioners will enhance our knowledge and give us a broad perspective in treatment aspect too. It will be a boon to materia medica of *Ayurveda* when the *Anukta dravyas* will be documented after having sufficient knowledge about their Pharmacological properties. This will help our science to be more up to date and try to lessen the gap between oriental knowledge and new advanced knowledge of herbs.

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