

ON THE IDENTITY OF AND INDO-GREEK RELATION REFLECTED IN THE  
PLANT-NAMES AND USES EVINCED IN THE *KAUṬĪLIYA ARTHAŚĀSTRA*  
WITH PARTICULAR REFERENCE TO 'KIRĀTATIKTA' OF 'KAṬUVARGA'  
(GROUP OF SPICES)\*

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The critical study of the Flora of the *Kauṭīliya Arthaśāstra* has revealed many particular notices not evidenced elsewhere in the Indian texts and tradition, reflecting many a time Indo-Greek interaction in their ancient antecedental background in so much so that the supporting evidence for the correct identity of the plant species really meant by the name referred to in the *Arthaśāstra* is found in the Greek and other exotic sources and not traceable otherwise in the Indian texts, other than the *Arthaśāstra*, *Kirātatikta* is one example in this category, which has been discussed in this paper highlighting its correct botanical identity for the first time by the authors and also the Indo-Greek affiliations reflected in its ancient antecedents and whereabouts.

A critical study<sup>1</sup> of the Flora of the *Kauṭīliya Arthaśāstra*, in its rich information about the economic plants/plant products, has revealed many particular notices not evidenced elsewhere in the Indian texts and tradition, reflecting in many cases Indo-Greek interaction in their background in so much so that the relevant and connected evidence for the correct identity of the plant-species really meant by the name referred to in the *Arthaśāstra* is found in the Greek and other exotic sources and not traceable in the Indian texts otherwise, other than the *Arthaśāstra*. An exemplary case under this category is *Kirātatikta*, which is although in the subsequent ages recognised exclusively as an extremely bitter (तिक्त) drug, but on the contrary in the *Arthaśāstra*, it is enumerated in the *Kaṭuvarga* (group of spices)§ in association with popular spices like long pepper (*pippali*), black pepper (*marica*), ginger (*śṛṅgivera*), mustard (*śarṣapa*), coriander (*kuṣṭumburu*), Angelica (*coraka*), *damaṅka* and etc. The epithet *Kirātatikta* is based on its ethnic affiliation with the ancient non-Aryan Indian hill-tribe *Kirāta*, hence the application of this name to more than one plant-species having

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§'पिप्पलीमरिचमुष्णिगवेराजाजोकिराततिक्तगौरसशेषकुस्तुम्बुरुचीरकदमनकमरुचकामिषुकाण्डादिः कटुवर्गः ।'  
(कोटि० अर्ध०/ अधि०2/ प्रकरण 33/अ०15/पाठ 20)

the same affiliation is not improbable.<sup>2</sup> Such reminiscent glimpses in the context of *kirātatikta*, though scanty, are visualised at one or two places in the Āyurvedic *Nighaṅṭus* of early Medieval period belonging to the north-western India like *Dhanwantari Nighaṅṭu*<sup>3</sup> and *Kaiyadeva Nighaṅṭu*<sup>4</sup>, where *Kaiḍarya* in the former and *kaṭṭṛṇa* in the latter are also linked in between the lines under the caption of 'bitter *Kirātatikta*', reflecting thereby that in addition to the subsequent most popular bitter *kirāta*, there were some other plants also, but belonging economically to the category of spices, being of pungent (*kaṭu*) taste and due to their common basis and affiliation with the *Kirātas*, whose one of the professions was collection of forest produce of medicinal and various other economic uses and their dealing as intermediary in the marketing, might have also been known and prevalent under the same name epithet.<sup>5</sup> We come across the notices of the *Kirātas* separately and in association of other hill-tribes right from the Vedas onwards although the Indian texts, tradition and ethnography. In the *Atharvaveda*, a *Kirāta*-girl is depicted for collecting medicinal herbs from the forest areas. The *Kirātas* were probably primarily inhabiting the western Himalayan regions even in the very ancient times, where from they must have been gradually displaced by the waves of immigrant-hoards to diffuse in their newer settlements, in the north in interior of the middle Himalayas, and southwards in the Vindhya regions, eastwards and further southwards having their reminiscent concentration now in the north-eastern Himalayas. These *Kirātas* of the Himalayas and also of the Vindhyas have been noticed in various forms and contexts by the Sanskrit poets and writers of the classics in so much so that the *Kirātārjunīyam Mahākāvya* of the great Sanskrit poet Bharvi has this epithet in its title even.

In the context of plant-epithet, *Kirātatikta*, but for the above 2-3 indications, is exclusively known for its bitter taste getting a very predominant place in this category next to *nim* tree in the common folk. In the Āyurvedic literature and practice right from the *saṃhitās* although the later periods, it is a well recognised drug belonging to the category of the bitters and based on the virtues of its bitter *rasa* and also other properties, it has been recommended for various therapeutic uses; and as anti-malarial drug still sustains its popularity in the common folk. The maximum frequency of references of *Kirātatikta* is seen in the *Caraka Saṃhitā*, which shows gradual reduction in the *Suśruta* and *Aṣṭāṅga Saṃgraha*/*Aṣṭāṅga Hṛdaya Saṃhitās*, reflecting thereby the initial better knowledge, use and popularity of the epithet in the ancient north-western frontier India, the primary settlement areas of the *Kirātas*. It is worth-mentioning in this context that *chirettā*\* is still used to give bitter taste to *Chāṅg*, a country wine popular in the north-western Himalayan areas. This fact also reflects to the Himalayan habitat of this plant-species representing *kirātatikta*. Now the identity of

\**Kirātatikta* (Sanskrit) undergoing its colloquial phonetic transforms—*Kirāta* (Marathi): *Prākṛta* form: *Cirāta/ciretta* (किरातस्य चो भ्लेच्छायं किराले—प्राकृतसर्वस्व पाद/३२); *Apabhraṃśa*: *cilādā-cilāya* (भविसद्वत्कहा); चिरायता, चिरेले etc. is now popularly known in the whole of north India under चिरायता/चिराता/चिरेता. Botanically, it is represented by *Swertia chirata* Buch.—Ham. (Family: Gentianaceae) distributed in the temperate Himalayas (at the height of 4,000 ft.—10,000 ft.) from Kashmir to Bhutan and Khasia Hills (4,000 ft.—5,000 ft.).

*kaidarya* and *kaṭṭṛṇa* has been resolved, reflecting thereby that the *kirātatikta* of the *Kaṭu-varga* of the *Arthaśāstra* is represented by some plant other than all these. What it was then?

Looking to the politico-historical back-ground of the Mauryan period to which our learned author of the *Arthaśāstra* is supposed to have belonged, and the closer and friendly relations of Mauryan emperor with the Western World which was under the Hellenistic politico-cultural dominance, a search was done in the Greek and other exotic sources for the clues of *Chirāyatā*, if any. It was revealed that Dioscorides, the great Greek physician of that time has mentioned *Chirāyatā*<sup>7</sup> as a name for the aromatic and pungent drug *Calamus aromaticus* Gueldenst., ex Ledeb. [= *Acorus calamus* Linn. (Family: Araceae)], represented by the famous *vacā* of the Indian texts and tradition and the English Trade name 'Sweet Flag' of the western writers. The Greek name of *vacā* has been mentioned by Dioscorides as *akoros* (D.1.2) which seems to have become in its Latinised form, the basis of the generic name of the binomial nomenclature of *vacā*. But the notice of *Chirāyatā* in the Greek sources definitely reflects its Indian export and affiliation. It is worth-mentioning in this continuation of this contest that the 'Sweet Calamus' or the 'Sweet Flag', i.e. the said *Chirāyatā* representing *vacā*, is also noticed in the Bible as spice and its use for racking the guilty as he (Democritus) says, grows in the country of the Tradastily,\* an Indian race. It is a plant of the colour of amber and leafless. The root of it, if divided into lozenges and taken in day time racks the guilty.<sup>8,9</sup> This description and uses to much extent befit to *akoros* of Dioscorides and *vacā* of the Indian texts and tradition represented botanically by *Acorus calamus* L. (= *Calamus aromaticus* Gueldenst. ex Ledeb.) noticed by the Greek writers also under its probably trade name *Chirāyatā* based on its affiliation with the *Kirātas*, the intermediaries in its supply and transmission. Though *vacā* is known in the later periods synonymously under its many other suggestive names like *ugrā*, *ugragandhā*, *lomaśā* etc. based on its various attributes, but *vacā* seems to be the ancient most which seems althrough pervading† and sustaining its popularity and priority both in the texts and common usage and trade till day.<sup>10</sup> *Vacā* (*Acorus calamus*) is an aromatic plant of the marshy habitat, native to Europe, (and America) and distributed throughout India from the Himalayas (up to 6,000 ft.) to Ceylon. The plant is found wild and is also cultivated at places in Kashmir, Nepal and Manipur in marshy lands. Its aromatic rhizomes are collected in the Himalayas and available in the markets in grocers' and drug-dealers' shop all over India. It is worth-mentioning at this juncture that *vacā* was an economic plant of domestic use of the foresters of the Vindhya in the time of Emperor Harṣa, as has been enumerated with other such plants being grown in the kitchen-gardens of the forest settlement areas of the Vindhya, reflecting the prior affiliation and knowledge of their ancestor *Kirāta*—inhabitants of the north-western Himalayas.<sup>12</sup>

\*Now-a-days also main collection of *chirāyatā* is done in the Nepal and Himachal Pradesh.

†(Hindi) *vaca*, *ghoravaca* (trade); (Punjabi) *varca*, *varaca* (Uhal valley-Kangara) *vaca*, (Kashmir) *vai* (<*vaca*); (Gujarati) *vaja*; (Arabic) *al-vajfa* (*Ibn-Baitāra*).

The epithet *vacā* is originally met with indistinctly in the *Atharvaveda* (Av. VIII. 6.3.6; I.24) depicted as a repellent of some disease-Demon, reflecting thereby the pre-existing knowledge and use of *vaja* before the advent of these vedic Aryans. Its medicinal uses are not much noticed till the Āyurvedic *Samhitās*, wherefrom and onwards it is evinced although as an important drug-agent.

Based on the antecedental facts and evidences, *Kirātatikta* of *Kaṣṭha* of the *Arthaśāstra* has been identified by the authors for the first time with the *Cirāyatā* of the Greek writers and the *vacā* of the Indian texts and tradition which has been noticed as *akoros* by Dioscorides; and the Indo-Greek relations reflected by the ancient whereabouts and affiliations of the epithet *kirātatikta* is also highlighted. A critical study of the Ancient Flora of India on similar lines relating to other plant-species and epithets is also emphasised.

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