

**‘AROGYAPPACHA’ (*TRICHOPUS ZEYLANICUS* Gaerin),
THE ‘GINSENG’ OF KANI TRIBES OF AGASHYAR HILLS (KERALA)
FOR EVER GREEN HEALTH AND VITALITY**

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ABSTRACT: ‘Arogyappacha’ (Trichopus zeylanicus) found endemic to Agasthyar hills of Kerala is used by the local ‘kani’ tribe as a health food for getting instant stamina, ever green health and vitality. The tonic effect of this plants is comparable to that of the famous health food/drug ‘Ginseng’. A critical survey of the Ayurveda classics, suggests that the ‘Arogyappacha’ may be the divine ‘Varahi’ described by sushruta. Chemical and Pharmacological evaluation of the plant have been initiated.

During the course of ethno-medico-botanical investigation of the ‘Kani’ tribe of Agasthyar hills of Kerala, the authors have come across with a very interesting wild plant species used by the local ‘Kani’ tribe for getting instant stamina, health and vitality. The unripe fruits of ‘Arogyappacha’ (as ‘Kani’ tribe calls the plant) is eaten fresh to remain healthy and agile by ‘Kani’ tribe during their long trekking trips in the high mountainous forests of Agasthyar hills. The word ‘Arogyapacca’ means the greener of health i.e. the one that gives very good health and vitality. It is claimed by ‘Kani’ men that one can live days together without food and still remain energetic and could perform even very rigorous physical work exercises by eating few fruits of this plant daily. The ‘Kani’ tribe also claims that if one eats the fruits of ‘Arogyappacha’ regularly he will remain always healthy agile, young and that no disease will afflict him. The ‘Kani’ tribe is normally very secretive about this plant. But thanks to the chance incident that led to

the discovery of this secret by the authors from them.

Information Gathered from ‘Kani’ Tribe

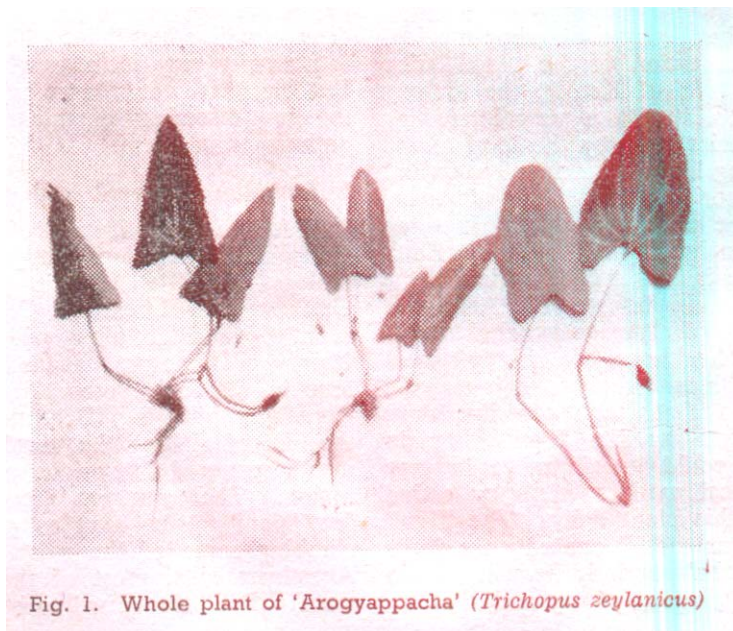
A team of scientists of the All India Coordinated Research Project of Ethnobiology (AICRPE) unit of the Post Graduate-cum-Research Centre in Ayurveda, Trivandrum, along with the AICRPE Chief Coordinator, made a trekking tour in the high mountainous forests of Agasthyar hills in December 1987 with the aim of visiting the ‘Kani’ tribal settlements scattered in various pockets of this region. The team was accompanied by a few ‘Kani’ tribe men as guides. While climbing some of the steep mountains of Agasthyar hills, most of the members of the AICRPE team used to become exhausted and at times felt great fatigue. To the surprise of the team members, the ‘Kani’ tribe men accompanying the team were found munching in between some small blackish

fruits. At one instance one of the 'Kani' young men offered a few of those same fruits to us and told that if we eat them we can also remain as agile as they are. Curiously, most of the team members ate those fruits after removing its leathery skin. It tasted like almonds and had a pleasant flavour. But what surprised us all was that it gave us a sudden flush of great energy and strength. We could thereafter do the trekking at ease and with great spirit and enthusiasm. After experiencing the wonderful effect of those curious looking fruits, we asked the 'Kani' men were initially very reluctant to reveal the identity of the fruit by saying that it is a tribal secret, a sacred information that cannot be revealed to any outsiders. They said that the use of this plant and many other traditional herbal practices followed by them are part of their sacred knowledge-system that were imparted to their great ancestors directly by saint Agastya – the mythical ancient saint who is considered to be the founder of Siddha Medicine and the Agasthyar hills, named after him, was his abode. After great

persuasions the 'Kani' tribe men finally revealed the secrecy of this fruit and even showed the plant which in fact was very much available in the area of Agasthyar hills we were trekking at that time.

Botanical Identity of 'Arogyappacha'

'Arogyappacha' has been identified now as *Trichopus zeylanicus* Gaertn of the family Dioscoreaceae. This species has already been recorded from Agasthyar hills by Botanical Survey of India, Southern Circle, Coimbatore. But this is for the first time that its use as a medicinal herb, that on consuming gives instant energy and stamina, is recorded. The specimens collected by us matched well with the specimen available at the Botanical Survey of India Herbarium, Coimbatore. However, on a critical study of its morphology and comparison of the same with the available description of the species, it matched better with the description of *T. zeylanicus* ssp *travancurius* (Bedd.) Burk as given in the Flora Malesiana (1954)



Flora of India and Flora of Madras have recorded *Trichopus zeylanicus* and mentioned its distribution as confined to the hills of Tirunelveli and Travancore region in the Indian subcontinent. Bed-dome (1861) who recorded this species for the first time from Travancore hills has named it as *Trichopodium travancorium* which was later renamed as *Trichopus zeylanicus*. Flora Malesiana while discussing about the world distribution of this species stated that the species is found only in Kelanthan and Pehang in Malay Peninsula, Ceylon and Travancore. Flora Malesiana described that the species of *Trichopus* found in Malesia and Travancore as non-specific and named it as *Trichopus zeylanicus* ssp. *Travancoricus* (Bedd.) Burk.

Morphological Description of the Species

Small. Perennial herbs with many slender stems (5cm to 25 cm long) arising from a nodose rhizome. There is one terminal leaf on each stem. The long petiole appears like a continuation of the stem, leaves are dark brownish to grey purple, broadly triangular, ovate with acute or obtuse apex and basally cordate with a wide sinus, Flowers, small or medium bisexual, mostly one, fascicled at the base of the leaves, extruded from between the protecting scale leaves. Perianth dark-brown, sub-equally 6-lobed, Stamen 6 with subsessile anthers, filaments widening into broad connectives. Ovary inferior, 3 celled with two superimposed ovules in each cell. Stigma 3-lobed. Fruits are somewhat winged, triangular and indehiscent. The tender kernel of immature fruit is sweet to taste and has pleasant flavour. On ripening it becomes stony and unpalatable.

Ayurvedic Identity of the Plant.

Currently there is no information available on the Ayurvedic use or identity of this

plant. From a critical survey of the various ancient Ayurvedic classics, the authors have come across with some descriptions of a plant which matched strikingly with 'Arogyappacha' Sushruta, while dealing with the various divine drugs along with 'Some' also described one 'Varahi' – which he described as 'Kandha sambhava' – rhizomatous, 'Ekapatra' single leaves arising from a stem and 'Anjana samaprabha' – shining like the grey-black stone. The leaves and flowers of this plant shine like grey-black stone. Sushruta also described the plant that with its railing stem with the raised leaves appears – 'Krishnasarpa swarupena' – like a black cobra with its raised hood. Sushruta ascribed great rejuvenating property to the divine 'Varahi' which is very true of 'Arogyappacha'. Sushruta has also described the habitat of this plant as a shade loving herb found in the banks of rivers and natural ponds is also true to this plant. These descriptions given by Sushruta suggests that the divine 'Varahi' described by Sushruta may be about 'Arogyappacha', Sushruta has recorded the distribution of the divine 'Varahi' in Kashmir region, but has also mentioned that it may also be found in similar habitat of other mountainous regions in the country.

Phytochemical & Pharmacological Evaluation of 'Arogyappacha'

The antifatigue and spirit promoting properties of the fresh fruits of 'Arogyappacha' as claimed by the 'Kani' tribe are found to be true from the direct experience of the same made by the authors during their visit to the Agastyar hills. The other claims of the 'Kani' tribe on the efficacy of this plant as rejuvenating, age stabilizing, disease resistance building etc., are not supported by any evidence. However, in the light of the available proof

of its efficacy as anti-fatigue and spirit promoting drug, it offers great scope for scientific investigation and its possible medical application. A detailed scientific investigation which include chemical screening to isolate the active principles, coupled with its pharmacological screening (whole crude drug as such extract, isolates, fractions etc.) are now being planned to be carried out at the Regional Research Laboratory, Jammu. The fruits and the whole plant along with its rhizomes have been collected for this purpose

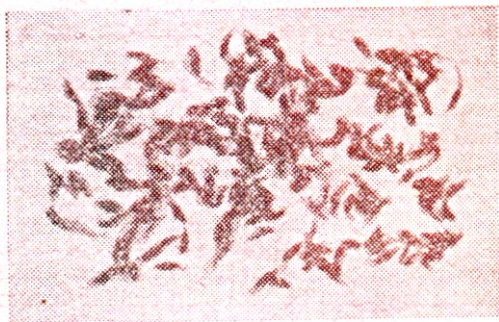


Fig. 2. The fruits of 'Arogyappacha'

The rapid recovery from fatigue experienced (by the authors) after consuming the fresh fruits of 'Arogyappacha' suggests its effects on neuro-physiological changes. The tonic effects this experienced is comparable to that of 'Ginseng'. This suggests that the other claims on the efficacy of 'Arogyappacha' as a protector of health by giving greater resistance to diseases and as elixir of life etc., may also be sometimes turn out to be true. This little known wild plant used by 'Kani' tribe may be the drug stocked in the dispensary of mother Nature for combating the most dreadful killer disease of man namely Acquired Immuno Deficiency Syndrome shortly known as AIDS.

Investigation of 'Arogyappacha' from Ayurvedic Point of View

The stereotype approach of modern medical research like phyto-chemical screening, isolation of single compounds active principles and pharmacological evaluation of compounds etc., are at time found to be inadequate or even futile efforts in evaluating the efficacy of traditional tribal medicines. It will be desirable, therefore, to evaluate the tribal drugs also from the point of view of those well organized traditional medicines like Ayurveda or Unani or Siddha. So, in addition to the routine modern chemical and pharmacological evaluation, the drug 'Arogyappacha' will also be subjected to evaluation from the point of view of Ayurvedic pharmacy and pharmacology (Dravya Guna Rasa Shastra) and the theoretical and conceptual foundations of Ayurveda (the Panchabhoota concept, constitutional types based on Tridosha theory etc.) The plant will have to be examined of its properties called Rasa (the 'Shadrasas'; the six tastes), Guna (the attributes of qualities which are eight in numbers), 'Veerya' (Potency), 'Vipaka' (the taste that comes out after the materials digested) and 'Prabhav' (the specific action) and then evaluate its relation as well as its reaction to the constitutional types (the 'Vata', 'Pitta' and 'Kaphah' balance in the body) of the body taken into account for correcting the vitiated 'Doshas'.

From the preliminary observation made by the authors the 'Arogyappacha' may be investigated as a drug belonging to the 'Svathahita' (that which helps to maintain positive health) group of drugs. Detailed Ayurvedic study on this plant is planned to be carried out at the AICRPE unit of Post Graduate-Cum-Research Centre in Ayurveda, Poojappura, Trivandrum.

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