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āryavaidyan

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Aryavaidyan is an international Journal for the encouragement and elucidation of the most ancient system of medicine, Ayurveda and its contemporary practice. This quarterly of the Arya Vaidya Sala, Kottakkal is a publication entirely devoted to the cause of Ayurveda and allied subjects such as ethnomedicine, naturopathy, sidha, unani and modern medicine. This is the one and only periodical for scholars, practising physicians, students and lovers of the subject.

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सतताध्ययनं, वादः परतन्त्रावलोकनम् ।
तद्विद्याचार्यसेवा च बुद्धिमेधाकरो गणः ॥

"Constant study and discussion, a comprehensive understanding of the other sciences together with service to the Acharyas of these sciences are the group of factors that improve intelligence and memory power."

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EDITORIAL....

We are happy and elated to point out that the forthcoming issue of August '94 of Aryavaidyan is coming to you heralding the entry into the eighth year of its purposeful career. We take this occasion to express our gratitude to all our well-wishers, doctors, scientists, workers, writers, subscribers, readers and the press and the management who have co-operated with us. We offer our special tributes to all those who helped us with suggestions and constructive criticisms and also co-operated with us to increase our readership and enhance the popularity of our publication.

Really it is this response and encouragement to our performances so far, that gave us the confidence to go forward in the way chartered by our founder. We, with all modesty and humility, wish to share the happiness of all our well-wishers in having conducted this purposeful and successful career. We also take it as our duty on this occasion to pledge to carry on this fruitful work, dedicating ourselves whole-heartedly.

We do not wish to trace here the progressive developments that have taken place all over the world in the last seven years. Since the inception of our journal we have tried to respond sensitively, carrying the messages, informations and comments in the columns of our journal. We admit that due to lack of proper agencies to furnish us with uptodate information and our own failure and weakness to imbibe such trends and spirit in due time, we may have lagged behind. Still, judging by the feed-backs we have received in the form of requests for previous issues, for reprints of important articles from abroad also and for reproduction of articles by other journals, we are pleasantly reassured of the relevance and propriety of the way of our steering and the correctness of our path. But we will not be complacent, as we have to improve in many aspects. We therefore appeal to all our well-wishers to join with us whole-heartedly in our stock-taking programme and also to continue the encouragement extended to us so far for further advancement. Hence, on this solemn occasion, we offer our thanks once again to all those who have shown their goodwill and rendered us valuable co-operation.

Vaidyaratnam P.S. Varier

Doctors and Practitioners of different systems of medicine and Yoga Teachers of Yoga cum therapists, from 17 countries meeting in *Annecy* from 12th to 15th of May 1994 during the Vth World Congress of Holistic Medicine and Yoga, organized by the "Association Medecine et Yoga" France under the auspices of the World Federation of Yoga and Holistic Medicine, adopted* the following declaration:

ANNECY DECLARATION*

The term Holistic Medicine recognizes:

That human being is an indivisible individual, and is in constant interaction with the environment.

That the use of all medical systems, traditional or modern, help a patient to improve one's health, if the techniques are globally considered and interpreted.

It also recognizes the role of the patient in one's own cure and the therapist should help the patient to improve one's health by educating him to realize his responsibility.

It is appealed to the World Organization, UNESCO and other organizations, international institutions, including the European Union, Governments and Parliaments, to be more conscious of the importance of the Holistic approach to medicine in the health care systems and encourage this kind of relationship by recognizing all therapeutic systems with due importance.

It is recommended that the medical personnel should be more receptive to the holistic requirement of the patient.

It is suggested that the patient should play an active role in the treatment by being more conscious of one's responsibility in one's health and cure.

The congress draws the attention of the people at large and mass media to promote the awareness about the Holistic approach to health care.

The Vth World Congress of Holistic Medicine and Yoga, Annecy the May 15, 1994.

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* Adopted unanimously less four abstentions on the 15th may 1994.

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FROM THE PAGES OF VAGBHATA-XXIX

N.V.K. WARRIER

.....कालस्तु शीतोष्णवर्षभेदात् त्रिधा मतः ॥ ३८ ॥
सहीनो हीनशीतादिरतियोगोऽतिलक्षणः।
मिथ्यायोगस्तु निर्दिष्टो विपरीतस्वलक्षणः ॥ ३९ ॥

(.....kalastu stosnavarsabhedat tridhamatah 38
Sahino hinasitadiratiyogoऽ tilaksanah
Mithyayogastu nirdisto viparitasvala-ksanah 39

"Time (Kalam) is considered to be of three types as cold, hot and rainy. Cold and others when less, it is a lesser conjunction. When with signs in excess it is over-conjunction and when with opposite conditions (to the season) it is false or irregular conjunction."

The time is studied generally as of three stages with markedly different features as with properties of coldness, heat and of rain. The seasons of Hemantha and Sisira are cold times. Vasantha (spring) and Greeshma (summer) belong to hot times. Pravrit and Sarat seasons belong to rainy times. When the coldness of the Sisira and Hemantha are lesser i.e. not cold or of a very mild degree below the average, it is a Heenasamyoga (lesser conjunction) of the cold times. When there is excessive cold, much above average, it is an Atiyoga, over conjuction of the cold. If heat is felt in a cold season, it is Mithyayoga, false or irregular conjunction. The same rule has to be applied for hot and rainy seasons.

कायवाक्चित्तभेदेन कर्मापि विभजेत्त्रिधा।
कायादिकर्मणो हीना प्रवृत्तिर्हीनसंज्ञकः ॥ ४० ॥
अतियोगेऽतिवृत्तिस्तु, वेगोदीरणधारणम्।
विषमाङ्गक्रियारम्भपतनस्खलनादिकम् ॥ ४१ ॥
भाषणं सामिभुक्तस्य रागद्वेषभयादि च।
कर्म प्राणातिपातादि दशधा यच्च निन्दितम् ॥ ४२ ॥
मिथ्यायोगः समस्तोऽसाविह वाऽमुत्र वा कृतम्।

(Kayavakcittabhedena karmapi vibhajettridha
Kayadikarmano hina pravrittirhina samjnakah 40
Atiyogoऽ tivrttistu, vegodiranadharanam
Visamanga Kriyarambhapatana skhalanadikam 41
Bhasanam samibhuktarya ragadvesa-bhayadi ca
Karma pranatipatadi dasadha yacca ninditam 42
Mithyayogah samastoऽsaviha vaऽmutra va krtam)

"Actions also are to be divided into three as by body, speech and mind. Lesser activity of the body and others are termed as underactions. Excessive action is over-conjuction. Forced action of natural urges, Vegas when no incentive is there or holding them when the urge is there, performing actions with disorderly placed

limbs and doing perverted actions, like falling and slipping and talking when food is in the mouth, actions prompted by attachments, hostility and others (with pride, greed etc.,) and committing the ten sins as killing, stealing and others instructed to be abhorred in this or in the other world are all of Mithyayoga (false or irregular conjunctions)."

As time is shown of three different natures, actions also are of three categories, i.e. with body, speech and mind. Heenayoga (lesser conjunction) is the lack of average work of these three agents and overwork is over-conjunction. If one does not allow the body to move or do proper exercise by walking, or by doing work with hands, it is a lesser conjunction. Similarly, over exertion with body is Atiyoga or excessive conjunction. If one does not talk it is Heenayoga and excess talking is Atiyoga of speech. Similarly regarding the mind less of thinking and over-thinking. Irregular or disorderly actions of body, speech and mind are illustrated by examples. There are fourteen natural urges, described in the chapter titled "to prevent of the origin of diseases" as urge for flatus, urination, defeacation, sneezing, coughing etc. To initiate forcibly when there is no stimulus, or not to attend the calls of nature, hold and carry the urge for a long time are described as the cause of all diseases. Performing movements with limbs placed disorderly (as in perverted coitus) or doing actions which are despised as inauspicious in earthly life and afterwards are examples. Falling, slipping are also examples of Mithyayoga (disorderly actions of the body). Talking with food in the mouth, when eating is an example of irregularity (Mithyayoga) of speech.

Actions prompted by attachment, hostility, fear and other passions are also examples of Mithyayoga. In describing the origin of diseases in the chapter titled "Janapadodwamsaneeya" (those that destroy settlement of people), Charaka presents the role of such factors in creating diseases. He says, that men were free from the present-day diseases in Kritayuga, since they were satisfied with what they got from nature. But by the end of Kritayuga and starting of Tretayuga, people started to live in Janapadhas and eat cooked food and became addicts to hoarding (Atyadana) and gradually the people and environment got deteriorated. It is said:

"भ्रस्यति तु कृतयुगे केषांचिदत्यादानात् साम्पन्निकानां सत्त्वानां शरीरगौरवमासीत्, शरीरगौरवाच्छ्रमः, श्रमादालस्यं, आलस्यात् संचयः, संचयात् परिग्रहः, परिग्रहात् लोभः प्रादुरासीत् कृते। ततस्त्रेतायां लोभादभिद्रोहः, अभिद्रोहादनृतवचनं, अनृतवचनात् कामक्रोधमानद्वेषपारुष्याभिघातभयतापशोकचिन्तोद्वेगादयः प्रवृत्ताः। ततस्त्रेतायां धर्मपादोऽन्तर्धानमगमत्। तस्यान्तर्धानात् युगवर्षप्रमाणस्य पादह्रासः, पृथिव्यादेश्च गुणपादप्रणाशोऽभूत्। तत्प्रणाशकृतश्च सत्त्यानां स्नेहवैमल्यरसवीर्यविपाकप्रभावगुणपादभ्रंशः। ततस्तानि प्रजाशरीराणि हीयमानगुणपादैराहारविहारैरयथापूर्वमुपष्टभ्यमानान्यग्निमारुतपरीतानि प्राग्व्याधिभिर्ज्वरादिभिराक्रान्तानि। अतः प्राणिनो ह्रासमवापुरायुषः क्रमश इति।" (चरकं–विमानस्थानं–जनपदोध्वंसनीयम्)

["Bhrasyati tu krtayuge kesamcidatyadanat sampannikanam satvanam sariragauravamasit, sariragauravacchramah, sramadalasyam, alasyat samcayah, samcayat parigrahah, parigrahat lobhah pradurasit krte. Tatastretayam lobhadabhidrohah, abhidrohadanrtavacanam anrtavacanat kamakrodhamanadvesabhighatabhayatapasokacintodvegadayah pravrttah. Tatastretayam dharmapadoऽntardhanamagamat. Tasyantardhanat yugavarsapramanasya padahrasah, prthivyadesca gunapadapranaso -

Sbhut. Tatpranasakrtasca sasyanam snehavaimalyarasaviryavipakaprabhavagunapadabhramsah. Tatastani prajasarirani hiyamanagunapadairaharaviharairayathapurvamupastabhyamananyagnimarutapari tani pragvyadhibhirjvaradibhirakrantani. Atah pranino hrasamavapurayusah kramasa iti /" (Carakam -Vimahasthanam- Janapadodhwamsaniyam)]

"Towards the end of Kritayuga due to over input there was heaviness in the bodies of wealthy persons. Heaviness of the bodies gradually led to fatigue, lassitude, hoarding, possessiveness and greed in Kritayuga. In Tretayuga, greed provokes ill-will and the habit of uttering lies, leading to passions of desire, anger, egoism, hostility, aggression, attack, fear, anxiety, sorrow, excess thoughts, excitement etc., one by one. So in Tretayuga, a quarter of Dharma has disappeared. Due to its disappearance, the number of years of the Yuga is reduced by one fourth and so the properties of unctuousness, purity, taste, potency and Prabhava or extra-ordinary property are all reduced similarly. Therefore, by an intake of food with distorted behaviour the body is described as being blocked and pervaded by perverted fire and air and becomes a victim to disease like fever and others initially. So the span of life was also shortened gradually."

A picture of how disorderly life and consequent passions lead to diseased conditions is given here. The ten sins to be abandoned are killing or violence, stealing, desire for prohibited things like mating with animals prohibited women and with the wives of elders and those who have to be respected. These are the sins committed by the body. Hurtful and rough words, utterance of incoherent or irrelevant words are examples of speech irregularity. Thought of destroying other animals or men, intolerance of the merits of others or greed for sensual pleasure, wrong statements about scientific truths are the examples of mental aberrations and false tendencies.

All the actions done here or elsewhere are examples of Mithyayoga.

निदानमेतद्दोषाणां, कुपितास्तेन नैकधा ॥ ४३ ॥
कुर्वन्ति विविधान् व्याधीन् शाखाकोष्ठास्थिसन्धिषु ।

Nidanametaddosanam, kupitastena-
naikadha 43
Kurvanti vividhan vyadhin sakhakostha-
sthisandhisu.

"These are the causes for provoking Dosas. Provoked by them in various ways, they create varieties of diseases in the limbs alimentary canal, bones and joints."

शाखा रक्तादयस्त्वक् च बाह्यरोगायनं हि तत् ॥ ४४ ॥
तदाश्रया यथव्यङ्गगण्डालज्यर्बुदादयः ।
बहिर्मार्गाश्च दुर्नामविद्रधीशोफादयो गदाः ॥ ४५ ॥

Sakha raktadayastvak ca bahyarogaya-
nam hi tat 44
Tadasraya masavyangagandalajyarbuda-
dayah
Bahirmargasca durnamagulmasopha-
dayo gadha 45

"The Sakhas consist of blood, other tissues and skin. It is the external seat of diseases like Masha, Vyanga, Gandalaji, Arbuda, and the base of Piles, Gulma, Sopha (swelling or inflammation) and other diseases."

The term "Sakha" consists of tissues from blood onwards and skin also. The diseases named Masha, Vyanga, Gandalaji Arbuda and others as Visarpa, Vidradhi gave their origin taking Sakha as basis. Masha is described in the 21st chapter of Uttarasthana named Kshudrarogavijnana.

The Masha is described as the form of Tilakalaka. Tilakalaka is like the black sesamum seed developing on skin without any pain. Masha is the same with greater prominence. Vyanga is also discolouration of the skin. It is due to Vata and Pitta provoked by sorrow, anger, etc., and occurs as dark circles or patches. Gandalaji is a disease described in diseases of the neck and face. It is a swelling of Ganda (neck) with a burning sensation and fever. Arbuda is cancerous growth. Erysipelas, abscesses and tumours also have their base. Piles, Gulma (bunch-like projection of the stomach due to misperistalsis) and swellings have their seats in the stomach, though their external parts are based on Sakhas

अन्तः कोष्ठो महास्रोत आमपक्वाशयाश्रयः ।
तस्थानाः छर्द्यतीसारकासश्वासोदरज्वराः ॥ ४६ ॥
अन्तर्भागं च शोफार्शोगुल्मवीसर्पविद्रधि ।

(Antahkostho mahasrota
amapakvasayasrayah |
Tat sthanah
chardyatisarakasasvasodarajvarah || 46 ||
Antarbhagam ca
sopharsogulmavisarpavidradhi |)

"The Koshta is defined as Mahasrota which lies inside the body is dependant on Amasaya (stomach) and Pakvasaya (small and large intestine). Vomiting, diarrhoea, cough, breathing troubles, ascites and fever have their base here, along with the inner part of Sopha (swelling or inflammation), piles, Gulma, Visarpa and Vidradhi (abscesses and tumours)."

Koshta is the inner part and the seat of the stomach and the intestines which carry the food from its immature to the digested stage. It is Mahasrota, the bigger or greater srota or open channel. Diseases like vomiting, diarrhoea, cough, asthma, stomach disorders and ascites have their bases here. Fever is due to Ama obstructing the Srotas. So its seat is Koshta. Swelling and inflammation, piles, Gulma, erysipelas, abscesses and tumours have an external part and internal part. The internal part of these diseases have their base in Koshta.

शिरोहृदयवस्त्यादिमर्माण्यस्थ्नां च सन्धयः ॥ ४७ ॥
तन्निबद्धाः सिरास्नायुकण्डराद्याश्च मध्यमः ।
रोगमार्गः स्थितास्तत्र यक्ष्मपक्षवधार्दिताः ॥ ४८ ॥
मूर्धादिरोगाः सन्ध्यस्थित्रिकशूलग्रहादयः ।

(Sirohrdayavastyadimanyasthnam ca
sandhayah || 47 ||
Tannibaddhah
sirasnayukandaradyasca madhyamah |
Rogamargah sthitastatra
yaksmapaksavadharditah || 48 ||
Murdhadirogah
sandhyasthitrikasulagrahadayah |)

"The middle (Madhyam) path of diseases are the Marmas (vital parts) as Sira (head), Hridaya (heart), Vasthi (urinary path, kidney and bladder altogether), and the articulation of bones (joints). The Siras (veins and nerves), Snayu (ligaments) and Kandaras (tendons) are fixed in it (on the joints). Rajayakshma (tuberculosis), hemiplegia, facial paralysis, diseases of the head, pain of joints, bones and Trika (saccrum) have their bases there."

स्रंसव्यासव्यधस्वापसादरुक्तोदभेदनम् ॥ ४९ ॥
सङ्कोचभङ्गसंकोचवर्तहर्षणतर्षणम् ।
कम्पपारुष्यसौषिर्यशोषस्यन्दनवेष्टनम् ॥ ५० ॥
स्तम्भः कषायरसता वर्णः श्यावोऽरुणोऽपि वा ।
कर्माणि वायोः.....

(Sramsavyasavyadhasvapa-
sadaruktodabhedanam || 49 ||

Sangangabhanga-
samkocavartaharsanatarsanam |
Kampaparusyasausirya
sosaspandanavestanam, || 50 ||
Stambhah kasayarasata varnah
syavoऽrunoऽpi va |
Karmani vayoh----------)

Loosening of joints contracting, striking, creating numbness, fatigue, pain, (including pricking, piercing and chopping types) obstruction of urine, faeces or speech, shrinking and solidification of faeces etc., are the actions of Vata. It also causes horripilation, thirst, tremor, roughness, hollowness, emaciation, throbbing, binding, immobilisation, astringent taste and dark brown, or rosy colour.

The above is list of actions of Vata when provoked.

.....पित्तस्य दाहरागोष्मपाकिताः ॥ ५१ ॥
स्वेदः क्लेदः स्रुतिः कोथः सदनं मूर्च्छनं मदः।
कटुकाम्लौ रसौ वर्णः पाण्डुरारुणवर्जितः ॥ ५२ ॥

(----pittasya daharagosmapakitah || 51 ||
Svedah kledah srutih kothah sadanam
murcchanam madah |
Katukamlau rasau varnah
pandurarunavajitah || 52 ||)

"The actions of Pitta are creation of burning sensation all over the body, red colour, heat, maturation or ripening or cooked stage, sweat, wetness of Malas, discharge, decay, fatigue, fainting, intoxication, acrid (pungent) and sour tastes and creation of colours except white and rose."

Regarding the taste, bitter taste is correct. According to Hemadri,

"कषायतिक्तमधुरं वातादिषु मुखं क्रमात्।"

("Kasayatiktamadhuram vatadisu mukham kramat |)

Astringent, bitter and sweet tastes are felt by Vata, Pitta and Kapha in that order.

श्लेष्मणः स्नेहकाठिन्यकण्डूशीतत्वगौरवम्।
बन्धोपलेपस्तैमित्यशोफापक्त्यतिनिद्रताः ॥ ५३ ॥
वर्णः श्वेतो रसौ स्वादुलवणौ चिरकारिता।

(Slesmanah snehakathinyakandusetatva-
gauravam |
Bandhopalepastaimityasophapaktyatinid-
ratah ||53 ||
Varnah sveto rasah svadulavanau cirakarita|

"The actions of Kapha are creation of unctuousness (oiliness or lubrication) hardness, itching, coldness, gravity, coating of bones, anointing or smearing and creation of rigidity. It also causes swelling, immaturation, over-sleeping, and white colour, sweet and sour taste of the mouth and prolongation of healing or wounds and normalisation of all diseases."

The above are the actions of the Vata, Pitta and Kapha.

Charaka presents eighty troubles due to Vata, forty due to Pitta and twenty due to Kapha (Maharogadhyaya). Astamgasamgraha also follows this order (Su. chapter 20).

Disorders of Vata

1. नखभेदम	Nail splitting
2. विपादिका	Cracking of soles
3. पादशूलम्	Pain of the foot
4. पादभ्रंशम्	Foot drop

5.	पादसुप्तता	Numbness of the feet
6.	वातखुड्डता	Pain in the ankles
7.	गुल्फग्रहम्	Stiffness of ankles
8.	पिण्डिकोद्वेष्टनम्	Cramps of calf muscles
9.	गृध्रसि	Sciatica
10.	जानुभेदम्	Tearing pain of knees
11.	जानुविश्लेषम्	Dislocation of knees
12.	ऊरुस्तम्भम्	Stiffness of thighs
13.	ऊरुसादम्	Loss of movement of the thighs
14.	पाङ्गुल्यम्	Lameness
15.	गुदभ्रंशम्	Prolapse of the rectum
16.	गुदार्तिः	Pain in the anus
17.	वृषणाक्षेपम्	Twitching of the scrotum
18.	शेफस्तम्भम्	Stiffness of the penis
19.	वंक्षणानाहम्	Pain in the groins
20.	श्रोणिभेदम्	Pelvic pain
21.	विड्भेदम्	Pain during defaecation
22.	उदावर्तम्	Upward movement of Vayu
23.	खञ्जत्वम्	Limping
24.	कुब्जत्वम्	Hunch back
25.	वामनत्वम्	Dwarfism
26.	त्रिकग्रहम्	Stiffness of the sacral region
27.	पृष्ठग्रहम्	Stiffness of the back
28.	पार्श्वविमर्दम्	Compression of the sides
29.	उदरावेष्टम्	Twisting pain in abdomen
30.	हृन्मोहम्	Cardiac dysfunction
31.	हृद्रवम्	Tachycardia
32.	वक्षोद्धर्षम्	Shivering of the chest
33.	वक्षोपरोधम्	Constriction of the chest
34.	वक्षस्तोदम्	Chest pain
35.	बाहुशोषम्	Wasting of the arm
36.	ग्रीवास्तम्भम्	Stiffness of the neck
37.	मन्यास्तम्भम्	Stiffness of sternomastoid
38.	कण्ठोर्ध्वंसम्	Hoarseness of voice
39.	हनुभेदम्	Pain in the jaw
40.	ओष्ठभेदम्	Cracking of lips

41.	अक्षिभेदम्	Tearing pain of the eyes
42.	दन्तभेदम्	Dental pain
43.	दन्तशैथिल्यम	Loose teeth
44.	मूकत्वम्	Dumbness
45.	वाक्संग्रहम्	Stammering
46.	कषायास्यता	Astringent taste in the mouth
47.	मुखशोषम्	Dryness of the mouth
48.	अरसज्ञता	Loss of taste sensation
49.	घ्राणनाशम्	Loss of olfactory sensation
50.	कर्णशूलम्	Ear ache
51.	अशब्दग्रहणम्	Hallucination of sound
52.	उच्चैश्रुतिः	Hearing of magnified tone
53.	बाधिर्यम्	Deafness
54.	वर्त्मस्तम्भम्	Stiffness of the eyelids
55.	वर्त्मसङ्कोचम्	Contraction of the eyelids
56.	तिमिरम्	Cataract
57.	अक्षिशूलम्	Ophthalmodynia
58.	अक्षिम्युदासम्	Squint
59.	भ्रूम्युदासम्	Twisting of eyebrows
60.	शङ्खभेदम्	Temporal pain
61.	ललाटभेदम्	Pain in the forehead
62.	शिरोरुक्	Headache
63.	केशभूमिस्फुटनम्	Cracking of scalp
64.	अर्दितम्	Facial paralysis
65.	एकाङ्गरोगम्	Monoplegia
66.	सर्वाङ्गरोगम्	Polyplegia
67.	आक्षेपकम्	Convulsions
68.	दण्डकम्	Tetanic convulsion
69.	तमः	Black out
70.	भ्रमः	Giddiness
71.	वेपथुः	Tremor
72.	जृम्भा	Yawning
73.	हिक्का	Hiccough
74.	विषादम्	Malaise
75.	अतिप्रलापम्	Excessive incoherent talk
76.	रौक्ष्यम्	Roughness

77.	पारुष्यम्	Coarseness
78.	श्यावारुणावभासम्	Blackish and reddish lustre
79.	अस्वप्नम्	Insomnia
80.	अनवस्थितचित्तत्वम्	Instability of mind

These are the eighty most prominent ones among the innumerable disorders of Vata.

Disorders of Pitta.

1.	ओषम्	Heat
2.	प्लोषम्	Scrorching
3.	दाहम्	Burning
4.	दवथु	Intense burning
5.	धूमकम्	Fuming
6.	अम्लकम्	Hyperacidity
7.	विदाहम्	Burning in stomach and oesophagus
8.	अन्तर्दाहम्	Internal burning sensation
9.	अंसदाहम्	Burning sensation in the scapular region
10.	ऊष्माधिक्यम्	Pyrexia
11.	अतिस्वेदम्	Excessive perspiration
12.	अङ्गगन्धम्	Foul smell of the body
13.	अङ्गावदरणम्	Splitting of body parts
14.	शोणितक्लेदम्	Excessive moisture in the blood
15.	मांसक्लेदम्	Moisture of muscles
16.	त्वग्दाहम्	Burning in skin
17.	त्वगवदरणम्	Tearing of skin
18.	चर्मदलनम्	Thickening of skin
19.	रक्तकोठम्	Urticarical patches
20.	रक्तविस्फोटम्	Pustules
21.	रक्तपित्तम्	Haemothermia
22.	रक्तमण्डलम्	Haemorhagic patches
23.	हरितत्वम्	Greenishness
24.	हारिद्रत्वम्	Yellowness
25.	नीलिका	Bluishness
26.	कक्षा	Herpes
27.	कामला	Jaundice

28.	तिक्तास्यता	Bitterness in the mouth
29.	लोहितगन्धास्यता	Bloody smell from the mouth
30.	पूतिमुखता	Halitosis
31.	तृष्णाधिक्यम्	Excessive thirst
32.	अतृप्ति	Loss of contentment
33.	आस्यविपाकम्	Stomatitis
34.	गळपाकम्	Pharyngitis
35.	अक्षिपाकम्	Ophthalmitis
36.	गुदपाकम्	Inflammation of the anus
37.	मेढ्रपाकम्	Inflammation of the penis
38.	जीवादानम्	Discharge of pure blood
39.	तमप्रवेशम्	Fainting
40.	हरितहारिद्रनेत्रमूत्रवर्चस्त्वम्	Green or yellow colour in eyes, urine and faeces

These are the prominent ones among the innumerable disorders of Pitta.

Disorders of Kapha

1.	तृप्ति	Saturation
2.	तन्द्रा	Drowsiness
3.	निद्राधिक्यम्	Excessive sleep
4.	स्तैमित्यम्	Lack of motion
5.	गुरुगात्रता	Heaviness of the body
6.	आलस्यम्	Lassitude
7.	मुखमाधुर्यम्	Sweetness in the mouth
8.	मुखस्रावता	Salivation
9.	श्लेष्मोद्गिरणम्	Mucous expectoration
10.	मलस्याधिक्यम्	Excess of dirt
11.	वलासकम्	Excess of mucous
12.	हृदयोपलेपम्	Plastering of the heart
13.	कण्ठोपलेपम्	Plastering of the throat
14.	धमनीप्रतिचयम्	Accumulation in arteries and veins
15.	गळगण्डम्	Goitre
16.	अतिस्थौल्यम्	Obesity
17.	शीताग्निता	Urticarial eruptions
18.	उद्दर्दम्	Urticarial patches
19.	श्वेतावभासता	White lustre
20.	श्वेतमूत्रनेत्रवर्चस्त्वम्	Whiteness of the urine, eyes and faeces

These twenty are the prominent ones among the innumerable disorders of Kapha.

इत्यशेषामयव्यापि यदुक्तं दोषलक्षणम् ॥ ५४ ॥
दर्शनाद्यैरवहितस्तत्सम्यगुपलक्षयेत् ।
व्याध्यवस्थाविभागज्ञः पश्यन्नार्तान् प्रतिक्षणम् ॥ ५५ ॥

(Ityasesamayavyapi yaduktam dosa-laksanam ॥ 54 ॥
Darsanadyairavahitastatsamyagupa-laksayet
Vyadhyavasthavibhahajnah pasyannar-tan pratiksanam ॥ 55 ॥

"In this way, the symptoms of Dosas related to all diseases are to be properly understood by the expert well-trained in inspection, observing the patient at every moment and discriminating the stages of the diseases."

The symptoms described above are applicable to all diseases. These are to be properly taken into consideration by the physician. For this he must be an expert in examining the patient by inspection (Darsana), by palpation (Sparsana) and by questioning (Prasna). He has to be careful to observe the patient thoroughly at all times. The physician should be well-trained and experienced in differentiating the stages of each disease. There are different stages in the course of a disease which need different techniques and medicines. Confusion in studying the stages and application of inappropriate techniques, diet and medicines aggravates the ailment. Take the case of Jwara (fever). There is Ama stage, Pachyamana stage and Pakwa stage. In Ama reducing treatment (Lamghana) is prescribed. After a period of Lamghana and seeing that Ama is resolved, Kashayas, medicated gruels etc., are prescribed. In the Pakwa stage, Snehapana (oleation), Vasthi (enema) and other purificatory treatments are done. If the physician is not careful to differentiate the stages and acts wrongly, the condition is aggravated. If the conditions are understood well, the disease can be treated easily.

अभ्यासात् प्राप्यते दृष्टिः कर्मसिद्धिप्रकाशिनी ।
रत्नादिसदसज्ज्ञानं न शास्त्रादेव जायते ॥ ५६ ॥

Abhyasat prapyate dritih karmasidhipraka sini
Ratnadisadasajjnanam na sastradeva jayate ॥ 56 ॥

"The intuition which brightens the skill of an adept for fruitful action is gained by repeated practice. The knowledge about the true and false jewels and precious articles cannot be earned by scriptures alone."

Only by repeated practices one can gain mastery of actions which lead to rewarding achievements. So in dealing with conditions of health and diseases, a physician has to resort to continuous study by repeatedly reading the scientific presentations in the texts along with repeated observation tests by treatments and following the experiences of others to become an expert. To be an expert at selecting genuine jewels, gold and other precious articles, and avoiding imitations one has to have a long and reliable experiences.

Such expert knowledge can be gained only by a combination of systematic study and practice. Simply by studying the scriptures which describe the form, colour or special properties of an article, one cannot select with confidence. Repeated practical experience, is also essential. Practical experience alone is not enough to ascertain the genuineness of a jewel. Both incessant study and practical experience are essential to be an expert.

दृष्टापचारजः कश्चित् कश्चित्पूर्वापराधजः ।
तत्सङ्करादुभयतश्चान्ये व्याधिरेवं त्रिधा स्मृतः ॥ ५७ ॥

(Drstapacarajah kascit kascit purva-paradhajah |
Tatsankaradbhavatyanye vyadhirevam tridha smrtah || 57 ||)

"The diseases are of three origins. Some are with causes (wrong actions), which are discernable. some are because of offences of the past. Others are due to a mixture of both."

Diseases are grouped into 3 categories. One category is due to the wrong actions committed after birth in this world. Some may be due to moral offences committed in the past i.e. in the previous births or due actions of parents or ancestors before one's own birth. The third group may be due to a mixture of these two. ●

If you wish to be a true reformer, three things are necessary. The first is to feel. Do you really feel for your brothers? Do you really feel that there is so much misery in the world, so much ignorance and superstition?...Are you full of that idea of sympathy? You must think next if you have found any remedy. The old ideas may be all superstition, but in and round these masses of superstition are nuggets of gold and truth. Have you discovered means by which to keep that gold alone without any of the dross? One more thing is neceesary. What is your motive: Are you not actuated by greed of gold, by thirst for fame and power? Are you really sure that you can stand to your ideals and work on, even if the whole world wants to crush you down? Are you sure you know what you want and will perform your duty, and that alone, even if your life is at stake? Are you sure that you will preserve so long as life endures, so long as there is one pulsation left in the heart? Then you are a real reformer, you are a teacher, a Master, a blessing to mankind.

-VIVEKANDA

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VEGETABLES AGAINST CANCER

Dr. K. MADHAVANKUTTY

It is only five years since phytochemicals have been discovered. "Phyto" is the greek word for plant, and a large battery of chemicals from cauliflowers to pineapple, and from muringa shoot to red chillies are now on the investigator's table. These chemicals originally evolved to protect plants from sunlight has assumed prime importance in cancer control "The national Cancer Institute in America has launched a multimillion dollar project to find, isolate and study them" states SHARON BAGLEY in Newsweek..(Beyond Vitamins April 25, 1994).

Amazing tongue-twisters

These quaintly phrased phytochemicals have such an enormous range of activities, that it has marked an explosive beginning of the anticancer crusade. In fact, all fruits and vegetables contain these powerful cancer-fighting phyto-chemicals, which reveals the wisdom of our ancestors in recommending a vegetarian diet full of fruits and vegetables. And our foolishness for discarding it for fast food, processed food and multivitamin tablets of various hues, which are all poor substitutes for whole foods especially fruits and vegetables. According to Bagley, "they harbour a whole ratatouille of compounds that have never seen the inside of a vitamin bottle for the simple reason that scientists have not, until very recently even known they existed, let alone brewed them into pills". Some of the phytochemicals isolated and their functions are given in table I.

Dr. K. Madhavankutty, 'Poonthanam', Calicut-673004.

Defusing of tumours

Right now everybody is confused about many long-accepted tenets of nutrition. For instance the role of cholesterol in heart disease, the place of coconut oil in dietetics, the question of first class and second class proteins are all being hotly contested. Perhaps the most crippling of the blows was the doubt cast on the ability of antioxidant vitamins like Betacarotene and vitamin C in preventing cancer., which was hailed as a great modern discovery. According to Dr. Julie Buring of Boston, USA, "Among all the substances, phytochemicals offer the next great hope for the magic pill, one that would go beyond vitamins".

Kicking out the carcinogen

The most promising of the phytochemicals is perhaps SULFORAPHANE found in

Broccoli, Cauliflower, brussels sprout, turnips and kale. The fact that cooking or microwaving the vegetables does not destroy it enhances its value. In 1992, Dr. Paul Talalay of Johns Hopkins Medical College, Baltimore, USA added Sulforaphane to human cells growing in tissue culture and showed that it boosted synthesis of anticancer enzymes. Later he took 3 groups of rats and injected them with DMBA, a known carcinogen. While the first group served as controls, the second set was injected with low doses and the third group with high doses of Sulforaphane. Surprisingly while 68% of the rats in Group I got mammary tumours, in the second group only 35%, and in the third only 26% developed these tumours. Prof. Gary Posner, of the chemistry department of the same institute produced Sulforaphane synthetically. When this synthetic material was injected into a fourth of set of rats, the results were even more fantastic. Only 25% of the rats developed cancer.

It seems that Sulforaphane works its magic by snuffing out the cancer before it begins. The first step in the production of cancer begins with a cancer-producing i.e. Carcinogen molecule from food, drink, air of smoke invading cell. Within hours after being eaten, Sulforaphane enters the blood stream and reaches the cell and stimulates a group of proteins called phase II enzymes. The enzymes burst into action, attaching the Carcinogen to a molecule that kicks it out of the cell.

Table - 1

	Name of the Vegetable	Name of the Phytochemical	Functions of the phytochemical
1.	Cauliflower (broccole)	Sulforaphane	Sets in motion a process that whisks Carcinogens out of cells.
2.	Do	PEITC	Prevents Carcinogens from binding to DNA.
3.	Do	Indole-3-Carbinol	Helps a precursor of the hormone oestrogen, break up into a benign rather than a cancer causing form.
4.	Citrus fruits and berries	Flavenoids	Prevents cancer-causing hormones from hatching on to a cell.
5.	Tomatoes, green chillies, pineapple and strawberries	P. Coumaric Acid & Chlorogenic Acid	Disrupts the chemical combination between two common molecules which produce a carcinogen.
6.	Garlic and onions	Allylic Sulfides	Protects against stomach cancer. They stimulate intracellular enzymes which detoxify carcinogens.
7.	Soya	Genistein	Prevents tiny tumours from getting connected to the capillaries that carry oxygen & nutrition killing the tumour cells.
8.	Red chilly	Capsaicin	Prevents Carcinogens like those in cigarette smoke from binding to DNA, where they can trigger lung cancer.

Multiple blockages

Research done in the last two decades have convinced scientists that the production of cancer is by a complicated multifaceted chemical protocol. In fact theoretically it is impossible to have Cancer, as a cell has to pass through so many biochemical loops before it can become cancerous. In spite of all this, more than 2% of the world's population do get cancer. The multiplicity of the steps in the production of cancer is at once an insoluble problem for the seeker of the aetiology of cancer, while for the researcher trying to block cancer, it is a godsend. Fortunately, as it turns out, one or more of the inumerable compounds found in vegetables are capable of blocking the process at one stage or another.

During the process of digestion, our body routinely makes compounds, called nitrosamines out of nitric acid and anines derived from proteins. Production of nitrosamines are the first step in carcinogenesis. Tomato has nearly 10,000 phytochemicals in it. Of these, two i.e. P.Coumaric acid and chlorogenic acid catch hold of the nitric acid and whisk it out of the cell before its combination with amines. When Prof. Hotchkiss of Cornell University of USA gave tomato juice to volunteers, their bodies made fewer nitrosamines. According to him, "The whole tomato is more effective than the vitamin component. You can't have a lousy diet and take a few vitamins and get the same benefit". It is heartening that these acids are seen in many fruits and vegetables including green chillies, pineapples, strawberries and carrots.

Martyr of a phytochemical

If you can't block carcinogens in the first place as tomatoes do, or boot them out of the cell as cauliflower does, it helps to disarm them. Phenyl Isothiocyanate (PEITC) is a phytochemical found in Cabbages and turnips which inhibit lung cancer caused by chemicals in mice and rat. There are voracious enzymes in cells called P450S, which munch on substances arriving via food, drink, smoke or air and break them into small pieces that bind themselves to DNA. This is another stage of carcinogenesis. What PEITC does is to offer itself as a substitute into the jaws of P450S. A phytochemical called Ellagic acid is present in grapes,strawberries and raspberries (perhaps it is present also in the Indian gooseberry of Chyavanapras fame) which acts in a similiar manner.

Kill the small little tumour

If the above 3 steps have not been successful, there is a fourth chance for phytochemicals to act. The small, tiny little nidus of a tumour is only the beginning of the trouble. The trouble deepens when tumours start growing, invade the blood stream and metastasizes in the different parts of the body. The original growth canot flourish without its supply mechanism of capillaries which bring in oxygen and nutrients. Last year, german researchers isolated a chemical is soyabeans called Genistein which prevents these supply lines from forming. They cited this as the cause of the high incidence of prostate cancer in Japanese, who have migrated to other countries. They have given up the soya content of their foods.

The kaleidoscope of vegetable chemicals

As shown in the table, almost every vegetable in loaded with phytochemicals, thousands of them as for example in

tomatoes. cabbages and cauliflowers (For as Mark Twain put it, "what is a cauliflower after all, but a cabbage with college education?)' have it. Green chillies, red chillies, turmeric, cumin are all loaded with it. And almost every fruit and vegetable from berries to yams, to citrus and cucumbers contains flavinoids. To quote BAGLEY "In a cellular version of musical chairs, these compounds race to sites on the cell, where cancer-causing hormones attach themselves. When the music stops, they keep the hormones from sitting down on the cells' surface".

The research work, as is obvious has been confined to USA and Europe. Hence only vegetables and fruits found in the temperate climate have been subjected to scientific scrutiny. The tropical areas have a kaleidoscopic variety of fruits and vegetables, and the biological diversity of this area is incomparable. So it only stands to reason that thousands, nay millions of phytochemicals can be found in the tropical fruits and vegetables, if planned research work is undertaken. Vegetables and fruits like bananas, yam, gooseberry, mangoes, guava, melons, tamarind, jackfruit (An anticancerous lectin has been identified in Jackfruit by researchers of the Sree Chithra Thirunal Institute at Trivandrum) which has been used as home remedies for various chronic diseases in our country from days of yore are sure to be gold mines of phytochemicals. So also leaves and shoots of muringa, different verieties of Keerai, Neem, Karuveppila, Pudina and others. A co-ordinated approach in this area with the combined efforts of modern doctors, ayurvedic physicians, ethanobotanists, pharmacologists, chemists and biologists will yield fantastically rich dividends.

But right now, the biggest moral of the whole story is the reacceptance of the old idea of eating a diet rich in fruits and vegetables. This is what our grandmothers have always been telling us. But we had refused to accept it or even poh-poohed it as a blind belief on the plea that there was no scientific basis for it. Now that it has been scientifically proved, the earlier we accept it, the better. Of course, phytochemicals are not omnipotent. Even life-long vegetarians die of cancer. But for the moment, the anti-proverb seems to be "Trust in God, but lock your Car". Believe in vitamins if you want to, but eat the recommended five daily servings of fruits and vegetables. Pooping a capsule and forgetting the greatness of vegetables is nutritional madness. ●

SALT

Mankind has used Salt since antiquity. The first known salt-mines have been found in the Austrian Tyrol and date from the Bronze Age about 1000 B.C. For atleast 3000 years Sodium Chloride (Common Salt) has played an amazingly important part in the lives of men. Wars have been fought over its sources and for centuries its trade was more important than that of any other material. This was because Salt was the best preservative available.

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SOME PRELIMINARY OBSERVATIONS ON DARUHARIDRA A VANISHING MEDICINAL PLANT

HARINARAYANAN M.K., MUSTAFA ANAND P.H., JAYANTHI A. and REETHA A.

Introduction

Daru-Haridra, locally known as 'Maramanjal' is an important drug used in several Ayurvedic formulations. However, as in the case of several other raw drugs, the plant source of this is in some confusion. In most part of India *Berberis aristata* (Berberidaceae) and a few allied species of the genus are the accepted source of this drug (Kapoor and Mitra 1979; Kurup et al, 1979). These are erect, glabrous, spinous shrubs with yellow wood, that are commonly found along Himalayas and other Indian hill stations in scrub jungles and waste lands. The chief active alkaloid in this genus is reported to be Berberine, extracted from the stem and root bark (Asolkar et al., 1992).

Down south in Kerala, however, physicians have traditionally used a very different plant, *Coscinium fenestratum* (Menispermaceae) as the source of this drug (Moose, 1980; Baplal Vaidya 1982). This is a woody climber seen only in highly restricted localities in Kerala forests. The wood is, like turmeric, golden yellow in colour. Apart from berberine, the stem and root of the plant contain jatrarrhizine (major) berberrubine and a few other alkaloids (Asolker et al., 1992). Some pharmacognostic studies of this plant have been done earlier by Narayana Iyer & Kolammal (1966)

Fig. I

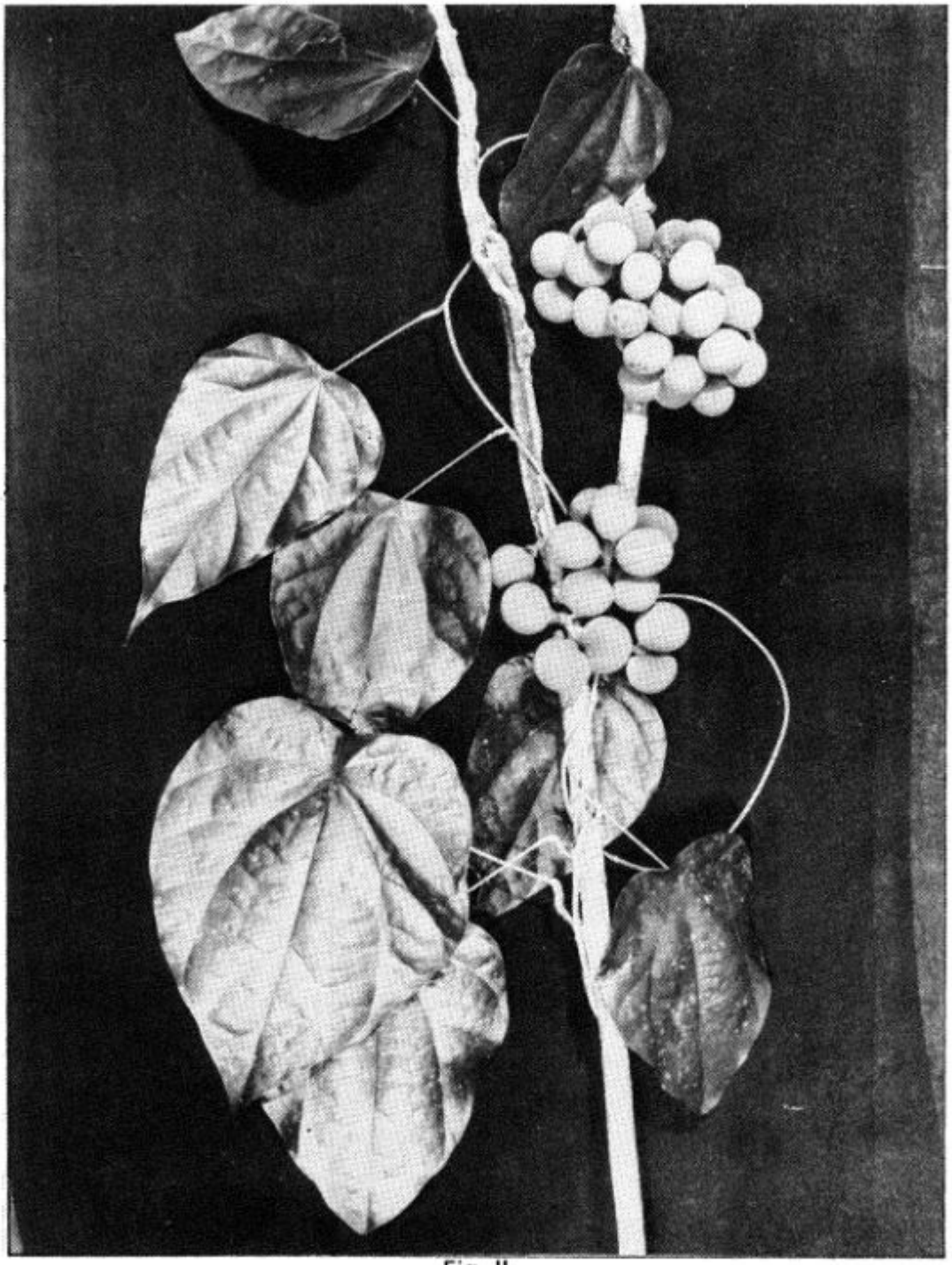

Fig. II

Coscinium fenestratum is an Indo-Malayan species. In India, it is restricted to the evergreen forests in central and south Kerala along the western coast of the western ghats, mostly along water courses, associated with Hopea parviflora, Elaeocarpus tomentosa, Mallotus sp, Thottea siliquosa etc. (Fig: 1)

A dioecious species, with distinct male and female plants, this was plentiful in our forests, once upon a time. However, rampant destruction of forests and over - exploitation of the species for the raw - drug market has seriously depleted its population. The very slow rate of regeneration has contributed further to its rarity. Consequently this highly valuable medicinal plant has now become extremely rare and endangered making conservational measures very urgent. It is in this background, that we chose this species for specialised study with respect to its habitat, requirements, present distribution, growth habits, reproductive biology, regeneration and possible measures for its conservation. To begin with, we have made intensive field studies, and worked out its gross morphology and anatomy. The data are presented in this paper.

Materials and methods

Several field trips were undertaken in different forest areas of the western ghats of Kerala for locating the species. Field observations pertaining to the natural growth pattern of mature plants and seedlings have been recorded. Specimens were collected during April - May for Laboratory studies. Pharmacognostic studies were conducted by taking sections of roots, stems, leaves and epidermal peelings. The sections and peelings were stained with saffranine.

Description

Coscinium fenestratum (Gaertn.) Colebr.

(Menispermaceae)

Vernacular names:

Mal: Maramanjal; Tam: Manjalkodi, Maramanjal;

Kan: Marada arashina;

Tel: Manupasupu

San: Darvi, Daru haridra;

Hin: Jahar-i-huldi;

Eng: Tree turmeric, False calumba.

A large woody climber (Fig.II), young stem and branches terate, distantly nodose, striated; bark yellow, corky, fissured and lenticellate, young stems and branches densely pubescent, very rarely with slender tendrillar branchlets (Fig. IV A), leaves simple, alternate, thick, peltate or deltoid, exstipulate; petioles upto 10 cm. long, angular, thickened both at base and apex, densely adpressed, rusty pubescent; lamina thick, broadly ovate, acute or acuminate at apex, rounded or truncate at base, margin entire, 13-30 x 12-23 cm., chartaceous, green, densely white, silky pubescent on both surfaces when young, green and glabrous above and silky pubescent below when mature, 5-7 nerved from base, nerves divergent, often forked, reticulation raised and prominent below; inflorescence cauliflorous, in globose cymes, peduncles upto 3 cm. in fruits; fruits drupaceous, 2-3 from each flower, covered with dense rustly brown pubescence, ovoid to sub - globose 2-3cm. in size, 1 seeded; pericarp reticulate, brownish and glabrous; seeds 2 x 1.5 cm., oblong, obtuse or reniform with a median longitudinal ridge encircling the seed; testa hard and stony, greyish glabrous with a waxy coating, endospermous; endosperm white and ruminate (Fig. III)

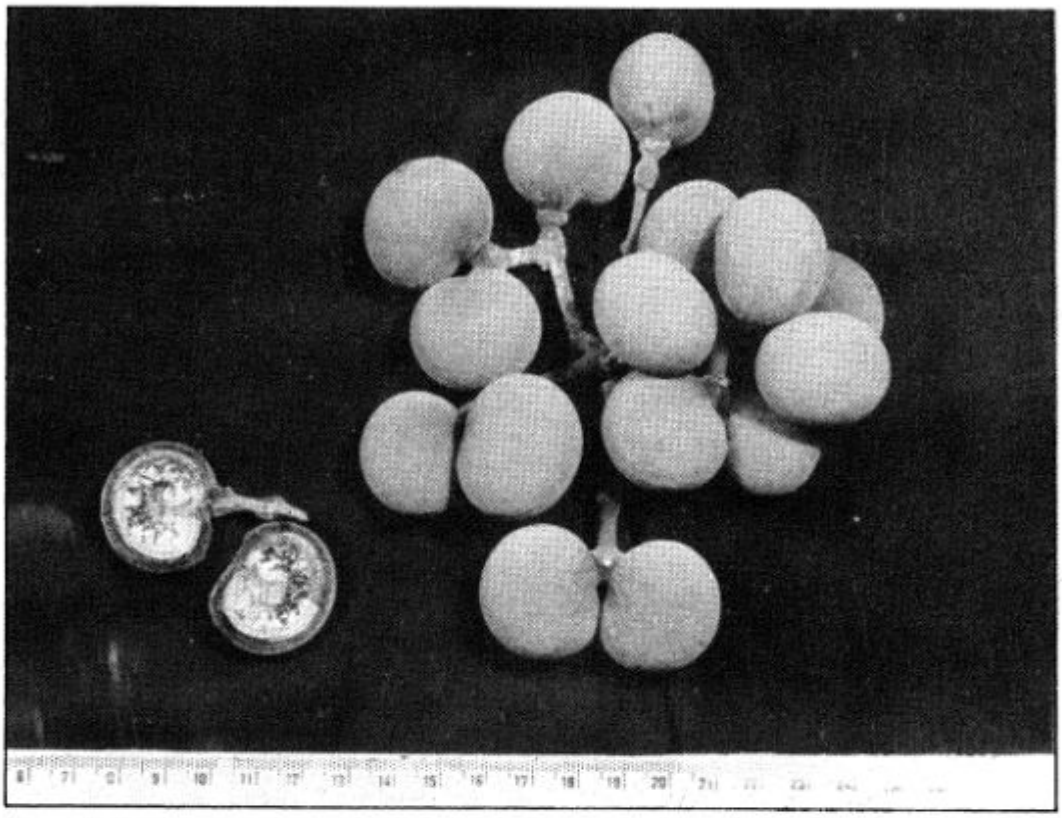

Fig. III

Natural regeneration

The plant regenerates from stumps of old plants and also through seeds, but, the rate of regeneration is found to be extremely low as is obvious from the very few number of seedlings and stem sprouts in the natural environment. In any case, propagation of this plant outside its natural fresh environment has been found to be extremely difficult.

Anatomy:

Stem: Secondary Structure

In T.S., the mature stem shows a somewhat circular outline, and a wheel-like anatomical configuration. The outermost cork is composed of 15 or more layers of thin walled, rectangular or tangentially elongated cells, arranged in vertical rows. The cork cambium is not readily distinguishable. The cortex within has several layers of thin walled, rectangular or polygonal cells without intercellular spaces, most of them containing oil droplets. The inner boundary of the cortex is rather irregular due to intrusions of fibres and stone cells and the cells are often filled with a yellow content. Inner to that, there are crescent shaped, interrupted strands of fibers in contact with the phloem strands, which are often connected by stone cells to form a composite, interrupted or continuous, sinuous or arched ring of sclerenchyma surrounding the secondary wood. Vascular strands are seperated by broad, multiseriate medullary interfascicular rays, composed

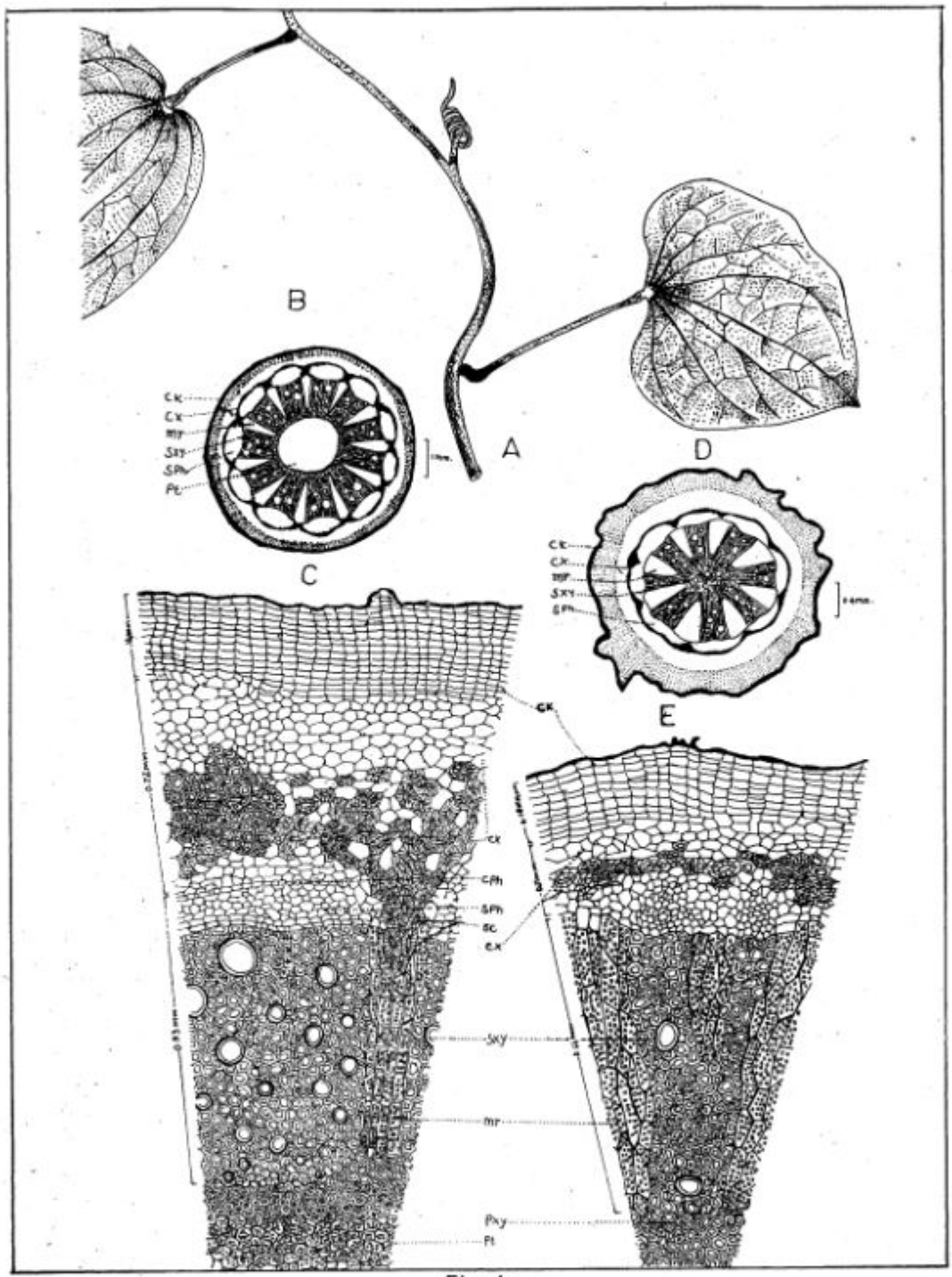

Fig. Iv

mostly of radially elongated, unlignified cells; into which the stone cells are found to intrude. The secondary phloem lies opposite and below the fibre-zones. The wood is diffuse porous and consists of rather large and mostly solitary vessels and thick walled fibres. The stem has a prominent pith, the inner cells of which are large, polyhedral and rather thin-walled compared to the thick-walled outer cells (fig. IV B - C)

Roots

The secondary structure is almost similar to that of stem, but can be distinguished by the absence of pith, and the virtual absence of fibre-crescents above the secondary phloem (Fig. IV D - E).

Medicinal uses

The bark of the raw drug is one of the important constituents, in more than 60 Ayurvedic formulations like 'Aswagandharishtam', 'Khadirarishtam', 'Anuthailam', 'Kathakakadirathi Kashayam', 'Eleneer kuzhambu', 'Maha panchagavyam' etc. It is used as a substitute for Calumba (Jaleorhize palmata (Lam.) Miera). It is found useful in debility, fevers and certain forms of dyspepsia. It is said to possess antiseptic properties and is used for dressing wounds and ulcers. (The Wealth of India 1950)

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MECHANISM OF METABOLISM

(PROCESS OF DIGESTION AND ASSIMILATION IN AYURVEDA)

Dr. V. NARAYANASWAMY

As the human body undergoes degenerative changes constantly, it is essential for its up-keep, to replenish the waste by fresh material. It is true not only of the animal kingdom, but also of the vegetable world. The need for finding proper food is there fore very essential. The search for food material, its accumulation and making it suitable for consumption alone are not enough for the desired end viz., the sustenace of life. The most important factor is the utilistion of the food material by the body and its conversion into body tissues. It is not an easy process. A series of chemical and bio-chemical changes take place, from the moment the food enters the mouth to the time the nutrition is taken out of it, and the residual waste matter is excreted out. As in other physiological activities, the tridoshas play an important part here also.

For the process of digestion, Agni (fire) is essential. Agni is divided by Hindu scientists into four divisions. They are (1) Terrestrial or the ordinary fire produced by combustible materials, (2) Celestial or fire produced by lightning, meteors etc., (3) Human on the fire that is essential for the digestion of the food materials and for the preservation of the animal heat and (4) Mineral or radiation from metals.

Ayurveda is concerned only with the Agni in the human body. They are classified into thirteen kinds. They are: (1) Jataragni the digestive fire found in the koshta, stomach, and intestines, (2) Dhatvagni, the fire that is found in the seven tissues or dhatus in the body, (3) Bhumagni (Bhutagni) or the fire found in the five varieties of dravays (Materials), parthiva, Apya, Agneya, Vayavya and Babhasa (earth, water), fire, air and ether).

Of these thirteen varieities, the most important is the Jataragni or the digestive fire found in stomach and intestines. Its proper existence is the source of help to the other Agnis. In the body, if it fails the others also fail. The importance given to the human heat and that the essential processes depend on the well-being of Agni is clearly indicated in the texts. "Life, colour of the body, well-being of the body, lustre and ojas depend on the Agni. When the Agni is extinct, the man's life also is extinct and when it is kept in proper form, the man lives for a long time without any disease. For it is said, that all the diseases

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take root from the deranged Agni" (Cha, Chi XV -34).

In all the Ayurvedic texts it is said that the function of the Agni in the body is performed by the Dosha, Pitta. In the formation of the dosha it is mentioned that Pitta is formed from Tejobhuta. If it is so, the action also should be identical. When there is excess of Pitta in the body and the consequent symptoms of burning sensation, feeling of heat in the body etc., the treatment adopted is to give cold producing things (Seetaveerya drvya) and the cure is effected. In the same way when there is diminution of pitta in the body, it is generally treated by drugs in which Tejobhuta is in predominance. Though Pitta is made of five elements (Bhutas) there is preponderence of Tejobhuta, as it is born of it and because it digests the food, it is also called Agni. it is clear from this that Pitta is different from Agni and on account of its function and on account of its quality. However sometimes, Agni is said as identical with Pitta or one and the same.

The process of digestion is a complicated one. It is said that in the process of digestion, all the three doshas take part. When the food bolus is put in the mouth, pranavayu propels it to the Kosta, stomach (Annapravesa Krit). There the food is disintegrated and made soft by the drinks that follow and by the Kledaka Kapha or mucilagenous substance that is present there. The disintegrated food is again changed by the pacaka pitta, which aided by the samana vayu (which resides by its side) nutritive and waste materials are separated.

Whatever might be the taste of the food in the beginning it undergoes three changes (parinamas) namely sweet (madhura), sour (amla) and pungent (katu). In amasaya it becomes predominantly sweet and produces krathy kapha. It should be understood that amasaya is the place of Kapha and so the digestion that takes place here is predominantly of Kapha origin. Later on, it becomes liquid amla, on account of the fermentation (vidaha) and auguments pitta. When the food descends down the intestines it is dried up by the agni removing the moisture. At this place it becomes hard and produces pungent taste. This is called avastha paka or change according to the seat of the digested food. When this digestion by jataragni is over and when the nutritive material is separated from the dross, the Bhutagni digestion takes place. That is the agni that is found in the various food materials taken.

There are five varieties of dravya or substance each with a preponderance of one Bhuta, as Parthiva, Apya (solid, liquid etc.). In each dravya there is a certain amount of agni Tejobhuta. That agni begins to work. It is only in this process, that the appropriate materials are separated from the food and made to join the various tissues in the body. The body consists of Pancha Bhutas and each dhatu in the body has got predominance of a particular bhuta. For example mamsa (muscle) is predominantly parthiva as rasa is predominant apya. These dhatus are nourished by the respective Bhutas that are present in the food material, parthiva drug enriches muscle and bone, Apya, food enriches muscle, bone, plasma and fat. This process is done by the Bhuthagni. So two digestions are conducted by two different kinds of agnis, namely Jatharagni and Bhutagni one from the body and the other from the food material.

The function of Dhatvagni, the digestive agencies in the tissue, will be considered here briefly. There are seven dhatus. They are classified into two divisions Prasada ja, the clear or important one and Kittaja, the

dross or the secondary one. Three things are present when the metabolism of each dhatu takes place, the tissue proper, the later or higher and the waste from the tissue. The following is the order in which the dhatus are formed. "From Rasam, blood is formed, then flesh, fat, bone marrow, and at last the reproductive element".

It will be considered how the dhatu poshana (metabolism of tissues) takes place. Thre are three theories. One theory states that from rasa, rakta is formed and from rakta, mamsa is formed. What does this mean? Does this mean that rasam is completely (Sarvatmana) converted into raktam and raktam into mamsa. Just like milk is turned to curd, curd to butter and butter to ghee. (Ksheeradhadi Nyaya). If that be the case, if a man is starved for a few days there would be no rasa dhatu in his body and in the course of a month's starvation of whole body would become Sukramaya, the seventh dhatu. This is not seen and hence the Ksheeradhadhi Nyaya may be left out of consideration.

There are certain people who advocate another theory called "The irrigation channel" system ('Ketara Kulya nyaya'). There are two kinds of rasa namely poshaka and poshya, that which feeds and that which is fed. The first is the outcome of foods and drinks. The second is the permanent dhatu like plasma, blood and muscle and the dhatus are fed by the nutrient rasa. This Poshaka rasa feeds the poshyarasa first, which is in the heart and later on taken by Vyana Vayu, feeds the rakta dhatu by the equivalent material obtained by food, and then the appropriate material builds the mamsa dhatu, and the process goes on, feeding one after the other just like an irrigation channel feeding the successive lands.

It is understood that the food material consists of all essential requirements of the body. When the nutrients course through the various tissues by a process of discrimination the tissues take only the appropriate material that is required for its building and for its maintenance. This process is done only one after the other, that is after feeding the rasadhatu, the ahararasa feeds the mamsa and so on. The mamsarasa takes roughly four days and odd for the conversion and so to reach the Sukram it takes about a month. There is one objection to this theory. If this is true, why should we take drugs which are said to be aphrodisiacs and increase the potency of the man in a very short time. The answer is that aphrodisiacs by the extra-ordinary power, prabhava, is able to increase potency by directly helping the sukra or reproductive agencies.

The third theory is that the ahararasa by various channels distributes itself and similar materials nourishes the rasa dhatu and by materials similar to rakta dhatu nourishes the rakta dhatu and in that way all the dhatus. As the rasa dhatu is the nearest, it is supplied first and later on other dhatus, each higher dhatu having a longer route than the former. This is described as harvest field and pigeon theory (Khale Kapota nyaya). That is as in a harvest field, the pigeons which come from a near place get grains earlier than those coming from a longer distance.

Among these theories the second or the Kedarakulya nyaya is generally acceptable., It is seen from the above that the rasa product of digestion plays an important part in nourishing the various tissues of the body.

Sukram should be considered not exactly as semen. For it is known that semen is secreted by the testis and stored in the seminal vesicle, whereas Sukram is supposed to be present all over the body. A simili

is given by Susruta "As ghee is present in milk and jaggery in sugarcane so also sukram is found in thewhole body". It is expelled out by the urethra as it is earlier collected in receptacle (dhara) on either side or bladder (vasthi). only one explanation is possible and that is that there are two kinds of sukram. One is the gross or the Sthula Sukra, semen which is necessary for the fecundation, and the sex hormone, which circulates all over the body keeping the characteristics of the sex.

There is one more dhatu ojas to be considered. It is considered as the quintessence of all the dhatus. Its primary seat is heart (hridaya) but it is said to circulate all over the body. It is not Sukshama or subtle but it is sthula or visible. It is predominantly soumya cooling Snigdha, oily and its colour is a little yellow and reddish. It is the cause of the proper maintenance of the body and mind.

This ojas becomes less by anger, starvation, worry, sorrow, too much of work etc. In such a condition the person loses all confidence in himself, becomes morose and all his physical and mental activities become diminished. The body lustre becomes less or absent, his mind is agitated (durmanaha) and his skin becomes rough. In short he loses all that is essential to call him a normal person. It is not possible to correlate this dhatu or substance in the body to anything in modern science. But it has been observed that people who are suffering from loss of ojas come under the classification of various neurotic conditions particularly anxiety neurosis, neurasthenia and such other psychic conditions. In these cases when treatment to increase the ojas is adopted the condition improves.

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Innumerable are the people who are seriously pondering over the meaning and significance of this world in which a person finds himself or herself to be placed. For each person, innumerable are the objects to be discerned. Thus, there is a plurality on the subjective side and a plurality on the objective side.

The Psychodynamics of Pranava,
Guru Nityachaitanya Yati

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INDIGENOUS MEDICINE AND CULTURAL HEGEMONY: A STUDY OF THE REVITALIZATION MOVEMENT IN KERALAM

K. N. PANIKKAR

III

Panniyinpalli Sankunni Variar was born on 16 March 1869 into an orthodox but talented family of temple service caste in Kottakkal, a small township near Calicut. The members of the family evinced interest in painting, music and Sanskrit literature.[48] Sankunni's mother, Kunhikutty Varasyar, had considerable knowledge in Sanskrit and was also well-versed in classical music. The reputation of the family was, however, based on the achievements of its members as Ayurvedic physicians. The artistic, religious and medical atmosphere in which young Sankunni grew up appears to have made an abiding impact on his precocious mind. Even as a small child he knew the names of medicines well enough to prescribe them to those who feigned illness as a practical joke to tease him.[49]

After exposure to such a family environment, Sankunni's education proceeded on traditional lines. He learnt Sanskrit under some of the reputed scholars of his time, Chunakkara Kochukrishna Variar and Kaikulangara Rama Variar. He was introduced to the rudiments of Ayurveda by Konath Achutha Variar, after which he studied for four years under Ashta Vaidyan Kuttancheri Vasudevan Mooss who was at that time one of the highly accomplished Ayurvedic physicians.

By the time Sankunni had completed his education at the age of twenty and started practice at Kottakkal, western medicine was becoming popular in the region. Being inquisitive he was eager to acquaint himself with the new system. His ignorance of English language was the first stumbling block which he overcame by learning it privately. An opportunity to acquire the skills of western medicine soon presented itself, although fortuitously, when he was afflicted by an eye disease, granular ophthalmia, for which he consulted Dr. V. Varghese, an assistant surgeon of the government hospital at manjeri near Kottakkal. On completion of the treatment, Dr. Varghese offered to teach him western medical methods, if he so desired. He gratefully accepted the offer and received training in the hospital for three years.[50] He learnt methods of diagnosis, dispensing medicines, administering anaesthesia and performing minor operations. His knowledge of medicine thus embraced both the indigenous and the western. Although firmly rooted in Ayurveda which he conceived as integral to his religion and

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culture, he developed respect and admiration for western medical knowledge, particularly surgery, anatomy and physiology which considerably influenced his perspective of reform.

Variar had a liberal and catholic outlook. Although deeply religious and orthodox in beliefs and practices his attitude towards other faiths was influenced by universalist principles. The entrance to his house was adorned by symbols of Christianity, Islam and Hinduism. When Dr. Varghese came to visit him, what Variar presented to his teacher as a token of his respect was a bejewelled gold cross.[51] His non-sectarian attitude was best expressed during the revolt of 1921 in which the Mappila rebels killed Hindu landlords and fought against the British troops. Variar's house was a place of refuge for both Hindus and Muslims, He did not hesitate to extend help and hospitality to them even when the police was present in his house. Despite the opposition of government officials, he advocated that families of the Mappilas involved in the revolt deserved as much relief as the Hindus. As a result. Variar's name was so respected that it became a password to safety during the troubled time of the revolt. That the mappilas refrained from attacking his house. but also stood guard to protect it from roaming bands of rebel was a demonstration of their respect and gratitude.[52]

Free from many of the prejudices of his times, Variar had an open, critical and eclectic mind. He was imaginative, but practical; enthusiastic but patient and energetic but systematic. These qualities contributed to the success of his institution building efforts, be it in the field of medicine or literature or art.

IV

The movement for the revitalization of indigenous medicine revolved around three issues: (a) The retrieval, systematisation and dissemination of knowledge. (b) The creation of institutional facilities for training physicians. (c) The preparation and distribution of medicine. In none of these fields P.S. Variar can be called a pioneer in the national context. Gamgadhar Ray and Ganga Prasad Sen in Bengal, Shankar Shastri Pade in Maharashtra and Gopalachari in Madras had in some ways anticipated his efforts.[53] There were also several contemporaries of Variar, like Gananath Sen and Lakshmipati, who were chartering a similar course. Yet Variar's efforts, apart being the first in Keralam, had greater emphasis on institution building and more importantly had a close nexus with the cultural awakening in colonial Keralam.

Immediately after he started practice in Kottakkal, he became conscious of the weakness of his art and therefore began exploring the possibilities of undertaking steps to remedy at least some of them. The formation of an association of physicians,

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48 The mural paintings of Ambalapuzha Temple were executed by Achutha Variar and Madhava Variar, two grand uncles of P.S. Variar, Kizhedath Vasudevan Nair, *Vaidyarathnam P.S. Variar*, Kottakkal, 1983. p.2.

49 *P.S. Variar Shashti Varshika Charitram*, Kottakkal, 1929. p.26.

50 Kizhedath Vasudevan Nair, *Vaidyarathnam, pp. 23-25.*

51 *Ibid* p.25.

52 *Ibid* pp. 60-65. Also see K.N. Panikkar, *Against Lord and State: Religion and Peasant Uprisings in Malabar*, New Delhi, 1990.

53 P.M. Mehta. *Luminaries of Indian Medicine*. Bombay, 1968 and Brahmanada Gupta. Indigenous medicine in nineteenth and twentieth century Bengal in Leslie, *Asian Medical System*. pp. 368-77.

the Arya Vaidya Samajam, in 1902 was the first step in this direction.

The inaugural session of the Samajam was held at Kottakkal with delegates drawn from all over Keralam. Subsequently annual conferences were held in different places. The Maharajas of Travancore and Cochin and the Samuthiri of Calicut were its patrons and P.S. Variar was nominated as its permanent secretary.[54] The annual conferences were conducted with great fanfare; they became cultural events in the localities with music, exhibition and public processions.[55] The organisational structure and activities of the Samajam covering all the three political divisions – Travancore, Cochin and Malabar – emphasised the unity of Keralam. It was perhaps the first public body to do so, much before the Indian National Congress organised its first Kerala conference in 1920.

The Samajam was essentially a voluntary public platform to exchange views and share experiences. In the process it became the ideal ground of the revitalization movement. Most of the programmes and activities of the movement either originated or were discussed in its meetings. A good example is the *patasala*, an institution for training physicians, the need for which was repeatedly stressed in the deliberations of every annual conference.[56] The main contribution of the Samajam was that it occasioned a 'creative introspection' – to borrow a term from D.D. Kosambi – into the past and the present of Ayurveda, both its knowledge and practice. The proceedings of the conferences had two dimensions. The first, general speeches – eulogistic, uncritical and nostalgic about the past – intended to instill self-confidence in the system. Although repetitive and superficial they created a sense of urgency to bring about changes in the existing conditions. The second, the reading of papers led to more professional discussions on illness, treatment and medicine. This was perhaps the most significant aspect, as it brought together uncodified experience and innovations and thus underlined both the problems and the potential of the discipline.

The deliberations in the conferences had an unmistakable tendency to underplay the effectiveness and suitablility of western medicine and to highlight the superiority of indigenous system for the treatment of Indians. The argument was not so much based on which system was currently better equipped and developed, but more on the connection of medical system with nature and society. Each system, it was argued, developed in specific natural and social conditions which influenced its pharmacopoeia and the method of treatment. In doing so the fundamental question of relations between body, ecology and medicine was underlined:

In Europe warmth is considered an indicator of happiness, as evident from the use of the words 'warm reception'. In contrast, we use the word *santapam*, (heat) for sorrow.... . The climate being cold Europeans feel happy with a little warmth. We, on the other hand, living in a tropical region are fond of cold. If any medicine to generate heat in the body is to be administered to Europeans, it has to be quite strong. Their medicines prepared to suit the body of Europeans are too hot for us. For those living in the tropical countries, an important quality of medicine is the ability of cooling the system. The medicinal herbs from the Himalaya region are therefore considered by many as more effective than those from the Vindhyas.... There is a general impression in India that

54 *Shashti Varshika Charitram*. pp. 81 -82.
55 *Dhanwantari*, 14 January 1917.
56 Ibid.

English medicines give only temporary relief. But the Europeans do not impute the same weakness to their system. It is so, because their medicines are effective for their diseases, but not suitable for the conditions of our body.[57].

One may pick several holes in the above statement, but it forcefully draws attention to the fact that the western and indigenous systems had originated and developed in different environmental and cultural conditions. Given these differences, whether western medicine was suited to the body and the mind of Indians was the basic question. In this context, the strength of the indigenous system was perceived as its indigenous character; it was in harmony with the nature of the inhabitants of the country.[58] It was a part of their culture, integrated with their pattern of life and hence attuned to a culturally specific concept of health care.

V

Although the speeches and writing of the advocates of indigenous medicine were often self-adulatory, the deliberations in the Arya Vaidya Samajam were quite self-critical and directed to the formulation of a plan of action. A major concern was the contemporary state of knowledge, two dimensions of which called for immediate attention. The first was stagnation and loss of knowledge and the second, lack of knowledge among the practicioners.

The loss of knowledge had occurred both due to the non-availability of texts as well as their use in actual practice. From the time of the early texts of Charaka, Susruta and Vagbhata a considerable body of literature had come into existence, either as original compositions or as commentaries of them, only a few, like those of Madhavacharya *(Madhavanidhanam)* Bhava Misra *(Bhavaprakasham)*, Shrangadhara *(Shrangadhara Samhita)* and Moresh Bhatta *(Vaidyamritam)* were actually in use. The existence of a large number of other texts, particularly composed in regional languages, was unknown even to those active in the profession. The loss of regional language texts of later provenance was all the more grievous as they alone recorded attempts at innovation in the treatment of difficult cases. The innovations based on experience were crucial, as the texts did not prescribe the actual composition of ingredients, for this was determined by a variety of considerations. Innovations were certainly not lacking; some of the unorthodox methods used by *Ashtavaidyans* to cure different cases are on record.[59]

The non-availability of later texts was particularly unfortunate as they contained information about additions made by them to the pharmacopoeia. Almost every text had contributed to the enrichment of the existing materia medica as evident from the works of Madanapala, Narahari, Shodalan, Moreshwar Bhatt and several others.[60] These additions took place either due to external influence or because of the need to meet new challenges. In the light of the above, the notion of stagnation of the indigenous system due to the inability or unwillingness of practitioners to depart from the given would require some re-examination.

A positive feature of the revitalization movement was the retrieval of knowledge and its dissemination through systematic collection and publication of texts. Judging from the results, the assumption about the existence of texts and commentaries, not easily accessible or not currently in use,

57 *Ibid.*, 14 May, 1917.

58 *Ibid.*

59 Kottarathil Sankunni, *Eithihyamala*, Kottayam, 1974. pp. 141-46 and268-77.

60 Variar, *Arya Vaidya Charitram*, pp. 49-64.

was not wide of the mark. Shankar Shastri Pade, the main inspiration behind the movement in Maharashtra, prepared an index of 702 texts and commentaries and published about 70 books.[61] The Usman Committee on the indigenous system of medicine in Madras Presidency listed 288 Sanskrit, 400 Telugu, 63 Malayalam and several hundreds Siddha texts and commentaries available in different repositories. It also identified 49 texts which could not be located anywhere.[62]

The dissemination of knowledge available in the classic and later texts was conceived as an urgent task of revitalization. Aided by the prevailing infrastructure developed during the colonial period, the protagonists of indigenous medicine tried to transform the hitherto relatively inaccessible knowledge into social knowledge as well as a shared system of knowledge among the practitioners. The publication of both texts and popular commentaries, were, therefore, undertaken in fairly large numbers in different parts of the country. By the end of the nineteenth century there were as many as fifty medical journals in Indian languages.[63] *Sanjeevini* in Bengali edited by Gangaprasad Sen. *Raja Vaidya, Arya Bhishak* and *Sadvaidya Kostubha* in Marathi edited by Sankar Shastri Pade and *Dhanwantari* in Malayalam edited by P.S. Variar to mention a few.[64]

The codification and dissemination of existing knowledge was an area to which P.S. Variar devoted considerabl attention. One of his early efforts was to prepare and publish a catalogue of medicines, with details of usage, dosage and other information which would enable patients to use medicines without the prescription of a physician. He wrote a book, *Chikitsa Samgraham* to acquaint the public with the rudiments of Ayurvedic medicines and treatment. The other important works authored by Variar were a book on cholera, a Malayalam rendering of *Ashtanga Hridayam* and a history of Ayurveda jointly written with his cousin P.V. Krishna Variar.[65] These publications created a corpus of literature in Malayalam easily accessible to the practitioners and the public and this contributed to a social consciousness about the use and importance of Ayurveda.

In this regard a more important role was played by *Dhanwantari,* a fortnightly journal published by P.S. Variar from Kottakkal. Started in 1902 it was the mouthpiece of the revitalization movement in Keralam and reflected most of the tendencies inherent in it. It provided an open forum for debate and discussion, as evident from some articles critical of reform efforts.[66] P.S. Variar was a regular contributor and some of his essays focused on the nature of choice, an Indian should make to achieve proper health care. He wrote a series of articles entitled the 'Western and Eastern Medicine' which was a candid assessment of the strength and weaknesses of the two systems. While conceding the advance made by western medicine, he argued for a selective adoption of ideas and methods from it. He underlined the

61 *Sudha Nidhi*, Vol. 1 no. 3.

62 *Report on Indigenous Medicine*, Appx. IX. Also see N. Kandaswamy Pillai, *History of Siddha Medicine*, Madras, 1979, pp. 372-402.

63 *Sudha Nidhi*, Vol. 1, no. 3.

64 Mehta, *Luminaries*, pp. 84-88.

65 Kizhedath Vasudevan Nair, *Vaidyarathnam. The Ayurveda Charitram* was perhaps the first history of Ayurveda to be written in an Indian language.

66 *Dhanwantari*, 14 May, 1917.

past achievements as well as the divine origin of Ayurveda, but at the same time stressed the need for introducing changes in it. On a comparison of the two systems what he emphasised was the relative merit and potential of Ayurveda for effective health care of Indians, given the climatic condition in which the body was located.[67] This article was an indication of the direction in which he wanted revitalization movement to proceed.

VI

The retrieval of knowledge becomes meaningful only when internalised by the existing body of practitioners and integrated into their practice. A majority of them did not have the training or intellectual equipment to do so. Therefore like many of his contemporaries, P.S. Variar realised the urgent need to rectify this situation by creating the necessary infrastructure to bring into existence a group of physicians well-versed in the discipline. Given the indifference of the colonial state in this matter, mobilization of internal resources became important.

"There are very few knowledgeable and experienced Vaidyans in Kerala today. Even if there are some they have no facilities to train and teach their disciples. There is enough reason to believe that after one more generation the conditions of Ayurveda would become so critical that any effort to remedy the situation is likely to be futile. The general opinion, therefore, is that arrangements for imparting training should be made as early as possible."[68]

This was an idea repeatedly rised by Variar in almost every meeting of the Arya Vaidya Samajam. Although it received enthusiastic approval and support, he was conscious of the limitations of resources, both men and material, for undertaking such a venture. Therefore, the proposal to set up a Patasala remained in a state of incubation for about fifteen years. Meanwhile he took some initiatives to create a body of qualified practitioners by evolving a system of public examination for those who were already carrying on practice. Under this scheme the Samajam organized early examinations in three towns of Kerala. That only seventeen out of 315 who took the examination managed to qualify was indicative of then existing state of knowledge and training of the practitioners. Interestingly a majority of those who took the examination belonged to lower castes. There were also a few Christians.[69]

The instituitional arrangement for teaching and training materialised only in 1917 when a *patasala* was set up at Calicut. It was an important step towards the professionalisation of indigenous medical practice through a systematic instruction of well-defined curriculum. The *patasala*, as evident from its prospectus, was conceived as the linch pin of the revitalization movement. The objectives of the *patasala*, the prospectus stated, were to revive the "once prosperous and now increasingly declining Ayurveda" to bring about timely changes in it, to train physicians with sufficient knowledge and experience who can conduct the practice 'without others' assistance and to acquaint the British government about the merits of indigenous system.[70]

The *patasala* adopted a five year course, with Sanskrit as the medium of instruction in the first year and later both Malayalam and Sanskrit. The curriculum of the

67 *Ibid.*

68 Prospectus of 'Arya Vaidya Patasala' *Dhanwantari*, Vol. 12, no. 11.

69 *Ibid.*, 16 August, 1913.

70 *'Prospectus'*.

patasala was based on a combination of indigenous and western knowledge. The emphasis was indeed on mastering Ayurvedic texts and through that acquiring knowledge of medicines and their preparation. They were supplemented with instruction in physiology, anatomy, chemistry, midwifery and surgery incorporated from the western system.[71]

The knowledge of Sanskrit was a prerequisite for admission and preference was given to those who were also conversant with English. The admission was open without caste or gender discrimination. Education was free, but for an admission fee of Rs. 5. To begin with, there were five scholarships, four for boys at the rate of eight rupees per month and one for girls at the rate of ten rupees.[72] Later on the number of scholarships considerably increased, so much so that an overwhelming majority of students received financial assistance to pursue their studies.[73]

The publication of the prospectus of the *patasala* and the nature of the curriculum proposed in it stimulated some thinking about the course and character of the revitalization movement.[74] The curriculum of the *patasala* articulated a definite view on this, a view which Variar had repeatedly expressed in several of his writings. While preferring Ayurveda as the ideal system suitable for Indian conditions, he was not in favour of isolationism. He believed that the western and Indian systems should be brought together so that the latter can benefit from this interaction. However, Variar's conception of this interaction, although programmatic, was quite superficial and inadequate. Like many of his contemporaries Variar was also inclined to borrow from the West rather than create a dialogue between the two epistemics; the indigenous and the European. Given the perception of European progress, the Indian mind during the colonial period tended to be eclectic, grafting ideas and practices into their own intellectual-cultural universe. The curriculum of the *patasala* which incorporated some elements of western medical knowledge in the final year of the course was a good example of this weakness. What was borrowed hardly merged with the rest of the course, and remained a separate and curious entity.

In the discussions and debates that followed the establishment of the *patasala* two distinct views came to the fore. The first represented by the purists who strongly resented the efforts of Variar to depart from tradition.

Taking a revivalist posture, they wanted the curriculum to be exclusively confined to the classic texts and their later commentaries. The other view placed greater reliance on western knowledge, particularly in anatomy and physiology.[75] Variar was not in agreement with either of these views as he was not in favour of a blind adherence to tradition or an uncritical acceptance of the West. The curriculum of the *Patasala* was one area in which he tried to bring together the western and the indigenous.[76] The establishment of the *patasala*, therefore, was an important event in the intellectual-cultural life of Keralam, as it was a pioneering institutional effort to reach out to western knowledge from a perspective strongly rooted in tradition.

VII

The most successful institution building effort of P.S. Variar was in the field of manufacture and marketing of medicines. Variar realised that Ayurveda could be effective and popular only if its medicines were standardised and prepared in conformity with textual prescription. This was possible only if the practitioners took

71 *Ibid.* 72 *Ibid.* 73 *Ibid.* 74 *Ibid.* 75 *Ibid.* 76 *Ibid.*

initiative and joined together to form companies for the manufacture and marketing of medicines. In this respect the practice of western medicine, he felt, was worthy of emulating. The popularity and effectiveness of western medicine was largely dependent on its easy availability, in accordance with the prescription of doctors. The indigenous medicine could contend with the increasing influence of western medicine only if it also developed the same infrastructure. With this in view he established the Arya Vaidyasala in Kottakkal in 1920. The advertisement published on the occasion is an interesting document which reflected Variar's business acumen, ability for innovation and will to change according to the contemporary needs. He had no hesitation to follow the western example, discarding old prejudices and thus bring into operation a system of manufacture of medicine on modern and scientific lines and market them on a commercial basis.[77].

P.S. Variar was indeed not the first to undertake large-scale manufacture and sale of indigenous medicine. Chandra Kishore Sen in Bengal had opened a dispensary in 1878 in Calcutta for selling medicines at a cheap rate. His firm, C.K. Sen & Co., had started large-scale production in 1898. So did N.N. Sen and Company in 1884 and Shakti Aushadalaya of Dacca in 1901.[78] But the bottling of *kashayam,* a medicinal brew, which could not be kept for more than a few days was an innovation, others had not attempted.

The sale of medicine in the Arya Vaidyasala, was moderate to begin with. During the first four year period the sale was only for Rs. 14,000 which increased to Rs. 57,000, Rs. 1,23,000 and Rs. 1,70,000 during the subsequent four year periods.[79] The venture proved to be a great success; the Arya Vaidyasala is a flourishing institution today with more then one sale outlet in every town in Keralam as well as in some cities outside. Following Variar's initiative several others established Vaidyasalas and began selling medicines. The social reach and acceptance of Ayurveda in Kerala society today is mainly due to the vision and enterprise of P.S. Variar.

VIII

The revitalization movement in Keralam occurred in the context of a cultural awakening of which Kottakkal was an important centre. Integral to this awakening was a quest to realise the political and cultural personality of Keralam through a construction of its political unity and cultural identity. Despite the existing political divisions, Keralam was conceived as one territorial entity-extending from Gokarnam to Kanyakumari. The writing of history which seems to have suddenly flourished during the late nineteenth century underlined this unity by tracing the origin of Keralam to the legend of Parasurama, according to which the area was reclaimed from the sea and donated to the Brahmans. Among many such histories written during this period, the one composed in verse by Kodungallur KunhiKuttan Thampuran, renowned for his translation of *Mahabharatam,* is particularly significant. Thampuran traced the origin, antiquity and historical development of the region.[80] His description of the territory anticipated

77 *Shashti Varshika Charitram,* pp. 70-74.

78 Gupta, 'Indigenous medicine in Leslie, *Asian Medical System,* p. 374.

79 *Dhanwantari,* 14 March 1920.

80 Kodungallur Kunhi Kuttan Tampuran, Keralam.

the romantic invocation of the land of Keralam by Vallathol Narayana Menon during the national movement. The period between Thampuran and Vallathol witnessed the formation of a consciousness about the identity of Keralam in the realm of history, politics, culture and in fact, in all areas of social endeavour. During this time the novels of O. Chandu Menon and C.V. Raman Pillai which had social and political significance had made their appearance, Narayana Guru and V.T. Bhattathiripad had initiated reform movements and G. Parameswara Pillai and his associates had presented the Malayali Memorial. All these events were expressions of a social resurgence, rooted in the intellectual and cultural perception of the changing situation in Keralam. The movement for the revitalization of indigenous medicine was located in this context.

Around the movement at Kottakkal several intellectual and cultural activities took shape: a history society, a literary magazine, a Kathakali troupe and a drama company were some of them. Arya Vaidyasala was the nucleus around which all these activities blossomed and P.S. Variar was the moving spirit behind them, not merely as a patron but as an active participant.[81] The work of Arya Vaidyasala thus became part of a multipronged cultural endeavour-the expression of a cultural renaissance, as described by N.V. Krishnan Kutty Variar, an outstanding physician of Kottakkal and the author of *Ayurvedacharitram*[82]

IX

The existing literature on the state of indigenous medicine has mainly focused on three issues-revivalism, professionalisation and elitism. That the movement within indigenous system, for that matter in all realms of cultural and intellectual life in colonial India, was essentially revivalist in character is a very common and often uncritically accepted idea. In case of medicine, Charles Leslie, the most articulate advocate of this view, argues that since the protagonists of indigenous medicine believed literally in the authority of the classic texts. and at the same time were impressed by the accomplishments of modern science, they set out to demonstrate that the institutions and scientific theories of cosmopolitan medicine were anticipated in the ancient texts.[83] He implies in his analysis that the inquiry into the causes of decline was to formulate a theory which would justify revival. He dismisses 'the revivalist theory of decline', as 'there is no evidence to support the assumption that the general level of Ayurvedic practice in the nineteenth century was less efficacious than that of antiquity[84]

Another view, both popular and influential, relates the revitalization movement to professionalization. Given the main concerns of the movement-systematization of knowledge, institutionalization of training and standardization of medicine-professionalization was inherent to it. As a

81 The script for plays was written by P.S. Variar which are preserved in the library of the Arya Vaidyasala.

82 Interview with the author at Kottakkal, 15 April 1991.

83 Charles Leslie, 'Ambiguities of medical revivalism', in Leslie, *Asian Medical System*. P. 365. Similar view is also held by Ralph C. Croizier, 'Medicine, modernization and cultural crisis in China and India. *Comparative Studies in Society and History*. Vol. 12, pp. 275-91.

84 Charles Leslie. 'The Professionalising Ideology of Medical Revivalism' in Singer (ed.). *Enterpreneurship and Modernization, p. 224.*

consequence, the movement is identified with professionalization, occurring under the influence of modern (read western) medical practice. An advocate of this view, Paul Brass, describes the movement-'a major revivalist movement in modern Indian history, according to him -'as an attempt by a traditionalistic interest group to legitimize itself and achieve recognition and status" [85]. The movement, in this reckoning, had a limited objective-to act as an instrument of political pressure in support of Ayurveda and to counteract the influence of the 'entrenched and hostile' modern medical profession. This argument seems to focus on the interest of a social group and thus underplays the significance of the quest to revitalize the system as a body of indigenous knowledge and as an aspect of cultural identity of a subjected people.

Yet another view of the movement underlines its elitist character as it sought 'to replace popular practice that were seen outside the scientific system'.[86] Elaborating this point Barbara Metcalfe in a study of Hakim Ajmalkhan, states:

> In some ways, the technique of creating intellectual equivalence was the same in all subjects, namely the return to texts of the literate culture at the expense of customary or local practice. Thus the adversaries of the reformers were practitioners of unsystematic folk medicine, often midwives and other women and poorly trained yunani practitioners. As in the case of religious education, this is scripturalist reform, but here reform by the cosmopolitan, not the shana-minded.[87]

The movement within indigenous medicine indeed had elements of all these three features. Yet any one of them individually or all of them collectively, did not constitute the character of the movement. All reforms movements in colonial India, either in social, cultural or religious spheres, were not without an element of revival inherent in them. Yet, they were not exclusively revivalist movements, seeking to resurrect the past as an alternative to the present. The past was indeed a reference point in all these efforts, but the invocation of the past was not very much an expression of the concern for tradition, as recently argued,[88] it was conceived as a device to contend with contemporary conditions.

In the case of indigenous medicine too a revivalist tendency, supported by the landed aristocracy, was quite evident. A report on the Arya Vaidya Samajam stated that its meetings were attended at one time or the other by almost all Rajahs, landlords and physicians.[89] As mentioned earlier, the partons of the samajam were the two ruling chiefs of Travancore and Cochin and the

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85 *Paul R. Brass. 'The politics of Ayurvedic education: A case study of revivalism and modernization in India', in Susan H. Rudolph and Llyod I. Rudolph (eds). Education and Politics in India,* Delhi, 1972. pp. 342-43.

86 Barbara Metcalfe,'Nationalist Muslims in British India: The case study of Hakims Ajmalkhan', *Modern Asian Studies,* 1985, 9.1, pp. 1-28.

87 *Ibid*

88 Lata Mani, 'Contentious traditions: The debate on sati in colonial Inida' in Kumkum Sangari and Sudesh Vaid (eds.) *Recasting Women,* New Delhi, 1989, pp. 88-126.

89 *Dhanwantari,* 14 January 1917.

90 *Ibid.*

former ruler of Calicut. The members of the erstwhile ruling families of Malabar area enthusiastically participated in the activities of the Samajam. The financial support to the movement also came from the same source.[90] Although politically loyal to the British, the members of this class were quite critical of the colonial cultural system; the obverse of the attitude of the intelligentsia which disapproved and opposed colonial domination, without, however, rejecting colonial culture. To the members of landed aristocracy the movement appealed as an oppurtunity to revive the practices of a traditional society in which they had exercised political and social power. Hence, their attitude was nostalgic and revivalist and their approach towards western medicine hostile and confrontationist. Such a perspective was not wholly shared by the movement, yet it did not dismiss it either. What it attempted was to go beyond this perspective in an effort to modernise the system, by reconciling it with the knoweldge of western medicine.

The revitalization movement essentially operated within the literate tradition and its social universe remained within the confines of literate groups—those who knew Sanskrit and English. A large number of popular practitioners who were mot literate and had no textual knowledge were inevitably marginalised by the movement. Infact, the leaders of the movement decried the ignorance and inefficiency of these practitioners and one of the state alms of the movement was to create in their stead a body of knowledgeable physicians. The impact of professionalization, in particular, was quite adverse on this group, as they in comparison were deemed untrained and unqualified. However, the movement did not look upon them as adversaries, as suggested by Barbara Metcalfe, but as objects of reform, even it reform turned them into victims.

X

The historiography of colonial India is quite often informed by a simple opposition between colonialism and nationalism. Consequently, the historical process during this period is telescoped into a unilinear development of anti-colonial consciousness, overlooking contradictions and differentiations with it. If located within this perspective the revitalization movement informed by an unmistakable tendency of confrontation with colonial medicine would appear as an expression of cultural nationalism, contesting colonial cultural hegemony. The movement, however, had multiple voices within it. While opposing the cultural ambience created by colonial medicine, the movement was not averse to incorporating elements of western knowledge preceived as superior and undeveloped in the indigenous system. A change which the movement tried to refute was the unscientific character of indigenous medicine, yet it levelled the same charge against popular medical practices and tried to make them comply with texutal prescriptions.

The quest to revitalise indigenous medicine reflected a multi-pronged struggle for cultural hegemony, not only between the coloniser and the colonised, but also between different classes within the colonial society. Delegitimising the culture of the subjected was necessary for colonial cultural hegemonisation. The dismissal of indigenous medicine as unscientific, antiquated and superstitious was part of this agenda. This representation was strongly contested by the revitalization movement, without however ignoring the advance in knowledge achieved in the West. Consequently the movement stood

for selective appropriation of knowledge from the coloniser's repertoire. What the movement thus attempted was to incorporate the weapon of the coloniser, on the one hand, and to undertake internal regeneration on the other. The incorporation tended to neutralize the hegemonic potential of colonial medicine and reclaim those social classes earlier drawn into the influence of colonial culture. At the same time the movement for internal regeneration, underlining the strength, the limits and the potential of the traditional system, merged with the anti-colonial cultural nationalism.

Contending with colonial medicine was only one dimension of the movement; the other was 'reform' of popular medical practices of non-literate groups, uninformed by textual knowledge and unsystematized by formal training. The professionalization and standardization which the movement attempted adversely affected these practices. The popular medical practitioners generally belonged to economically and socially subordinate castes and classes. They were inevitably forced to conform to the new standards set by the movement. The movement thus was a two pronged effort — first, to contest colonial cultural hegemony and second, to assert hegemony over popular cultural practices. ●

The status of knowledge, then, which Yoga envisages is not merely an intellectual conception or clear discrimination of the truth, nor is it an enlightened psychological experience of the modes of our being. It is a "realisation" in the full sense of the word; it is the making real to ourselves and in ourselves of the self, the transcendent and Universal Divine and it is the subsequent impossibility of viewing the modes of being except in the light of that self and in their true aspect as its flux of becoming under the Psychological and Physical conditions of our world existance.

Sri Aurobindo, The Synthesis of Yoga.
P.290

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ETHNOBOTANICAL STUDIES ON THE MEDICINAL FLORA OF TARIKHET BLOCK (KUMAON HIMALAYA) DISTRICT ALMORA U.P. - PART II

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Mode of Presentation:

The studies and findings are the result of constant observations made on the flora of the area.

Pattern followed in plants enumeration comprises botanical name, habit, flower colour, flowering and fruiting time, locality, Sanskrit (Ayurvedic) name, local name, Hindi name, medicinal importance (M) and parts useful. Taxa are classified under various families in accordance to Bentham & Hooker systems. Ethnobotanical and economic aspect alongwith important plants have been dealt apart from the enumeration section.

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* Amalgamated units, CCRAS, Tarikhet 263663, Ranikhet (U.P)

Enumeration

(Family, Botanical name, Habit, Colour of flower, Flowering and fruiting period, Locality (local name), Medicinal Utility, Part used, Abbreviation 'M' for Medicinal)

Ranunculaceae:

Clematis grata Wall. - climber, yellowish green, Sept-Nov., Gagas, Richi, Dyorakhal, (Ghaneli, Balkangu) M - leaves, stems.

Clematis gouriana Roxb. - climber, yellowish green, Nov-Jan., Binsar, Soni.

Clematis buchananiana DC. - climber, yellowish green, Sept-Oct., Tarikhet.

Anemone vitifolia Buch-Ham. - Herb, white, July-Sept, Chaubattia, Binsar (Ratanjot), M - roots, plant, seeds.

Thalictrum javanicum - Blume - Herb, white, July-Sept., Tarikhet, Virbhatti.

Thalictrum foliolosum DC - Herb, white, May-Aug, Ranikhet, Binsar (Mamira, Barmat) M-root.

Ranunculus sceleritus Linn. - Herb, yellow, Jan-March, Gagas, Tarikhet (kandir, Shim), M - plant, leaves.

Ranunculus arvensis Linn. - Herb, yellow, Jan-April, Tarikhet, Ranikhet, (Chambul), M - Plant, leaves.

Delphinium denudatum Wall - Herb, blue, April-June, Veerbhatti, (Nirvishi) (Jadwar), M - roots.

Memispermaceae:

Tinospora cordifolia Miers - Climber, July-Sept., Gagas, Dyorakhal, Guduchi, Gurj, Giloya, M - stems.

Cocculus laurifolius DC - Tree, yellow, Feb-March, Veerbhatti, Dyorakhal, (Tilphorha) M - roots.

Stephania rotunda Lour - Climber, Yellow green, April-May, Tarikhet, Sauni (Ganjarhu), M - roots.

Cissampelos pareira Linn. - climber, Greenish yellow, April-May, Tarikhet, Gagas (Patha, parhi), M - plants leaves.

Berberidaceae:

Holboellia latifolia Wall - Scandant, shrub, Pinkish, March-April, Tarikhet, Bensar.

Berberis asiatica Roxb - Shrub, yellow, Feb-March, Tarikhet, Gagas, Dyorakhal, (Daruharidra, Kilmorha), M - root.

Berberis chitris Lindl - Shrub, yellow, April-May, Ranikhet, Chaubatia, Bensar (Daruharidra, Kilmorha), M - root.

Papaveraceae:

Papaver dubium L: Herb, red, Feb-March, Tarikhet, Ranikhet, M - Petale

Fumariaceae:

Fumaria parviflora Lamk: Herb - Pink, Jan-March, Tarikhet, Ranikhet, (Parpata, Kuri, Pittpaprha), M - plant.

Cruciferae

Cardamine hirsuta Linn: Herb, white, Feb-April, Ranikhet, Sauni, Tarikhet, M - plant.

Cardamine impatiens Linn: Herb, white, Sept-March, Tarikhet, Bensar, M - plant.

Arabidopsis thaliana (L?) Hey: Sisymbrium thalianum J. Gay - Herb, white, March, April, Tarikhet.

Brassica nigra Koch. - Herb, yellow, March-April, Tarikhet, (Rajika, Lahi) Seeds.

Brassica campestris Linn. - Herb, yellow, March-April, Tarikhet, (Sarashapa, Sarson), M - seeds.

Brassica juncea Coss - Herb, yellow, March-April, Tarikhet, (Rajika, Rai), M - seeds.

Capsella bursa-pastoris Medic. - Herb, white, Jan-Dec. Tarikhet, M - seeds, plant.

Lepidium sativum Linn. - Herb, white, June-Oct., Tarikhet (Chandrasura, Ralan), M - seeds

Raphanus sativus Linn. - Herb, Lilac, Dec-March, Tarikhet, (Mulaka, Muli).

Coronopus didvmus (L.) J.M. Smith - Herb, Yellowish green, Nov-June, Tarikhet.

Capparidaceae:

Cleome viscosa Linn. - Herb, yellow, Aug-Oct, Gagas, Dyorakhal (Jakhia, Sauvarchala, Hulhul), M - seeds, leaves, roots.

Violaceae:

Viola serpens Wall. herb, Blue, March-May, Tarikhet, Ranikhet, Bensar, (Vanpushpa, Sanfsan, Banapsa), M - plant

Polygalaceae:

Polygala triphylla - Buch, Ham - Herb, Red, Aug-Sept, Tarikhet.

Polygala persicariaefolia DC. Herb, Pink, July-Oct, Tarikhet.

Caryophyllaceae:

Silene conoidea Linn. - Herb, Pink, Feb-Apri, Tarikhet, M - plant.

Stellaria crispata Wall - Herb, white, June-Sept. Ranikhet.

Stellaria media Gyrill - Herb, white,

Jan-Dec, Tarikhet, M - plant.

Drymaria cordata Willd - Creeping Herb, white, Feb-Oct, Tarikher, Ranikhet M-herb.

Polycarpae corymbosa Lamk. -Herb, white, Aug-Oct, Gagas, M - Herb, leaves.

Portulacaceae:

Portulaca oleracea Linn. - Herb, yellow, July-Oct, Tarikhet, Ranikhet, (Lanika, Kulfa), M-herb, seeds, leaves.

Hypericaceae:

Hypericum patulum Thunb. - Shrub, yellow, Aug-Oct, Ranikhet, Sauni, M - seeds.

Hypericum japonicum Thunb - herb, yellow, Aug-Oct, Ranikhet, Bensar, M - plants

Malvaceae:

Sida veronicaefolia Lamk - Herb, orange, March-Sept., Tarikhet, Gagas, (Bala) M - stem, seeds, roots, plant.

Sida rhombifolia Linn. - Shrub, yellow, Sept-Oct., Tarikhet, (Bala), stem, seeds, roots, plant

Urena lobata L. - Shrub, pink, Aug-Oct, Gagas, tarikhet, (Bachta), M - seeds, roots.

Hibiscus esculentus Linn. - Herb, yellow, July-Aug, tarikhet (Gandhamala) (Bhindi), capsules, seeds.

Bombax malabaricum DC. - Tree, Scarlet, Jan-Feb, Tarikhet, (Shalmali, Semal), M -root, flowers.

Salvastrum coromandelianum (Linn) - Garcke - Under shrub, yellow, Aug-Sept., Tarikhet, M - plant, leaves.

Tiliaceae:

Grewia oppositifolia Buch. Ham. - Tree, yellow, May-Sept, Tarikhet, (Bhimal), M - leaves, Bark.

Tricanfetta pilosa Roth. - Herb, yellow, Aug-Sept., Tarikhet.

Corchorus acutangulus Lamb. - Herb, yellow, Aug-Sept, Tarikhet (Chanchu), M - seeds, leaves.

Linaceae:

Reinwardtia indica Doon - Shrub, yellow, Jan-March, Ranikhet, Sauni, (Basant, Piuli), M - plant leaves

Geraniacea:

Geranium nepalense - Sweet, Herb, Pink, May-Sept., Tarikhet, Ranikhet (bhand), M - plant.

Geranium ocellatum Camb. - Herb, crimson, March-April, tarikhet, (Bhanda), M - plant.

Oxalidaceae:

Oxalis corniculata Linn. - Herb, yellow, Jan-Dec. Tarikhet (Changeri, Chalmorha), M - herb leaves.

Oxalis latifolia H & K - Herb, pink, July-Sept, Tarikhet.

Oxalis deppei Load - Herb, pink, June, Jhuladevi

Balsaminacea:

Impatiens balsamina Linn - Herb, pink, Aug-Sept., Ranikhet, Bensar (Gulmendi), M - plant, flowers, seeds.

Impatiens racemosa DC. - Herb, yellow, Aug-Sept, Veerbhatti, Bensar.

Impatiens scabrida DC. - Herb, yellow, Aug-Oct., Sauni, Sauni, Bensar.

Rutaceae:

Boenninghausenia albiflora Reichb - Herb, white, July-Oct., Tarikhet, (Pissumar), M - plant.

Citrus aurantifolia (Cheistm.) - Tree, white, July-Oct, Tarikhet (Kagji Nibu), M - Fruit.

Citrus aurantinum Linn. - Shrub, white, Chaubattia, Bensar.

Citrus maxima (Bulm) Merr. - Shrub, white, Sept-Oct. Tarikhet, M -fruits

Zanthoxylum alatum Roxb. - Shrub, yellow, April-June, Tarikhet (Tumbure, jajbal, Timur) M - bark, branches, fruits, seeds.

Citrus medica Linn. - Shrub, white,

Sept-Oct, Tarikhet (Nimbaka, Neebu), M -fruits, roots.

Ilicineae:

Ilex excelsa Wall - Tree, white, May-June, Bensar, Ranikhet.

Meliaceae:

Melia azaderach A. Juss. - Tree, Cilac, March-April, Tarikhet (Mahanimba, Baitarh, Bakain) M - fruits, root, bark, leaves.

Cedrella toona Roxb. - Tree, white, March-April, Tarikhet, (Tunneka, Toona), M-bark, flowers.

Celastraceae:

Euonmus tingens Wall - Tree, March-May, Chaubattia, (Kangkru, Chopra), M - bark.

Gymnosporia rufa Lows. -Shrub, white, April - May, Gagas.

Rhamnaceae:

Ziziphus jujuba Lamk. - Shrub, yellow, Oct-Nov, Tarikhet, Gagas (Baddar, Ber), M -fruits, leaves

Rhamnus triquetra Branchis - Tree, pale yellow, Aug-Sept., Sauni, (Gaunth, Gounta), M - bark

Vitaceae

*Vitis lanata*Roxb. -Climber, green, April-June, Ranikhet.

Vitis parvifolia Roxb. - Climber, green, March-May, Ranikhet, Chaubattia, Bensar.

Vitis vinifera Linna. - Climber, green, March-April, Ranikhet, Dyorakhal (Draksha, Angoor). M - fruits.

Leea aspera Edgew: Herb, green, June-Aug, Chaubatia, Bensar.

Sapindaceae:

Aesculus indica Colebr - Tree, pink, April-May, Ranikhet (Pangar), M - fruit.

Anacardiaceae:

Rhus cotinus Linn. - Shrub, pink, March--April, Tarikhet, Pilkholi.

Rhus parviflora Roxb. - Shrub, yellowish green, April-June, Gagas, Dyorakhal, Pilkholi (Raiteeng, Timu, Tang) M -fruits

Rhus wallichii Hook. f. - Tree yellowish green, April-June, Tarikhet, Gagas Dyogakhal (Akoria, Bhalya) M - leaves

Rhus semialata Murray - Shrub, yellow-green, April-June, Tarikhet (Taisi), M - fruits.

Pistacia integerrima Stewart - Tree, red, April-May, Tarikhet, Bensar (Karkatshringi, Kabra, karkasingi) M - galls.

Mangifera indica Linn. - Tree, yellow, March-April, Kumechhina (Amra, Aam), M - fruits, seeds, bark

Coriaaceae:

Coriaria nepalensis Wall. - Shrub, green, Feb-March, Tarikhet, (Mahola, masuri), M -leaves.

Fabaceae:

Crotalaria prostrata Rottl. - Herb, yellow, July-Sept., Ganiadyoli, Pilkholi, M - roots.

Crotalaria humifusa Grah. - Herb, yellow, July-Sept., Gagas, Dyorakhal.

Crotalaria alata Buch. Ham - Herb, yellow, July-Aug, Tarikhet, Sauni.

Crotalaria mysorensis Roth. - Herb, yellow, Aug-Oct, Tarikhet, Veerbhatti.

Crotalaria albida Heyne. - Herb, yellow, Aug-Oct, Tarikhet, (Banmethi) M - roots.

Crotalaria calycina Schrank. - Herb, blue, Aug-Sept., Tarikhet, Ranikhet.

Crotalaria sessiliflora Linn. - Herb, blue, Aug-Oct, Tarikhet, Ranikhet.

Crotalaria tetragona Roxb. - Herb, yellow, Sept-Oct, Tarikhet, Pilkholi.

Trifolium repens L. - Herb, white, July--Oct., Tarikhet, M - plant.

Trigonella foenum graeccum Linn. yellow, Feb-April, Tarikhet. (Methika, Methi), M - seeds, leaves.

Trigenella emodi Berth - Herb, yellow, June-Aug, Chaubattia.

Nelilotus indica All - Herb, yellow, March--May, Tarikhet (Vanamethika, Banmethi), M - plant, seeds.

Medicago lupulina Linn. - Herb, yellow, March-Sept, Tarikhet, Ranikhet M - plants

Lotus corniculatus Linn. - Herb, yellow, March-Sept., Tarikhet, M - flowers.

Indigofera trifoliata Linn. - Herb, Pink, July-Sept., Tarikhet (Jangalimethi), M - seeds.

Indigofera hirsuta Linn. - Herb, pink, May-July, Tarikhet.

Lespedeza sericea Miq. - Shrub, pink, Aug-Sept., Tarikhet.

Indigofera dosua Buch. - Ham. - Shrub, pink, May-July, Tarikhet.

Zornia diphylla Pers. - Herb, yellow, June-Sept., Veerbhatti, Dyorakhal, Gagas, M - root.

Smithia ciliata Royle - Herb, Yellow, June - Sept., Veerbhatti, Dyorakhal, Gagas, M - root.

Phaseolus radiatus Linn. - Creeping, yellow, Sept-Oct., Tarikhet, (Masha Mas, Urhad), M - seeds, Roots.

Phaseolus trilobus Ait. - Herb, yellow, Aug-Sept., Dyorakhal (Mudgaparni, Muwoan), M - plant, leaves.

Uraria lagopus DC. - Herb, yellow, Aug-Oct., Tarikhet, (Pithvan) M - plant, leaves.

Uraria neglecta Prain - Herb, pink, Aug--Oct., Tarikhet, Pilkholi.

Alysicarpus vaginalis DC. - Herb, pink, Aug-Oct., Tarikhet, M - roots.

Alysicarpus bupleurifolius DC. - Herb, pink, Aug-Oct., Tarikhet.

Desmodium laxiflorum DC. - Shrub, pink, Aug-Oct., Ranikhet.

Desmodium podocarpum DC. - Shrub, pink, Aug-Oct, Tarikhet.

Desmodium sambuense DC. - Shrub, pink, Aug-Oct., Tarikhet.

Desmodium sequax Wall - Shrub, pink, Aug-Oct., Tarikhet.

Desmodium polycarpum DC. - Shrub, pink, Aug-Oct., Tarikhet, M - plant.

Desmodium triflorum DC. - Herb, pink, Aug-Oct., Tarikhet, (Kudaliya) M - leaves.

Desmodium parvifolium DC. - Herb, pink, Aug-Oct., Dyorakhal.

Desmodium gyrans DC. - Shrub, pink, Aug-Oct., Tarikhet.

Vicia hirsuta S.F. Greaf. - Herb, Feb-April, Tarikhet, M - seeds.

Vicia sativa Linn. - Herb, pink, July-Oct., Tarikhet, (Ankra), M - seeds.

Pisum sativum Linn. - Herb, white, March-April, Tarikhet, (Kalaya), Matar, M - seeds.

Shuteria involucrata W & A - Scandat herb, Red, Ranikhet.

Dumasia villasa DC - Climber, yellow, Aug-Oct., Tarikhet.

Glycine soja Benth. - Herb, Red, Aug-Oct., Tarikhet (Bhat) M - seeds, Bark.

Erythrina arborescens Roxb. - Shrub, Scarlet, Aug-Oct., Tarikhet.

Pueraria lobata Willd - Climber, pink, Aug-Oct, Tarikhet.

Vigna vexillata Benth - Herb, climber, pink, Aug-Oct., Tarikhet.

Dolichos lablab Linn. - Herb, white, Aug-Oct., Tarikhet (Shimli, Sem), M - fruits, seeds, roots.

Dolichos biflorus Linn - Herb, creeping, yellow, Aug-Oct., Tarikhet (Kulattha, Gahat), M - seeds.

Atylosia scarabaeoides Benth - Herb, yellow, Aug-Oct., Tarikhet, Gagas, M - plant.

Flemingia bracteata Wight. - Shrub, pink, Aug-Oct., Tarikhet.

Flemingia fruticulosa Wall - Shrub, pink, Aug-Oct., pilkholi, Dyorakhal.

Flemingia semialata Roxb. - Shrub pink, Aug-oct, Tarikhet.

Lens culinaris Medic - Herb, white,

Feb-April, Tarikhet.

Caesalpinaceae:

Cassia loevigatu Willd - Shrub, yellow, Aug-Oct., Tarikhet.

Cassia mimosoidea Linn. - Herb, yellow, Aug-Oct., Tarikhet, M - roots.

Mimosaceae:

Mimosa rubicaulis Lamk. - Shrub, Red, June-Sept., Tarikhet (Agla, Aila), M -fruits, leaves, roots.

Robina pseudoacacia Linn. - Tree, white, June-Sept., Tarikhet, Bensar.

Acacia dealbata Link. - Tree, yellow, Feb-March, Tarikhet.

Rosaceae:

Prunus persica Stokes - Tree, pink, March, Tarikhet (Aruka, Arhu), M - fruits, leaves.

Prunus cerasoides D. Don - Tree, pink, March, Tarikhet (padmaka, Paddam) M - Branch, woods, Kernel.

Prunus communis Huds. - Tree, white, April, Tarikhet, (Aluhaokara) M - fruits.

Prinsepia utilis Royle - Shrub, white, Jan-Feb, Tarikhet, Bhekal, Bhekla, M - oil.

Spiraea canescens Don. - Shrub, white, April, Tarikhet.

Rubus paniculatus Sm. Shrub, white, May-July, Chaubattia.

Rubus ellipticus Sm. - Shrub, white, April-May, Tarikhet, (Hinsalu) M - fruits.

Fragaria indica Andr. - Herb, yellow May-June, Tarikhet.

Potentilla kleiniana W & A - Herb, Yellow, March-April, Tarikhet, M - roots, plant, leaves, stems.

Potentilla fulgens Wall - Herb, yellow, July-Oct., Chaubattia.

Agrimonia eupatoria Linn. - Herb, yellow, June-July, Chaubattia, M - roots, leaves.

Rosa indica Linn. - Shrub, pink, red, May-June, Tarikhet, (Sadagula) M - fruits.

Rosa moschata Will - Scandering, white, March-April, Tarikhet, (Kubjaka), Kuja, M.

Pyrus malus Linn. - Tree, Pink, March - May, Sauni, Chaubattia, (Simvitika, Sev.) M - fruits, bark, roots.

Pyrus pashia Buch. Ham. - Tree, white, March-April, Tarikhet, Dyorakhal, Sauni, (Mehal) Bark roots, fruits.

Stranvaesia glaucescens Lindl. - Tree, white, April-May, Sauni, Veerbhatti, (Garmehal) M - fruits, leaves.

Crataegus crenulata Roxb. - Shrub, white, April, Tarikhet, Gagas (Ghingaru), M - fruits.

Saxifragaceae:

Bergenia ciliata (Wall) Raizada - Herb, pink, March-May, Tarikhet (Pashanbheda, Silforha) M - roots.

Deutzia staminea R.Br. - Shrub, white, March-May, Tarikhet.

Crassulaceae:

Tillaea pentandra Royle - Herb, yellow, July-Sept., Ranikhet.

Kalanchoea spathulata DC. - Herb, yellow, July-Aug, Tarikhet, (Parnabeeja, Patharchoor), M - leaves.

Myrtaceae:

Psidium guajava Linn. - Tree, white, July-Aug, Tarikhet, (Amrood), M - leaves, fruits.

Eucalyptus globulus Labill - Tree, white, Aug-Sept., Ranikhet, (Tailparni), M - leaves, oil.

Melastomaceae:

Osbeckia stellata Wall - Shrub, pink, Aug-Oct., Ranikhet, Tarikhet.

Lythraceae:

Woodfordia floribunda salisb - Shrub, Scarlet, Feb-March, Ganiodyoli, Pilkholi, (Dhataki, Dhai), M - flowers.

Punica granatum Linn. - Shrub, Scarlet, Jan-March, Tarikhet (Darhima, Anar), M - fruits, bark.

Lagerstroemia indica Linn. - Shrub, pink, June-July, Tarikhet (Phurush, M - bark, leaves, bark).

Onagraceae:

Oenothera rosea Ait - Herb, pink, July-Sept, Tarikhet, Ranikhet.

Raimannia drummondii (Hook. f.) - Rose - Herb, yellow, April-July, Ranikhet, Tarikhet.

Cucurbitaceae

Cucumis sativus Linn. - Herbs, yellow, Sept-Oct, Tarikhet, (Trapusha, Khira) M - fruits, seeds.

Solena heterophylla Lour - herb, white, May-June, Ranikhet.

Momordica charantia Linn. - Herb, yellow, Aug-Sept., Tarikhet (Kaevellaka) M - fruits.

Citrullus lanatus (Thumb.) Mansf. - Clubber, white, July-Oct., Tarikhet (Indravaruni) M - roots, fruits.

Sechium edule (Jacq.) Sw. Herb - white, July-Oct, Uprari = (Ash - Kash) M - fruits.

Begoniaceae:

Begonia picta Sm. - Herb, pink, Aug-Sept., Ranikhet, Bensar.

Cactaceae:

Opentia dillenii Haw - Shrub, yellow, Sept-Oct., Tarikhet, Uprarhi (Patrasnuhi, Nagphani), M - fruit, milk, leaves.

Umbelliferae (Apiaceae)

Centella asiatica (L) Urban. ¦ Herb, yellow, March-April, Tarikhet, Mandukaparni, Brahmi, M - herb, leaves

Bupleurum tenue Don-Herb,yellow, Feb--Sept., Tarikhet.

Coriandrum sativum Linn. - Herb, white, Jan-March, Tarikhet (Dhanyaka, Dhaniya), M - fruits, leaves.

Pimpinella diversifolia DC. - Herb, white, July-Sept., Chaubattia, M - herb.

Ammi majus Linn. - Herb, white, Sept--Oct., Veerbhatti. (Atrilal) M - fruits.

Araliaceae:

Hedera helix Linn - Climber, yellowish, Sept-Oct., Ranikhet, Bensar (Banda), M - Berries, leaves.

Caprifoliaceae:

Viburnum cotinifolium Don. - Shrub, pinkish, May-June, Chaubattia.

Viburnum stellulatum Wall. - Tree, white, May-June, Bensar, Chaubattia.

Lonicera quinquelocularis Hardw. - Shrub, yellow, May-June, Chaubattia, Ranikhet.

Rubiaceae:

Wendlandia exserta DC. - Tree, white, May-June, Tarikhet (Tilaka) M - bark.

Oldenlandia corymbosa Linn. - Herb, white, Sept-Oct., Dyorakhal (Damapapar) M - plant.

Oldenlandia coccinea Royle - Herb, Scarlet, July-Sept., Tarikhet.

Oldenlandia grocilis DC. - Herb, pinkish, April-May, Ranikhet.

Randia tetrasperma Benth. - Shrub, white--yellow, April-May, Sauni, Gagas.

Leptodermis lanceolata Wall. - Shrub, blue, May-June, Tarikhet-Ranikhet.

Spermacoce stricta L.f. - Herb, white Sept-Oct., Gagas.

Borreria hispida (L) K. Schum. Spermacocoe hispida Linn. - Herb, Bluish white, Sept-Oct., Gagas, Sauni, Richi. (Madanghauti) M - herbs, seeds.

Rubia cordifolia Linn. - Herb, Scanding, red, July, Tarikhet, Ranikhet (Manjishtha, Majith), M - roots.

Galium rotundifolium Linn. - Herb, white, June-Sept., Tarikhet, Ranikhet.

Galium asperifolium Wall - Herb, pink, Aug-Oct., Chaubattia, M - Herb.

Valerianaceae:

Valeriana wallichii DC. Herb, white, March-April, Ranikhet (Tagar, samoya) M - roots.

Valeriana hardwickii Wall. - Herb, pink, March-April, Chaubattia Bensar (Tagar, asarun) M - roots.

(To be continued)

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RODHAJAKAMALA

Dr. K. Murali

The term 'rodha' means obstruction and thus rodhajakamala clearly denotes obstructive jaundice. This indicates the similarity in the concept of this type of jaundice, in both ayurvedic and modern parlance. Rodha is the distinguishing aspect of the samprapti based on which kamala, is classified. Among the two types i.e. Koshtasraya and Sakhasraya kamala, in the latter, doshas are spread to sakhas due to rodha and hence the term rodhajakamala. The variance in the samprapti is of course caused by particular nidana, which needs to be analysed.

Ruksha, sita, guru gunas and madhura rasa are the type of food causing rodhajakamala [1]. Viharas having these gunas are also causative factors. Of the gunas, the first one vitiates vata and the latter three, kapha. Hence the doshic vitiation, predominantly is of kapha. It must be noted that this nidana is in addition to other pittakara nidanas, mentioned as causative of Kamala. Kamala manifests either as paratantra (secondary) to panduroga in which there is predominence of pitta or as a svatantra roga in those who indulge in pittakara aharaviharas. So the above said nidanas super added to pittakara nidana causes rodhajakamala.

Two more nidanas observed are Vyayama and Vegadharana. Both cause Vatic vitiation. Especially vegadharana reverses the anulomagati of vata and excessive Vyayama promotes chala guna of vata. These two nidanas do have a determinent role in the samprapti and can be considered as vyanjaka (precipitating) type of nidana, while other nidanas are of utpadaka (predisposing) type.

All the three doshas are equally prominent in the samprapti. The earliest morbid change is vitiation of pitta, immediately followed by vitiation of kaphavatas. It is the diversion of accumulated pitta to sakhas (rakta and other dhatus including skin) that exactly causes rodhajakamala. The spread of doshas to sakha is motivated by vata, which is vitiated by very relevant nidanas. Vegadharana and Vyayama are the nidanas concerned. The former one truly impairs the anulomagati of vayu. Vyayama due to its chala guna also promotes the impaired movement so as to dislodge pitta from its normal site. Rodha by vitiated kapha is an added cause to this samprapti. It is this dislodgement of pitta

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that differentiates rodhajakamala from koshtasrayakamala.

Causative Factors	Affected Dosha	Type of Nidana	
Ruksha	Vata		
Sitha	Kapha		
Guru	Kapha	Ahara & Vihara	Utpadaka
Madhura	Kapha		
Vyayama	Vata	Vihara	Vyanjaka
Vegarodha	Vata		

Rodhajakamala nidana

Pitta spreads to sakhas, causes paka to the initial dhatus viz. rakta and mamsa. Due to paka, mala of rakta namely malarupa pitta is produced in excess. It is this form of pitta, that is spread to skin & eye that causes causing yellowish colour. In a bid to excrete this malarupapitta, body combines it with mutra. So mutra also becomes yellowish. When the disease is allowed to progress, later dhatus like mamsa and meda also undergo paka and subsequently their malas also become yellowish due to superadded malarupa pitta. Hence the appearance of yellow colour in asru (tears) and sveda (mala of meda). But the first dhatu, rasa, does not undergo paka since its site is koshta. Rakta is affected first, since it is one of the seats of pitta. Purisha (faeces) looses its normal yellow as pitta is out of koshta. Koshta becomes kapha dominant causing whitish colouration to purisha (svetavarchas).

Samprapti is well reflected in the signs and symptoms. Atopa, vishtambha, parsvasula, hidhma and svasa are due to pratiloma vata. Kapha causes hridayagaurava, arochaka and agnimandya. Jvara, haridravarna and paittik symptoms. Jvara and arochaka may appear as purvarupas. Bhaktadvesha (aversion to food) is an excessive form of arochaka and it is a common purvarupa for both types of kamala. In fact, etymology of the word kamala itself connotes this [2]. As the deviation in samprapti is at the point of sithanasamsraya, purvarupas are common to both types of kamala.

Lakshanasamuchchaya of Rodhajakamala

Srotodushti is an essential part of samprapti. Among the pathologies of srotas, sanga or rodha is the type occurs in rodhajakamala. Though the rodha is generally of kapha, it must be noted that any granthi or arbuda can cause it. In this condition, there is vitiation of mamsa and meda. To detect these abnormalities at the dushya level, modern diagnostic methods are to be adopted. Surgical methods may be used for the removal. Asmari is another cause for rodha. Here signs and symptoms are aggravated when the asmari is pratilomaga and relieved when it is anuloma. These types of rodhajakamala should be considered as paratrantra (secondary). Sudden onset is a characteristic of paratantra variety of rodhjakamala. Purvarupas

	dushya dhatu	dushya mala	
	rakta	pitta	peethanetra etc.
Sakhagata pitta	mamsa	dushikadi	peethavarna
	meda	sveda	peethasveda
Koshtagata vata	atopa	vishtambha	parsvaruja etc.
Koshtagata kapha	arochaka	avipaka etc.	

may not be so prominent.

As far as the sadhyasadhyata is concerned, rodhajakamala is krichrasadhya, since there is association of all the three doshas. Paratantra type, of course depends upon the cure of svatantra disease and some of them are sastrasadhya.

While formulating the line of treatment, all the aspects are to be taken into account. As the prominent dosha, pitta is out of koshta, sodhana therapy is out of question. Samana therapy to palliate the vitiation of doshas, and direct therapies to bring them to koshta are the other options. The latter needs sneha and sveda. Sneha cannot be done in rodhajakamala as there is vitiation of kapha already giving rise to agnimandya & arochaka. Sveda should be avoided since there is association of pitta. So samana therapy is the only option. While treating the vitiation of all the three doshas, that of kapha should be considered first. Food nourishes and gives vitality to the body, only when kaphaja symptoms are relieved. Antikapha therapy also purifies srotus allowing pitta to come back to koshta. Antivata therapy should be followed or done simultaneously. Making vata anuloma also promotes coming back or pitta. Atopa and vishtambha also get relieved. Aggravation of pittakopa as a result of antikapha need not be feared. Acharya recommends the use of katuamla-lavana rasas in the vitiation of pitta if it is in sakhas or is in latent state [3]. If the antikapha therapy is continued even after the return of pitta to koshta, that may lead to pittakopa. Purisha, regaining its normal colour indicates the return of pitta. Later treatment is generally antipitta as in koshtaga kamala. This is the management of rodhajakamala in principle.

Coming to the yogas (drug combinations) specific to rodhajakamala, it can be seen that no specific ones are indicated in rodhajakamala except a few. Hence among the kamalaharayogas more antikapha ones can be chosen. Vasaguluchyadi [4] and patoladigana [5] are examples. Former one can be used when there are several associalted symptoms. Navayasa gulika [6] is recommended by vridhavaidyas of Kerala, to be added in any of these kashayas.

Kashaya of aragvadhadigana [7] is another useful medicine. Bark of aragvadha alone as kashaya is also recommended. Aragvadha and trikatu is another combination. Indukantha kashaya [8] is useful in srotorodha. Trayanthyadi kvatha [9] with masura substituted with sigru is also effective.

Use of sudha (lime) as an effective remedy is also practised in Kerala. Sudha is thikshna and ushna in property and lekhana in action. Jeera, sudha and guda in a proportion of 1:2:3 rolled into a size of gooseberry fruit are administered with milk as anupana for seven or forteen days. Sudha is also given as a single dose with equal quantities of tamarind, camphor and jaggery. Administration is followed by strict regimen. Use of shankhachurna is also recommended.

In rodhajakamala, food should be of katuamla and lavana rasas. Peya (gruel) prepared in Panchakola kvatha is used. Yusha of kulatha with added maricha is suggested. Some patients even express a desire for such foods.

Paratantra type of rodhajakamala requires treatment of main disorder and some of them need surgical intervention. More research is necessary to evaluate the drugs for rodhajakamala and to find out specific

remedies suited to particular conditions.

References

1. Ashtangahridaya Chikitsa 16, 46-48
2. कामं अन्नादिकांक्षां लाति इति कामला
3. Ashtangasamgraha Sutra 12,6
4. Ashtangahridaya Chikitsa 16, 13
5. Ibid Sutra 15,15
6. Ibid Chikitsa 16,14
7. Ibid Sutra 15, 17
8. Sahasrayoga Kashayaprakarana
9. Ashtangahridaya Chikitsa 13, 11-12 ●

ON FIRE

The fire-drill is probably the most universal, Polynesia being the only region from which it is absent. In Europe it probably dates from Neolithic times, in Asia, it is older and not yet obsolete. As in all methods that use friction, there are two pieces of wood, the lower of which rests on the ground, and is called the 'hearth'. In the fire drill a cylindrical or tapered drill held vertically is rotated between the two hands, which at the same time, press the stick downwards into a shallow pit in the hearth. The fire is caught in a small heap of tinder, consisting, e.g., of fungus or dead leaves.

Frits Staal, Agni-1, P. 82

●

That does not move ..... the One swifter than the mind.
This is never attained by the senses.
It has gone before already.
That remains still while running past others.
In that, the vital breath assigns functions.
That moves; That does not move.
That is far; That is near.
That is inside of all these.
That is outside of all these.

Isavasya Upanishad, mantras 4 and 5

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ഗ്രന്ഥാവലോകനം

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എം.ഡി. (ആയു.), കോട്ടക്കൽ

ആയുർവേദപഠനരംഗത്ത് നിരവധി പരീക്ഷണങ്ങൾക്കു വിധേയരായിക്കൊണ്ടിരിക്കുന്നവരാണല്ലോ നാം. സ്വാതന്ത്ര്യാനന്തരകാലം മുതൽതന്നെ അക്കാദമിക്ക് നിലവാരം ഉയർത്തുവാനായി ഗവേഷണപദ്ധതികളും പാഠ്യപദ്ധതികളും എത്രയെത്ര കമ്മിറ്റികൾ പുനഃപരിശോധിച്ചുകഴിഞ്ഞു. ശാസ്ത്രസിദ്ധാന്തങ്ങൾ കാലോചിതമായി പഠിപ്പിക്കാനുതകുന്ന ഗ്രന്ഥങ്ങൾ വിരലിലെണ്ണാവുന്നതേയുള്ളു. ദീർഘകാലത്തെ തപസ്യയിൽ നിന്നുമാത്രമേ മൂല്യവത്തായ ഗ്രന്ഥങ്ങൾ പിറവിയെടുക്കൂ. ഈ പശ്ചാത്തലത്തിൽ വേണം ആയുർവേദാചാര്യ ശ്രീ. കെ.സി. കുഞ്ഞിരാമൻ വൈദ്യരുടെ അടുത്ത കാലത്തിറങ്ങിയ രണ്ടു ഗ്രന്ഥങ്ങളും വിലയിരുത്താൻ.

1343 പേജുകളുള്ള 'ആയുർവേദ ചികിത്സാസിദ്ധാന്തങ്ങളും' 436 പേജുകളുള്ള 'ആയുർവേദത്തിന്റെ മൗലികസിദ്ധാന്തങ്ങളും' പൂർവാചാര്യന്മാരുടെ ശാസ്ത്രസിദ്ധാന്തങ്ങളെ പഠിച്ച് അനുവേങ്ങളുടെ ഉരകല്ലിൽ ഘർഷണം ചെയ്ത് അനുനയത്തോടെ അവതരിപ്പിക്കുകയാണ് ഗ്രന്ഥകർത്താവ്. ദേശീയ–അന്തർദേശീയ നിലവാരമുള്ള വൈദ്യശാസ്ത്രകൃതികൾ പരിമിതമായ മലയാളത്തിൽ, മലയാളിക്കഭിമാനിക്കാവുന്ന വിധത്തിൽ ഈ രണ്ടു ഗ്രന്ഥങ്ങളും ശ്രദ്ധ പിടിച്ചുപറ്റിയാൽ അത്ഭുതപ്പെടേണ്ടതില്ല.

1988ൽ പ്രസിദ്ധപ്പെടുത്തിയ 'ആയുർവേദ ചികിത്സാസിദ്ധാന്തങ്ങൾ' ചികിത്സാപഠനത്തിന് ഒരു വഴികാട്ടിതന്നെയാണ്. ചികിത്സാപ്രവേശനത്തിന് മുമ്പ് പഠിക്കേണ്ട ചില തത്ത്വങ്ങളുണ്ട്. സാംഖ്യം, യോഗം തുടങ്ങിയ ദർശനങ്ങളിൽ വ്യാപരിച്ചുകൊണ്ടുള്ള ഇത്തരം 96 തത്ത്വങ്ങളെ അടുക്കും ചിട്ടയും വരുത്തി പരിചയപ്പെടുത്താൻ ഗ്രന്ഥകർത്താവ് മനസ്സിരുത്തിയിട്ടുണ്ട്. പ്രകൃതിയുടെ പശ്ചാത്തലവും ഗതിവിഗതികളും ത്വരയോടെ അന്വേഷിച്ചിറങ്ങുന്ന ഗ്രന്ഥകർത്താവ് ''പഞ്ചൈളാദി 96 തത്ത്വങ്ങൾ'' വിശദീകരിച്ചുകൊണ്ട് ആയുർവേദത്തിന്റെ നിർവചനം വിശകലനം ചെയ്യുന്നു. ചികിത്സാവിവരണത്തിൽ സംഹിതകളെ മാത്രമല്ല, ശബ്ദകല്പദ്രുമം, യോഗാമൃതം, ഭൈഷജ്യരത്നാവലി, ഭാവപ്രകാശം തുടങ്ങിയ ഗ്രന്ഥങ്ങളെയും സന്ദർഭമനുസരിച്ച് ഉദ്ധരിക്കുന്നുണ്ട്. രോഗത്തെ അവതരിപ്പിക്കുന്നതിൽ വാഗ്ഭടന്റെ ശൈലിയാണ് സ്വീകരിച്ചുകാണുന്നത്. നിദാനം, സമ്പ്രാപ്തി, പൂർവരൂപം, ലക്ഷണം, സാദ്ധ്യാസാധ്യത, ചികിത്സ, രസപ്രയോഗം എന്നിങ്ങനെ ക്രമപ്പെടുത്തുന്ന സമ്പ്രദായം പ്രായോഗികമായി സൗകര്യപ്രദമാണ്.

കായചികിത്സാനിർവചനത്തിൽ ഉൾപ്പെട്ട ഉന്മാദാപസ്മാരങ്ങൾ ഈ ഗ്രന്ഥത്തിൽ വിവരിച്ചുകാണുന്നില്ല. അതുപോലെ ചരകൻ പ്രാധാന്യംകൊടുത്ത് വിവരിക്കുന്ന രസായനവാജീകരണങ്ങളും ഉൾപ്പെടുത്തിക്കാണുന്നില്ല. ചികിത്സാസിദ്ധാന്തങ്ങളിൽ ഇവയുടെ പ്രസക്തിയില്ലേ എന്നൊരു ചോദ്യത്തിനു പ്രസക്തിയുണ്ട്.

എന്നാൽ ഗ്രന്ഥത്തിൽ വിവരിച്ചുവരുന്ന

പല രോഗങ്ങളിലും ചികിത്സയുടെ സത്ത കണ്ടെത്തുവാൻ ഇദ്ദേഹം ശ്രമിക്കുന്നുണ്ടെന്നു മാത്രമല്ല, സ്വാനുഭവങ്ങളുടെ സഹായത്തോടെ പൂർവാഖ്യാതാക്കൾപോലും ശ്രദ്ധിക്കാത്ത പലതും വിശദീകരിക്കുന്നുമുണ്ട്. വാതകഫജ്വര പ്രകരണം ഇതിനുദാഹരണമാണ്.

അരോചകം, തൃഷ്ണ, ഉദാവർത്തം തുടങ്ങിയ രോഗങ്ങളുടെ വിശദീകരണങ്ങളും ശ്രദ്ധേയമാണ്. 'സിദ്ധയോഗങ്ങൾ' എന്ന ശീർഷകത്തിൽ ബൃഹത്തായ ഒരു പട്ടിക നിരത്തുന്നതിനേക്കാൾ അനുഭൂതമായ യോഗങ്ങളും പരിചിതരായ വൈദ്യന്മാരുടേതായാലും യുക്തി സഹിതം പരാമർശിക്കുന്നതല്ലേ നല്ലത്?

പഞ്ചഭൂതങ്ങളും, ഷഡ്രസങ്ങളും, ദ്രവ്യങ്ങളും, ദോഷങ്ങളും, അവയുടെ ചികിത്സാതത്ത്വങ്ങളും എന്നിങ്ങനെ ക്രമാനുഗതമായി ആയുർവേദസിദ്ധാന്തങ്ങളും നിരൂപിച്ചെടുത്ത മറ്റൊരു ഗ്രന്ഥമാണ് 'ആയുർവേദത്തിന്റെ മൗലികസിദ്ധാന്തങ്ങൾ'. 436 പേജുകളിൽ 14 അധ്യായങ്ങളോടുകൂടിയ ഈ ഗ്രന്ഥം 1949 മുതൽ 1990 വരെയുള്ള കാലഘട്ടത്തിൽ അടിസ്ഥാനതത്ത്വങ്ങളെക്കുറിച്ച് മലയാള ഭാഷയിൽ പുറത്തിറങ്ങിയ പുസ്തകങ്ങളുടെ തുടർച്ചയാണ്. ഇതിന്റെ പ്രസാധനം നിർവഹിച്ചിരിക്കുന്നത് പ്രഭാത് ബുക്ക് ഹൗസാണ്.

കെമിസ്ട്രി, ബയോളജി, ഫിസിക്സ് തുടങ്ങിയവയിൽ പ്രാഥമികപഠനം നേടിവരുന്ന ആധുനികവിദ്യാർഥികളെ സിദ്ധാന്തങ്ങളുടെ ഉദ്ബോധനത്തിനിറക്കുമ്പോൾ പ്രതിപാദനശൈലിക്ക് മാറ്റം വരേണ്ടേ? സർവകലാശാലാതലത്തിൽ പ്രാരംഭത്തിൽതന്നെ പഠിക്കേണ്ട പുസ്തകം എന്ന നിലയ്ക്ക് കൂടുതൽ ഉദാഹരണങ്ങളും, ചിത്രീകരണമാർഗങ്ങളും, രേഖാചിത്രങ്ങളും എന്നിവ സഹിതം വിവരിക്കുന്നതല്ലേ ഭംഗി? അഗോചരമായ വസ്തുതാകഥനം ഒരു നിർധാരണത്തിന്റെ രൂപത്തിലെങ്കിലും വിശദീകരിക്കേണ്ടതുണ്ട്. എങ്കിലും ശാസ്ത്രസത്ത നഷ്ടപ്പെടാതെ പഠിച്ചുവളരുവാൻ ഈ ഗ്രന്ഥത്തിന്റെ ആവശ്യകത തർക്കമറ്റതാണ്. ''വീരസിംഹാവലോകന'' ത്തിൽ ജ്യോതിശാസ്ത്രഹേതുക്കളെ പറഞ്ഞു കർമവിപാകം ഉപദേശിക്കുന്നുണ്ടെങ്കിലും നമ്മുടെ ഗ്രന്ഥകർത്താവ് സൂര്യാദിഗ്രഹങ്ങളെ പഞ്ചഭൂതങ്ങളുമായി ബന്ധപ്പെടുത്തി ത്രിദോഷകോപത്തെ വിവരിക്കുമ്പോൾ ജ്യോതിഷവിദ്യാർഥിക്കും ഈ ഗ്രന്ഥം പ്രയോജനപ്രദമായിത്തീരുന്നു. ശാസ്ത്രപ്രാമാണ്യം കാണിക്കാനായി കാടുകയറാതെ പ്രസക്തമായതുമാത്രം ഉദ്ധരിച്ചുകൊണ്ട് പ്രതിപാദനത്തോട് നീതിപുലർത്തുന്നുമുണ്ട്. അച്ചടിത്തകരാറുകൾ തിരുത്തി ഒരു ശുദ്ധിപത്രം തയ്യാറാക്കേണ്ടതും ആവശ്യമാണ്.

രണ്ടു ഗ്രന്ഥങ്ങളും സർവകലാശാലാതലത്തിൽ ബി.എ.എം.എസ്. ബിരുദത്തിനു പഠനയോഗ്യമായി അംഗീകരിച്ചിരിക്കുന്നുവെന്നത് അവയുടെ ശ്രേഷ്ഠതയെ കാണിക്കുന്നു. പഠിച്ചുനേടിയത് ലളിതമായി പ്രതിപാദിച്ചുകൊണ്ട് ശ്രീമാൻ കെ.സി. കുഞ്ഞുരാമൻ വൈദ്യർ പുതുവെളിച്ചമാണ് കാണിച്ചിരിക്കുന്നത്. ഈ തപശ്ചര്യയ്ക്കു വിനീതമായ അഭിനന്ദനങ്ങൾ അർപ്പിക്കട്ടെ. ●

ആയുർവേദാചാര്യ
ശ്രീ കെ.സി. കുഞ്ഞുരാമൻ വൈദ്യൻ

ആയുർവേദ ചികിത്സാസിദ്ധാന്തങ്ങൾ —165 രൂപ

ആയുർവേദത്തിന്റെ മൗലികസിദ്ധാന്തങ്ങൾ —95 രൂപ

പഴഞ്ചൊല്ലിലെ വൈദ്യലോകം

1. അഷ്ടാംഗഹൃദയഹീനന്മാർ
ചികിത്സിക്കും ചികിത്സയിൽ
മഞ്ഞൾ എല്ലാം വയമ്പായി
കർപ്പൂരം കൊടുവേരിയായി

കേരളോല്പത്തിയും മറ്റും —ഗുണ്ടർട്ട്

FOR THE ATTENTION OF CONTRIBUTORS

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ARRANGEMENT

Manuscripts have to be in their final form when submitted. The first page should contain the **main title** of the paper and a **running headline, author's name,** department, institution or hospital, location and country. The main title of the paper should contain words necessary for correct indexing and be as brief as clarity permits.

The second page should contain an **abstract,** not exceeding 200 words with pertinent information on the material and methods used, important results and major conclusions.

The third page should begin with the introduction part of the paper. The subject matter should then be clearly arranged with suitable headings, preferably the following and in this order: Material, and Methods, Results, Discussion, Acknowledgements and References. The paper should end with the date of submission and the exact address for correspondence with the first author.

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Wherever possible, authors should express weights, measures and degrees of temperature in SI Units using the correct abbreviations.

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All tables should be typed on **separate sheets,** they should be numbered with **Roman numerals** and each table must be accompanied by a descriptive text, which make the substance of the table comprehensible without reference to the text.

The most suitable location of a table in the printed paper should be indicated in the left margin of the manuscript.

ILLUSTRATIONS

Line drawings should be submitted as **original artwork** executed in **black ink.** Words and figures should be big enough to be easily readable after size reduction. Continuous tone illustrations should be submitted as un-mounted glossy prints, suitable for half tone photography. The author's name and the title of the paper should appear on

the back of each illustration, the top of the figure should be indicated. Figures should be numbered in **Arabic numerals** and referred to in the text as "Fig 1" etc. The approximate position of figure should be indicated in the margin of the manuscript. Each figure must have a descriptive legend, which should be typed on an attached sheet.

REFERENCES

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The name of the original author should be given first, then the name of translator, editor, or commentator if any succeeds.

Example:

Warner (1982), Indo-Swedish Forestry Programme II,
Background Document, New Delhi-1-9

Or

Vagbhata, Ashtangahridaya, ed. Y. Upadhyaya,
Varanasi: The Chaukhamba Sanskrit Sansthan, 1975.

Regarding an idea taken from a previous book, it is better to indicate their name, year of publication and pages referred in bracket just after the last sentence of that part (not para). It should be as follows:

Ayurvedic theory and Practice are exclusively....and
Vedanta (Rai P.C. 1981: 1-6). Hence it is.....

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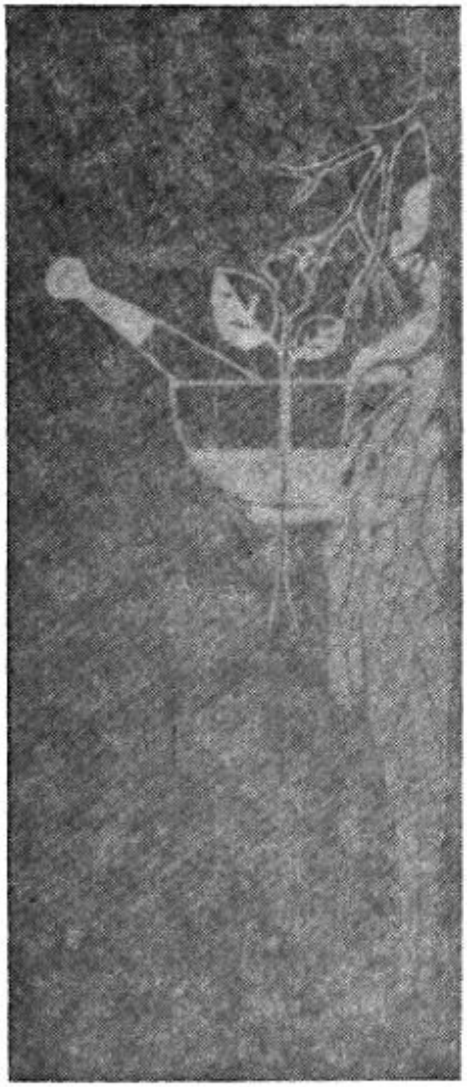

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