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# Methods of evaluating *Anukta Dravya*

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## ABSTRACT

In *Dravyaguna Shastra* medicinal plants are documented by means of *Rasapanchaka* and *Karma*. Chronological up gradation of medicinal plants has been observed from *Vedic Kala* to *Samhita Kala* and up to *Nighantu Kala*. Still many folklore plants and exotic plants are available in India which have not been mentioned in *Ayurvedic Samhitas* and *Nighantus*. Such undocumented or unexplored drugs are known as *Anukta Dravya* (extra pharmacopeial drugs). It is noted that raw drugs for making good number of formulations are derived from plants. And some plants are fall under endangered category. Because of increased population and over exploitation of drugs, habitat degradation is going on. Earth is losing at least one potential major drug every two years. *Pandit Narahari* author of *Raja Nighantu* has provided criteria for nomenclature of undocumented drugs. *Acharya Charaka* has explained guidelines for drug standardization in *Viamana Sthana*. If these methods are followed to study *Anukta Dravya* along with modern parameters of Pharmacognosy will provide new ways to preserve some endangered species by adapting tissue culture technique. Additional activity can be explored by screening the drugs. And at the end the Standardized drug can be added in API Monograph.

**Key words:** *Anukta Dravya, Extra pharmacopeial drugs, Undocumented, Unexplored*

## INTRODUCTION

*Dravyaguna* has special emphasis on *Ayurveda Shastra*. The main aim of *Ayurveda* is to maintain the health and to cure the disease. This aim is fulfilled only when the drug is studied thoroughly and used appropriately. As the whole Universe (*Bramanda*) is *Panchabhautika*, and *Sharira* is also *Panchabhautika* in the same way all the *Dravyas* are *Panchabhautik* and acts as medicine. No single drug in the universe is useless.<sup>[1]</sup> In *Khudakchatuspada Adhyaya* of *Sutra Sthana*, *Acharya Charaka* has described the importance of *Bheshaja* in the successful management of the disease.<sup>[2]</sup> Literary meaning of word *Anukta*

is न-उक्त i.e., un-said. *Nokta* or *Anuka* is a drug which is not included in *Ayurvedic Samhita* or *Nighantus*. The term *Anukta Dravyas* means that the drugs, which are available in the universe, have to be studied in terms of their identification, morphology and provide scientific validation. India has got dense medicinal flora and hundreds of medicinal plants are available which are therapeutically important and those folklore medicines are used in day-to-day life for major and minor ailments are not included in *Ayurveda*. Therefore, it is necessary to identify, name these plants and then analyze them scientifically in terms of *Rasapanchaka*. Simultaneously, the plants should be studied for their chemical composition so that they can be successfully utilized in therapeutics and documented for future reference.<sup>[3]</sup>

## Need

Study of *Anukta Dravya* helps in achieving many objectives like many important medicinal plants have been red listed and many are on the way. If *Anukta Dravyas* are studied scientifically and if we find pharmacodynamic properties similar to the drugs which are red listed then this *Anukta Dravya* is a best substitute for it.

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Ethno-medicine is a study of traditional medicine practiced by various ethnic groups. *Charaka* clearly states that information about unknown drugs should be collected from forest dwellers, shepherds tribes etc. This will expand the knowledge of herbs.<sup>[4]</sup>

To find new molecule in the plant.

Explore the floras in the world.

अनेनउपदेशेन नानौषधिभूतंजगति किञ्चिद्भयं उपलभ्यते

तां तां युक्तिमर्थं च तं तं अभिप्रेत्य! (च.सु.26/12)

There is no single drug in the universe, which is not *Aushadha* or which is useless. Every plant is useful for one or the other purpose.<sup>[5]</sup>

### Methods for evaluating new drug

1. Field survey and documentation through folklore

गोपालास्तापसाव्याधयेचान्येवनाचारिणः ।

मूलाहाराश्रयेतेभ्यो भेषजव्यक्तिरिष्यते ॥

2. The *Aushadanaama*, *Roopa* which is unknown can be known through *Gopalaka*, *Vanacharini*, folklore practitioners usually these nomadic forest tribes know very well the vernacular names.<sup>[6]</sup>

3. Extensive study of literature: Review of various medical databases like Pubmed, Dhara etc, *Charaka Samhita*, *Sushruta Samhita* and books like *Dravyaguna Vigyana* by different authors etc. related to *Anukta Dravya* and the concept of '*Dravya Pariksha Vidhi*'.

4. Nomenclature: After identification, nomenclature of plants in Sanskrit should be done prior to determining the name to every plant as per the criteria of nomenclature mentioned in *Nighantus*

नामानि क्वचिदिह रूढितः प्रभावादेश्योक्त्या क्वचिदिह लाञ्छनोपमाभ्याम्।

वीर्येण क्वचिदितराह्यादिदेशाद् द्रव्याणामिह सप्तघोदितानि।। (रा.नी.)

Names and Synonyms are assigned to plants on the following seven bases according to *Raja Nighantu* as follows<sup>[7]</sup>

a) *Rudhi* (Traditional usages) e.g., *Atarushaka*, *Tuntuka*

b) *Prabhava* (Effect), e.g, *Krimighna*, *Vatari*

c) *Desha* (Habitat), e.g., *Vaidehi*.

d) *Lanchana* (Morphological characters), e.g., *Citratandula*, *Chitraparni*

e) *Upama* (Simile), e.g., *Kinshuka*, *Hinhasya*

f) *Viryas* (Potency), e.g., *Ushana*

g) *Itarahvaya* (Names prevalent in other regions or other factors) e.g., *Indrayava*, *kakahvaya*

### 5. *Dravya Pariksha Vidhi* as per *Charaka Samhita*

तस्यापीयं परीक्षा - इदमेवंप्रकृत्येवंगुणमेवंप्रभावमस्मिन्देश जातमस्मिन्नुतावेवं गृहीतमेव मुपस्कृतमनया च मात्रया युक्तमस्मिन् व्याधावेवविधस्य पुरुषसेव्य तावन्तं दोषमपकर्षत्युपशमयति वा ; यदन्यदपि चैवविधं भेषजं भवेत् तच्चानेन विशेषेण युक्तमिति॥ (च.वि.8/87)

*Acharya Charaka* has given guidelines for drug standardization, which are as relevant in today's era too. It indicates that a drug should be studied as follows:

1. *Prakruti*: Name, Natural order of drug and botanical morphology.
2. *Guna: Rasa, Virya, Gunas* and chemical properties
3. *Prabhava*: Therapeutic actions.
4. *Desha*: Botanical distribution
5. *Rutu Gruhitam*: Time and method of collection
6. *Nihit*: Method of preservation
7. *Upaskrit*: *Sanskar*, Pharmaceutical processing for its preparations
8. *Matra*: Dosage
9. *Vyadhi*: Various diseases in which drug can be therapeutically used
10. *Evam Vidham Purushasya*: Clinical trials or in which person it is probably useful.<sup>[8]</sup>

▪ **Determination of Rasa:** *Rasa* of a drug is gustatory appeal. Poisonous and unknown drug if put on tongue may prove fatal hence may not be advised to put on tongue hence before tasting any drug on human volunteers that drug should undergo chemical analysis. According to modern chemistry, the taste are resultant from certain chemicals for

ex- Carbohydrates such as sucrose, glycogen and starch are sweet in taste. Tannins have astringent taste. Volatile oils may have pungent taste. Alkaloids are generally bitter in taste. *Lavana rasa* in salts. *Amla rasa* in acids etc.<sup>[9]</sup>

- **Determination of Guna:** The *Gunas* inherent in a *Dravya* can be understood by their *Rasa*, applications and biological responses. They can be inferred also by its known Pharmacological actions. Ex. *Madhura Rasa* is having *Snigdha*, *Seeta* and *Guru Guna*. Hence can be considered as *Vata Shamaka* and used in *Vataja Vikara*.<sup>[10]</sup>
- **Determination of Vipaka:** *Vipaka* can be assessed by its action produced on *Doshas*, *Dhatu*s and *Malas*. Ex *Madhura* , *Amla*, *Lavana Rasa-Srustavinmutra Pravrutti*. *Katu*, *Tikta*, *Kashaya Rasa- Baddhavinmutra Pravrutti*.<sup>[11]</sup>
- **Determination of Virya:** *Chakrapani* quoted that *Virya* can be perceived either by *Nipata* (by means of external contact with body) or *Adhirasa* (by means of internal contact i.e., with site of action) ex. *Seeta Virya* of *Saindhava Lavana* and *Ushna Veerya* of *Anupa Mamsa* may be perceived through inference.<sup>[12]</sup>
- **Determination of Prabhava:** The property which is responsible for a special or peculiar action of a drug. Two plants may have a single chemical component in common and yet the remaining chemicals may be slightly different. Even then, the required changes in the analytical tests have to be made. *Haritaki* and *Dhataki* are both examples of *Dravyas* having *Kashaya Rasa* but *Haritaki* acts as a laxative whereas *Dhataki* causes constipation. It is the natural property of *Kashyaya Rasa* to cause constipation; but chemical analysis of *Haritaki* revealed the presence of anthroquinone which has laxative properties. Thus, laxative action of *Haritaki* could be explained. It is possible to obtain similar explanations in case of *Danti* and *Chitraka*.<sup>[13]</sup>

#### Pharmacognostical Studies of natural drug

- Identification and Official name

- Synonyms and vernacular terms.
- Habitat
- Morphological Features - macroscopic study
- Microscopic Features
- Cultivation, collection and processing of drug
- Chemical analysis- Involves series of process of identification, quantification and separation of active constituents present in the plant.
- Bio Assay- The Bio assays are performed by In Vitro and In Vivo methods to confirm Pharmacological actions, Toxicological studies, Additional or unexplored Pharmacological activity
- Toxicological studies are carried out to confirm the Toxicity, Lethal dose, Therapeutic effective dose by animal experimentation.
- From the above points, it is clear that Pharmacognostic study covers thorough information regarding a natural drug. Thus, this can be co-related with the *Dravya Pariksha Vidhi* in *Vimana Sthana* of *Charaka Samhita*

**Examples of some Anukta Dravya:** Kusuma and Joshi (2010) have done nomenclature of 10 *Anukta Dravya* present in the peripheries of Varanasi, U.P. Based on Principles of *Naamrupagyanam* (basonyms and synonyms)<sup>[14]</sup>

1. *Raatki Rani* - *Cestrum nocturnum* Linn. Indication- Spasm, Heart disease
2. *Poinsetta* - *Euphorbia pulcherrima* Wild. ex Klotzsch. Indication- Tumors
3. *Ban Tambaku* - *Solanum erianthum* D Don. Indication- Inflammation, Pain, Cough, Skin disease, Wound, *Asthma*, Diabetes
4. *Jonkmari* - *Anagallis arvensis*. Indication- Epilepsy, Mania, Hysteria, Dropsy, Leprosy
5. *Nagphool* - *Gmelina asiatica*. Indication- Syphilis, Gonorrhoea, Burning sensation in eye, Fever, Dysuria, Dandruff
6. *Rangoon ki bel* - *Quisqualis indica* Linn. Indication- Diarrhoea, Fever, Worm, infestation, Boil, Ulcer Dysuria

7. *Ghoda Tulasi - Scoparia dulcis* Linn. Indication - Headache, Toothache, Cough, Wound, Heart disease, Haemorrhoids, Diarrhoea
8. *Gulabbas - Mirabilis jalapa*. Indication - Boil, Syphilis, Abscess, Diabetes, Dropsy, Gonorrhoea, Itch, Tumor
9. *Aarogyappacha - Trichopus zeylanicus* Gaertn. Indication- Fatigue, Aging, Debility, Loss of appetite
10. Khogar, Khaapat, Kaikar - *Garuga pinnata* Roxb. Indication - Asthma, Roundworm, Obesity, Eye disease, Snake bite, Cough, cold.

## DISCUSSION

Multiple medicinal plants are in folklore use with satisfactory results. Hence, to include them in *Ayurvedic* Pharmacopoeia that drug should be studied thoroughly.

Experts of *Ayurveda*, taxonomy and traditional healers should come together to give a proper place to *Anukta Dravya* in *Ayurvedic* pharmacopoeia.

While confirming one pharmacological activity of the drug we may find another pharmacological activity.

*Acharyas* suggested utilizing *Yukti* (intellect) along with *Anumana* (Inference) to determine properties of undocumented drugs.

'*Dravya Pariksha Vidhi*' explained by *Acharya Charaka* may be utilized to assess purity, quality and efficacy of already known or documented drug as well as unknown drugs.

By following these methods, writer of previous age might have evaluated the properties of new herbs and added their application in management of various diseases. Such as *Yashtimadhu*, *Hingu*, *Chopachini* etc. herbs have been added to *Ayurvedic* Pharmacopoeia in later period.

## CONCLUSION

The methods of evaluation of drug explained by different *Acharyas* along with modern concept of pharmacognosy gives textual background to study undocumented drug or *Anukta Dravya*. The study of

*Anukta Dravya* by these methods would facilitate its inclusion to the API Monograph. It would facilitate the use of drug in *Ayurvedic* practice once its *Rasapanchaka* etc. are known. Increased population, industrialization, threatened the wealth of plant species. Many plants are enlisted endangered hence we should look forward for alternate source.

## REFERENCES

1. Sharma P. V. *Dravyaguna Vijnana* Vol 1. Basic concepts. Chaukham babharati Academy, Varanasi, Reprint 2002
2. Vidyadhar Shukla, Tripathi R.-Charaka Samhita of Agnivesha vol 1. Chaukhambha Sanskrit Pratisthana Delhi, Reprint 2017, Pp149
3. Jaimala A Jadhav, Aparna G.-Dravya Pariksha vidhi w. s. r. to Anukta Dravya. International Journal Of Research In Indian Medicine. vol 4, Jan 2020 E-ISSN 2456-4435.
4. Vidyadhar Shukla, Tripathi R. Charaka Samhita of Agnivesha vol 1. Chaukhambha Sanskrit Pratisthana Delhi, Reprint 2017, Pp 47
5. Vidyadhar Shukla, Tripathi R.-Charaka Samhita of Agnivesha vol 1. Chaukhambha Sanskrit Pratisthana Delhi, Reprint 2017, Pp358
6. Mahendra Bhogik, Dhanvantari Nighantu; by Acharya Priyavrit Sharma and Dr. Guru Prasad Sharma; Chaukumba orientalia, Varanasi, Reprint 2012, pp-3.
7. J.L.N. Shastri, Fundamental Principles of Pharmacotherapeutics in Ayurveda, Vol 1, Chaukhambha Orientalia, 2006. Pp- 292
8. Vidyadhar Shukla, Tripathi R.-Charaka Samhita of Agnivesha vol 1. Chaukhambha Sanskrit Pratisthana Delhi, Reprint 2017, Pp 639
9. Dr. J.L.N. Shastri, edited, "Illustrated Dravyaguna Vigyana", Vol.1; 3rd edition; Published by Chaukhambha Orientalia, 2008.
10. J.L.N. Shastri, Fundamental Principles of Pharmacotherapeutics in Ayurveda, Vol 1, Chaukhambha Orientalia, 2006.
11. J.L.N. Shastri, Fundamental Principles of Pharmacotherapeutics in Ayurveda, Vol 1, Chaukhambha Orientalia, 2006. Pp 150

12. J.L.N. Shastri, Fundamental Principles of Pharmacotherapeutics in Ayurveda, Vol 1, Chaukhambha Orientalia, 2006. Pp 166
13. Singh Preetam et al. World Journal Of Pharmaceutical And Medical Research, A Critical Review on Concept of Prabhava. ISSN 2455-3301
14. Ganji Kusuma, Joshi V.K.- Nomenclature of Anukta Dravya, Ancient Science of Life. Vol 29, No 4 (2010) pages 17-23

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