



Review Article

'Doctrine of Signatures'; An Age Old Theory With Special Reference to Some Ayurvedic Medicinal Plants

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Abstract

The Doctrine of Signatures is a theory believed by many herbalists since centuries. The doctrine states that herbs that resemble various parts of the body can be used to treat ailments of that part of the body. A theological justification was made for this philosophy: It was reasoned that the Almighty must have set his sign upon the various means of curing disease which he provided. A plant bearing parts that resembled human body-parts, animals, or other objects were thought to have useful relevance to those parts, animals or objects. This doctrine was observed in some Indian medicinal plants which are presented in this article.

Key words: *Doctrine, Signatures, Ayurveda, Medicinal Plants*



1. Introduction

An age old theory; The Doctrine of Signatures has started to gain some grounds as a treatment for some ailments related to certain body parts. The theory was believed by many herbalists since centuries with a belief that various parts of the body can be treated by various parts of the plants resembling phenotypically. A divine justification was concluded for such a belief “Almighty must have set his sign upon the various means of curing disease which he provided”¹.

1.1 History

- Theophrastus Bombastus von Hohenheim, also known as Paracelsus (1491–1541), a professor of medicine at the [University of Basel](#), proposed the concept of Doctrine of Signatures and published it in his writings. During the first half of the 16th century, Paracelsus travelled throughout Europe, Levant and Egypt, treating people and carrying out experiments with new plants in search of more treatments and solutions.
- The Doctrine of Signature was broadly publicized by the writings of Jakob Böhme (1575–1624), a shoemaker in Görlitz, Germany, who had a mystical vision in which he saw a relationship between God and man. He wrote *Signatura Rerum* (1621) which was translated into English as ‘The Signature of All Things’.
- Nicholas Culpeper’s wrote a book on herbals which encompasses ideas of astrology and Doctrine of Signatures in herbal medicine .
- One article suggests that the graphical and scriptural treatment of signatures by Oswald Crollius (ca 1560-1609), Giovanni Battista Della Porta (1534-1615) and Wolfgang Ambrosius Fabricius (1653) allowed the invention of an instrument which, by formalizing and systematizing the correspondences between plants and organs, made possible a practical use in which metaphysical and religious justifications were not explicitly involved any more, precisely these justifications which resulted in confining this doctrine outside of modernity².



- The 17th-century botanist and herbalist [William Coles](#) (1626–1662), author of ‘The Art of Simpling and Adam in Eden’, stated that walnuts were good for curing head ailments because in his opinion, "they have the perfect Signature of the Head"³.

1.2 Illustrations

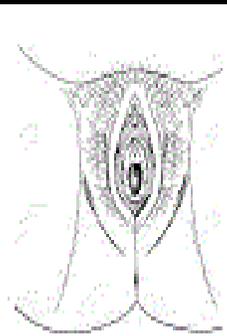
According to one study on 55 plants based on Doctrine of Signature it was observed that plants with spines and thorns would cure scorpion stings and bites of insects, dogs and snakes. Variegation of seeds and appearance of roots like some species of snakes are used against snake bites, spiniferous plants are thought to be beneficial to get relief from the pain of old hidden thorns in feet. The thin elongated, strong flexible aerial roots are thought useful as hair tonic. The plants with prominently jointed stems help cure bone fractures or dislocations. Swelling of body parts can be treated by the swollen organs of plants like tubers and petioles. Inflated fruits are thought useful to treat boils. Inflated, rounded or swollen tubers are considered beneficial in treating obesity or bulkiness of human body. Colors of plant parts play an important role in the selection of medicines e.g.

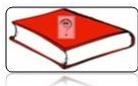
- (a) Yellow flowers, latex and dyes are remedial to treat jaundice.
- (b) Plants yielding white latex are thought *galactagogue*. Red colour of plant parts, e.g. flowers suggested their medicinal utility for blood diseases, sun-stroke and burns.
- (c) Other examples: Plant species growing in water bodies / water-logged places would cure burns, control fever and also act as cooling agents. Plants producing mucilage are used as aphrodisiac or to increase sexual potentiality. The plant species which inhabit rocky/stony places and break the substratum by their growing roots are useful in the treatment of kidney-stone⁴.

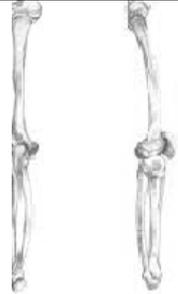
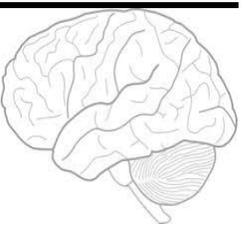
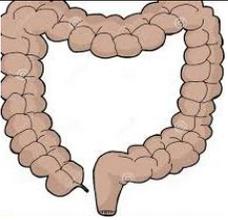
2. Materials and Methods

Some Indian medicinal plants were studied and observed by the author to understand them through the Doctrine of Signatures. Doctrine of Signatures, as seen relevant to some Indian medicinal plants with their Ayurvedic indications, are presented in the following **Table 1**.

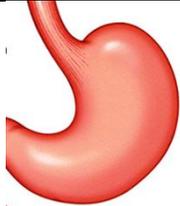
Table 1 Indian medicinal plants with their Ayurvedic indications

S. No.	Sanskrit name of plant	Botanical name of plant	Analogy to human organ	Action as per Ayurveda	Picture of the plant	Picture of related organ/Disease
1.	Kāncanāra	<i>Bauhinia variegata</i> Linn.	Leaves look like thyroid gland	Gaṇḍmālān aśana (One which is useful in treatment of Thyroid disorders)		
2.	Kapikacchu	<i>Mucuna prurita</i> Hook.	Seeds look like testes	Vṛṣya ⁶ (Aphrodisiac)		
3.	Aśvatha	<i>Ficus religiosa</i> Linn.	Leaves look like female genital organs	Yoniviśodhana ⁷ (one which purifies the female genital organs)		



4. Manjiṣṭhā	<i>Rubia cordifolia</i> Linn.	Red colored stems and roots resembling blood	Raktaśuddhikara ⁸ (Blood Purifier)		
5. Asthiṣṭkhalā	<i>Cissus quadrangularis</i> Linn.	Stems look like bones	Asthiyuk ⁹ (One which heals the bone fractures)		
6. Śālmali	<i>Bombax malabarica</i> D.C.	The spines look like acne	Yuvānapidikā ¹⁰ (Useful in Acne)		
7. Maṇḍukaparnī	<i>Centella asiatica</i> Linn.	Leaf looks like brain	Medhya ¹¹ (Brain tonic)		
8. Āvartani	<i>Helicteres isora</i> Linn.	The fruit looks like intestine	Atisārahara (Useful in diarrhea) and Udarasūlaghni (relieves spasmodic pain) ¹²		



9. Cakramarda	<i>Cassia tora</i> Linn.	Leaf looks like a ring	Dadruhara (Useful in Ring worm) ¹³		
10. Rason	<i>Allium sativum</i> Linn	The bulb bud looks like stomach	kukṣīśulaha ra ¹⁴ (Antispasmodic)		

Pharmacological studies performed on the above plants were also cited to support the Doctrine as discussed below:

1. Kāñcanāra: The effects of daily administration of *Withania somnifera* root extract (1.4 g/kg body wt.) and *Bauhinia purpurea* bark extract (2.5 mg/kg body wt.) for 20 days on thyroid function in female mice were investigated. Serum triiodothyronine (T₃) and thyroxine (T₄) concentrations were increased significantly by *Bauhinia*, It appeared that these plant extracts are capable of stimulating thyroid function in female mice.¹⁵
2. Kapikacchu: Total alkaloids showed increase in Spermatozoa population¹⁶
3. Aśvatha: The ethanolic extract of leaves showed antifungal effect against *Candida albicans*¹⁷.
4. Manjīsthā: The aqueous extract showed *Anti-inflammatory* activity¹⁸ and *mollugin* isolated from root showed inhibition of passive cutaneous anaphylaxis, degranulation of mast cells and also lymphoid leukemia in mice.¹⁹
5. Asthiśṛkhalā: Alcoholic extract exhibited *fracture healing* activity²⁰
6. Śālmali: Alcoholic extract of thorn showed potent *anti-acne* activity²¹.
7. Maṇḍukapaṇḍi: Aqueous extract improved cognitive functions and decreased oxidative stress in rat²², *Anti-stress* activity²³ and ethanolic extract reported to have *Tranquilizing* activity²⁴.
8. Āvartani: Fruits exhibited inhibitory effect on gastrointestinal motility and thus *antispasmodic* activity²⁵.



9. Cakramarda: Chrysophanic acid-9-anthrone isolated from an aqueous paste of the powder exhibited *Antifungal* activity²⁶.
10. Rasona: Garlic oil act as a potent relaxant of the smooth muscle of the gastrointestinal tract ²⁷.

3. Conclusion

Doctrine of Signatures is based on the logic of Analogy. This philosophy can help to know the medicinal properties of plants and treatment of diseases. This theory is not only interesting but can also be a subject of research. Thousands of research activities are going on worldwide based on plants for discovering new molecular entities and proving their therapeutic potential. In modern times when the plants are reduced to their smallest potent part-the active moiety- which is further investigated for their effect on body; Doctrine of Signatures can serve as a platform of indications for some unknown medicinal activities of plants or reverse pharmacology. Critical observation of plants can provide us a deeper insight of properties and actions of Plant.

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