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STUDIES IN THE HISTORY OF TĀMBŪLA — USE OF
LIME (CŪRNA) AND CATECHU (KHADIRA) IN
TĀMBŪLA AND ITS ANTIQUITY — c.A.D. 100-1900

By

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After my paper¹ on the history of *Indian Nut-Cracker* (A.D. 1300-1800) was published, a friend of mine suggested that I should write a paper on the history of the *lime-pot* used for keeping lime or *chunam* by persons who eat *tāmbūla*, a combination of the *betel-nut*, *betel-leaf*, *catechu* and other spicy ingredients. I agreed to this suggestion and began to hunt up references to lime-pot in literary sources known to me. Unfortunately in the material about *tāmbūla* collected by me I could not locate any definite references to the lime-pot as such though we have reason to believe in the existence of some lime-pot since our ancestors began to use *chunam* or lime as an ingredient of *tāmbūla*. It is, therefore, necessary to prove the antiquity of *lime* (= *cūrṇa* in Sanskrit) as used in *tāmbūla* as also of *catechu* (= *Kāt* in Marathi) as the combination of the *chunam* and *catechu* in the mouth reddens the mouth of the person chewing *tāmbūla*.²

(1) Raghunātha Paṇḍita in his *Rājavyavahārakośa* (c.A.D. 1676) refers to *lime* as चूना (“चूना नाम भवेच्चूर्णम्”) and *lime-pot* as चुनाळ (“चुनाळः स्यात् चूर्णपात्रम्”) as I have already pointed out in any paper on the *Nut-Cracker* referred to above.

(2) The Marathi Dictionary called the *Śabdakośa* (by Y. R. Date and C. G. Karve, Vol. III, p. 1210) records the following words for *lime-pot* :—

“ चुनाळ, चुनाळ, चुनाळें ”

and derives them from Sanskrit चूर्ण + आलय (= चूर्णालय) = चूर्णपात्र of the *Rājavyavahārakośa*. So far I have not traced any usages of the चूर्णपात्र or चूर्णालय in the Sanskrit sources.

1 Bhārata Itihāsa Mandal Quarterly, Poona, 1948 pp. 8-14.

2 Cakrapāṇinītha in his *Bhāvopahāra* (Kashmir Sanskrit Series, No. 14, Srinagar, 1918, pages 36-37) refers to *tāmbūla* in the following stanza 39:—

“ स्वसंविद्धन्दनानन्द नागवल्लीदिलोज्ज्वलम् ।
स्फुरत्स्फेन्दुसुरभि ताम्बूलं ते निवेद्यते ॥ ३९ ॥ ”

The commentary of Ramyadeva Bhaṭṭa on this stanza explains *tāmbūla* as “ ताम्रभवामूलम् अखिलोपरञ्जकत्वात् ”. This etymology of *tāmbūla* needs to be examined. It is indeed highly imaginative.

The *Śabdakośa* does not record any usages for the words about *lime-pot* referred to above.

(3) The habit of chewing the *tāmbūla* is current in Indo-China. This habit has a great antiquity as I am informed by my friends at Hanoi, one of whom has sent me a version of a story about its origin which I am appending to this article. Consistent with this tradition is the discovery of a *lime-pot* at *Thanh-hoa* (in Northern Annam) by O. R. T. Janse, who led an expedition to Indo-China and the Philippines and published his report on it in the *Harvard Journal of Asiatic Studies* (June 1941). A photograph of this *lime-pot* will be found on Plate XXV. This *lime-pot* is one of the articles of the *Sung* and *Ming* dynasties discovered by Janse. Prof. P. K. Mukherji in his *Indian Literature in China and the Far East*, Calcutta, 1931, records the following chronology of the *Sung* and *Ming* dynasties in his list of the Translators of the Chinese *Tripitāka* — (Pages 3-4) — Later (Northern) *Sung* dynasty A.D. 960-1127 K'aifung (Honañ) — Southern *Sung* dynasty—A.D. 1127-1280—*Ming* dynasty—A.D. 1368-1644. It is not clear from Janse's Report whether the *lime-pot* belongs to the *Sung* or the *Ming* dynasty. We may, however, conclude that it belongs to the period A.D. 960-1644 and hence cannot prove the use of *lime* in *tāmbūla* in Indo-China prior to A.D. 960.

(4) In the article on *Chunam* in the *Hobson-Jobson* (by Yule and Burnell, London, 1903, pp. 218-219) we get the following dated references to the use of *lime* in *tāmbūla* :—

A.D. 1510—"And they also eat with the said leaves (betel) a certain *lime* made from *oyster shells*, which they call *cionama*."

—*Varthema*, 144

A.D. 1563—"...So that all the names you meet with that are not Portuguese are Malabar, such as *betre* (betel), *chuna* which is *lime*...."

—*Garcia*, fol. 37g

A.D. 1610—"Chunan"—Pyrard de Laval, ii. 84 (Hak. Soc. ii, 135).

A.D. 1614—"Having burnt the great idol into *Chunah* he mixed the powdered *lime* with *pān* leaves and gave it to the Rajputs that they might eat the object of their worship".

—*Ferishta*, quoted by *Quartremère*, *Not et*

.. *Ext XIV* 510.

A.D. 1673—"The natives chew it (betel) with *Chinam* (lime of Calcind Oyster Shells)"

—*Fryer*, 40

A.D. 1689—“*Chinam* is Lime made of Cockle-Shells or Limestone ; and *Pawn* is the leaf of a Tree.”

—Ovington, 123

These references³ clearly prove the use of *lime* in *tāmbūla* and in particular of the *lime prepared from Oyster Shells or Cockle-Shells*, which is even now used in some parts of India.

(5) From the reference to the use of *lime from Oyster Shells* in *tāmbūla* made by Varthema in A.D. 1510 we now turn to the section on *tāmbūla (tāmbūlabhoga)* of the *Mānasollāsa* (c.A.D. 1130) of king Someśvara. In this section the use of *lime from pearl-oysters* is prescribed for use in *tāmbūla* or *viṭaka* (Marathi *viḍā*) as follows :—

“मुक्ताशुक्तिभवं चूर्णी वीटकेषु निधापितम्”

[See p. 84 of *Mānasollāsa*, Vol. II (G. O. Series, Baroda, 1939)]

The use of *lime* in *tāmbūla* is thus clearly established from c.A.D. 1100 up to the present day.

(6) In the Tāntrika treatise on yoga called the *Siva-Saṃhitā* (3rd Edition, Pāṇini office, Allahabad, 1942) we find the following references to *tāmbūla* including a reference to “*Cūrṇa*” or *lime* :—
Page 32—The Yogī should try to attain success in yoga by the following means :—

“He should use clarified butter, milk, sweet food, and *betel without lime*, camphor, husked sweet grains, pleasant monastery or retired cell, having a small door etc.”

“घृतं क्षीरं च मिष्टान्नं ताम्बूलं चूर्णवर्जितम् ।

कर्पूरं निस्तुषं मिष्टं सुमठं सूक्ष्मरन्ध्रकम् ॥ ४० ॥”

On p. 58, however, *tāmbūla* has been definitely mentioned among the impediments of yoga as follows :—

“नारी शय्यासनं वस्त्रं धनमस्यविडम्बनम् ।

ताम्बूलं भक्षयानानि राज्यैश्वर्यविभूतयः ॥ ३ ॥

भोगरूपा इमे विघ्ना धर्मरूपानिमाञ्छृणु ॥ ६ ॥”

Trans.—“Women, beds, seats, dresses and riches are obstacles to yoga. *Betels*, dainty dishes, carriages, kingdoms, lordliness and powers etc. . . These are the obstacles which arise from *Bhoga* (enjoyment) etc.”

3 Bernier's reference (C.A.D. 1660) to *tāmbūla* may be added to the references from the Hobson-Jobson. It is as follows:—

“*Betel* is a small parcel made of aromatic leaves and other ingredients mixed up with a little of the *lime made from sea-shells*, this colours the lips and mouth red and agreeably perfumes the breath” (pp. 13-14 of *Travels*, London 1891).

Nārāyaṇatīrtha in his commentary *Yogasiddhānta-candrikā* (Chowkhamba Sans. Series, Benares, 1910, p. 100) refers to *tāmbūla* without lime in the following verse :—

“ कर्पूरं मधुरं स्निग्धं गन्धं ताम्बूलमेव च ।
चूर्णेन रहितं धातुपोषणं योगिनां शुभम् ॥ ”

(7) The earliest datable reference to the use of *cūrṇa*, or *lime* or *chunam* in *tāmbūla* so far traced by me is found in the section on Perfumes (*Gandhayukti*) of the *Bṛhatsaṃhitā* (c.A.D. 500) of Varāhamihira (Chap. 77, Verses, 35, 36, 37 dealing with *tāmbūla* — pages 612-613 of the Edition with Eng. Trans. by V. Subrahmanya Sastri, Bangalore, 1947). This reference is as follows :—

“ युक्तेन चूर्णेन करोति रागं
रागक्षयं पूगफलातिरिक्तम् ।
चूर्णाधिकं वक्त्रविगंधकारि
पत्राधिकं साधु करोति गन्धम् ॥ ३६ ॥ ”

Translation—“A moderate dose of *lime* used with betel-leaves gives good colour ; an extra quantity of areca nut spoils the colour ; excessive lime produces bad smell in the mouth, but an extra quantity of betel-leaf, pleasant smell.” Lime by itself with betel-leaf may not produce red colour in *tāmbūla* when chewed. At present deep red colour⁴ is obtained by the combination of *lime* and *catechu* (Marathi *Kāt*) in the *tāmbūla*. We must, therefore, record evidence about the use of *catechu* in *tāmbūla* from Sanskrit and non-Sanskrit sources.

(8) The *Suśrutasāṃhitā* (N. S. Press, Bombay, 1938) mentions the use of *cūrṇa* or *lime* in *tāmbūla*, in the following verse 21 of Chap. 24 of *Cikitsāsthāna*.

“ कर्पूरजातीकक्रोललवङ्गकटुकाह्वयैः ॥
सचूर्णैः सहितं पत्रं ताम्बूलजं शुभम् ॥ २१ ॥ ”

Tāmbūla is also mentioned in the following verses of Chap. 46 of the *Sūtrasthāna* :—

Page 249

4 The *Rājanighaṇṭu* of Narahari (c.A.D. 1450) refers to the dye-producing properties of *Khadira* (*Khadira-sāra*) or extract from the *Khadira* tree (*Catechu*) in the following verse (p. 13 of Ānandāśrama Edition, Poona, 1896) :—

“ खादिरः खदिरोद्भूतः तत्सारो रङ्गदः स्मृतः ।
ज्येयः खदिरसारश्च तथा रङ्गः षडाह्वयः ॥ ४१ ॥ ”

.....“ तस्माद्भुक्तेरितं कफम् ॥ ४८४ ॥
 धूमेनापोह्य द्वयैर्वा कषायकटुतिक्तकैः ।
 पूगकङ्कोलकपूर्लवङ्गसुमनःफलैः ॥ ४८५ ॥
 फलैः कटुकषायैर्वा मुखवैशद्यकारकैः ।
 ताम्बूलपत्रसहितैः सुगन्धैर्वा विचक्षणः ॥ ४८६ ॥ ”

(9) The *Carakasamhitā* also mentions *tāmbūla* in the following verses of Chap. 5 of *Sūtrasthāna* (p. 42 of N. S. Press Edition, Bombay, 1941) :—

“ धार्श्यास्येन वैशद्यरुचिसौगन्ध्यमिच्छता ॥ ७६ ॥
 जातीकटुकपूरानां लवङ्गस्य फलानि च ।
 कङ्कोलस्य फलं पत्रं ताम्बूलस्य शुभं तथा ।
 तथा कर्पूरनिर्यासः सूक्ष्मैलायाः फलानि च ॥ ७७ ॥ ”

There is no reference to *cūrṇa* or lime in the above ingredients of *tāmbūla* mentioned in the early medical text of the *Carakasamhitā*. We must go through the whole text of this work and see if *cūrṇa* as an ingredient of *tāmbūla* has been mentioned in some other context.

(10) The *Rājanighaṇṭu* of Narahari (c.A.D. 1450) records the following verses about *cūrṇa* on p. 132 of the *Anandāśrama* (Poona, 1896) Edition of this work :—

गुणाः — “ चूर्णी चार्जुनवृक्षजं कफहरं गुल्मघ्नमर्काह्वयम्
 शोफघ्नं कुटजं करञ्जनितं वातापहं रुच्यदम् ।
 पित्तघ्नं जलजं बलाग्निरुचिदं शैलाह्वयं पित्तदम्
 स्फाटिक्यं दृढदन्तपङ्क्तिजननं शुक्त्यादिजं रुक्षदम् ॥ २० ॥

ताम्बूललक्षणम् —

पर्णाधिक्ये दीपनी रङ्गदात्री
 चूर्णाधिक्ये रुक्षदा कृच्छदात्री ।
 साराधिक्ये खाद्विरे शोषदात्री
 चूर्णाधिक्ये पित्तकृत्पूतिगन्धा ॥ २१ ॥ ”

Verse 20 in the above extract mentions the properties of *cūrṇa* from the *Arjuna* tree, *Kuṭaja* plant etc. The *cūrṇa* from *śukti* (pearl-oyster) mentioned last in this verse is identical with the *lime* from oyster-shells used in *tāmbūla*. Verse 21 definitely deals with *cūrṇa* or *lime* and its use as also the use of *Khādirasāra* or *catechu* in *tāmbūla*. This verse may be compared with verse 36 in the *Gandhuyukti* section of the *Bṛhatsamhitā* quoted above.

(11) The *Aṣṭāṅgasamgraha* (c.A.D. 625 according to Hoernle, or 8th-9th cent. A.D. according to Prof. Dineshchandra Bhattacharya)

of Vāgbhaṭa definitely refers to *Cūrṇa* (lime) and *Khadira* (catechu) in *tāmbūla* in the following verses (34-38) of Chap. 3 of *Sūtrasthāna* (ed. by R. D. Kinjawadekar, Poona, 1940, p. 15) :—

“ रुचिवेशय सौगन्ध्यमिच्छन्वक्त्रेण धारयेत् ॥
जातीलवङ्गकर्पूरकङ्कालकटुकैः सह ॥ ३५ ॥
तांबूलानां किसलयं हृद्यं पूगफलान्वितम् ॥
रक्तपित्तक्षतक्षीणरूक्षोत्कुपितचक्षुषाम् ॥ ३६ ॥
विषमूर्च्छामदार्तानामपथ्यं शोषिणां च तत् ॥
पथ्यं सुप्तोत्थिते भुक्ते स्नाते वान्ते च मानेव ॥ ३७ ॥
द्विपत्रमेकं पूगं च सचूर्णखदिरं च तत् ॥ ”

(12) The importance of the medical properties of the *Khadira* (*Acacia Catechu*) and its products was recognized more than 2000 years ago as will be seen from the references to *Khadira* by Caraka, Suśruta, Vāgbhaṭa, Hārīta, Cakradatta, *Dhanvantari-Nighaṇṭu*, Vṛnda, Śodhala, Bhāvamiśra (*Bhāvaprakāśa*) etc. collected by my friend Vaidya B. G. Shah (Pages 452-458 of the *Nighaṇṭu Adarśa*, Part I, Ahmedabad, 1927). R. N. Khory in his *Materia Medica*, II, 184 records the *Actions and uses of catechu* as follows :—

“ Powerful astringent, stronger than Kino, anti-periodic and *digestive*. Its action is due to the *tannic acid* it contains. It is a powerful astringent to the mucous membranes, given in dyspepsia attended with pyrosis, and also diarrhoea in children ; in dysentery, intermittent fevers and scurvy ; as a gargle in hoarseness of voice and sore throat. Locally as a dusting powder, hypertrophied relaxed tonsils, ulcerated and spongy gums and to control passive haemorrhages. ”

(13) The combination of the decoction of the *khadira* (*Catechu*) and *Kramuka* (betel-nut) is prescribed in urinary troubles by the *Suśrutasaṃhitā* (N. S. Press, Bombay, 1938, p. 452) —*Cikitsāsthāna*, Chap. 11, Section 9 as follows :—

“ क्षौद्रमेहिनं कदर-क्रमुक-कषायं ... पाययेत् ॥ ९ ॥ ”
(variant “ खदर-क्रमुक-कषायं ”)

Kadara is explained as *white catechu* by the lexicons *Vaijayantī* (c.A.D. 1050) — “ सिते तु तस्मिन् कदिरः ” and *Medinī* (c.A.D. 1200-1275) — “ कदरः खदिरे श्वेते ”

In the *tāmbūla* also there is a combination of *kramuka*⁵ (betel-nut) and *khadira* (catechu).

(14) The *Carakasamhitā* (N. S. Press, Bombay, 1941) gives recipes of (1) a pill (*guṭikā*) of *Catechu* (*Khadira-sāra*) and (2) oil from *Catechu* in the *Cikitsāsthāna*, Chap. 26, verses 206-214 (p. 609). These recipes are prescribed for persons suffering from *mukharoga* (diseases of the mouth). The recipe of the *Khadira-guṭikā* contains numerous ingredients like चन्दन (sandal), लवङ्ग (clove), कक्कोल, जातिकोश (nutmeg or its outer covering), मञ्जिष्ठा, घातकी, एला (cardamom) etc. Some of these ingredients are used at present in *tāmbūla*. The verses referred to above begin with “तुलं खदिरसारस्य” and end with “खदिरादिगुटीकेयं तैलं च खदिरादिकम्.” In this *Khadira-Guṭikā* of Caraka we have the ancestor of our modern scented *Kāt-gōḷi* or *Catechu pill* used in *Tāmbūla*.

(15) The definite *Catechu pill* (*Kāt-gōḷi*) used in *tāmbūla* is described in detail by Someśvara in his *Mānasollāsa* (Section on *Tāmbūla* called *tāmbūla-bhoga*) — Vol. II (G. O. Series, Baroda, 1939), p. 85 :—

(खदिरगुटिका) — “खदिरकाथचूर्णं तु कस्तुरीक्षोदमिश्रितम् ॥ ९७३ ॥
 श्रीखण्डकल्कसंयुक्तं कर्पूररजसान्वितम् ।
 मलयित्वा समैर्भागैर्गुटिका कल्पिता शुभा ॥ ९७५ ॥
 त्रिदोषशमनी कण्ठ्या दन्तानां च बलावहा ।
 (खदिरसारमुखरजन) — अन्यत्खदिरसारस्य चूर्णं कोष्ठाम्लसंयुतम् ॥ ९७६ ॥
 जातीफलस्य चूर्णेन मिश्रितं मुखरजनम् ।
 जम्बीरवीजपूरस्य कलिकाभिः समन्वितम् ॥ ९७७ ॥
 कर्पूरपूर्वं खादेच्च तदनु क्रमुकान्वितम् ।”

The *catechu-pill* for king's *tāmbūla* contained *musk* (*Kasturī*), *Sandal* (*Sṛikhaṇḍa*), *camphor* (*Karpūra*), while the *catechu-powder*, used with *tāmbūla* contained powder of *nutmeg* (*jātiphala*), *camphor* (*Karpūra*) etc.

(16) In the light of the history of *Catechu* in *tāmbūla* recorded above the following notes from the article on *Catechu* in the *Hobson-Jobson* (London, 1903, pp. 173-174) would be found interesting :—

5 In the *Bodhāyanīyagṛhyaśeṣasūtra* (Mysore, 1920, P. 374 — *Praśna V*, Chap. 7 — *Vanaspati-homa*) worship of क्रमुकवृक्ष (betel-nut tree) is prescribed (“क्रमुकादिवृक्षान् अर्चयित्वा”). This text possibly belongs to 3rd or 4th Century A.D. (See p. XXIV of P. Harting's Edition of Selections from this text).

CATECHU also *CUTCH* and *CAUT*—An astringent extract from the wood of several species of *Acacia* (*Acacia Catechu*) the *Khair*, and *Acacia Suma*, Kurz, A.C. *Sundra* D.C. and probably more. The extract is called in H. *Kañh* (*Skj. kvath* 'to decoct') but the two first commercial names which we have given are doubtless taken from the southern forms of the word e.g. *Can. Kāchu*, Tam. *Kāsu*, Malay. *Kachu*. De orta, whose judgments are always worthy of respect, considered it to be the *lycium* of the ancients and always applied that name to it; but Dr. Royle has shown that *lycium* was an extract from certain species of *berberis*, known in the bazars as *rasot*. *Cutch* is first mentioned by Barbosa among the drugs imported into Malacca. But it remained unknown in Europe till brought from Japan about the middle of the 17th Century.

- Usages*: A.D. 1516 "drugs from Cambay... *Cacho*"—*Barbosa*, 191.
 A.D. 1554 — "...*Cate*... (at Ormauz) they call *Cacho*" —
A. Nunes, 22.
 A.D. 1563 — "... the wood vulgarly called *Cate*" — *Garcia*
f. 125.
 A.D. 1578 — "The Indians use this *Cate* mixt with Areca
 and with Betel and by itself without other
 mixture" — *Acosta Tract*; 150.
 A.D. 1585 — "Sassetti mentions *Catu* as derived from the
Khadira tree *i.e.* in modern Hindi *Khair* (Skt.
Khadira).
 A.D. 1616 — "*Catcha*"
 — *Foster, Letters*, 127.
 A.D. 1617 — "*Cacha*" (drug)
 — *Cook's Diary*, i. 294.
 A.D. 1759 — "*Hortal* and *Cotch*, Earth-oil and wood oil.
 — *List of Burma Products etc., Oriental Report*
i, 109.
 C.A.D. 1760 — "To these three articles (betel, areca and
 chunam) is often added for luxury what they
 call *Cachoonda*, a Japan-earth which from per-
 fumes and other mixtures, chiefly manufactured
 at Goa, receives such improvement as to be sold
 to advantage when reimported to Japan.....
 Another addition too they use of what they call
Catchoo, being a blackish granulated perfumed
 composition."
 — *Grose*, i, 238.
 A.D. 1813 — "The peasants manufacture *Catechu* or *terra*
Japonica from the *Keiri* (*Khair*) tree (*Mimosa*

Catechu) which grows wild on the hills of *Konkana* but in no other part of the Indian Peninsula" (erroneous)

— *Forbes, Or. Mem.* i. 303 (2nd Ed. i. 193).

(17) The *Khadira* plant has a great antiquity and sanctity. In the *R̥gveda* (Book III, Hymn 53) Indra is invoked as follows:—

"19. Enclose thee in the heart of Khayar (*Khadira*) timber, in the car wrought of *Śimsāpā* put firmness" (Griffith's Trans. Vol. I, 1896, p. 375).

Griffith's Note:—"Khayar-timber": the hard wood of *Khadira*, or *Acacia Catechu* of which the pin of the axle was made. *Śimsāpā*: *Dalbergia Sisu*, also a common timber tree.

It would require a special monograph to trace the history of the *Khadira* tree from the time of the *R̥gveda* upto the present day. This tree had great sanctity in ancient Indian sacrificial ritual as the sacrificial post was made of *Khadira* (*Khādīra-yūpa*). Kauṭilya in his *Arthaśāstra* (Chap. XVII of Book II on Superintendent of Forest Produce, p. 107 of Eng. trans. by Shamashastry) mentions among forest products (1) *Khadira* (*Mimōsa Catechu*) and (2) *Somavalka* which is white *Khadira* (see p. 625 of *Aṣṭāṅgharīdayakośa* by K. M. Vaidya, 1936—article on *Somavalkā* mentioned in the *Sūtrasthāna* of the *Aṣṭāṅgharīdaya*). The history of the economic products of India on the strength of Indian sources has not yet been studied systematically. Such history will have a respectable place in any comprehensive history of Indian Culture when it comes to be written. For this purpose each of these products must be studied separately from the historical and cultural point of view.

(18) *Berthold Laufer* in his *Sino-Iranica* (Chicago, 1919, p. 481) refers incidentally to *Catechu* as follows:—

"It is not intelligible to me why Hirth says that in the Ming dynasty (A.D. 1368-1644)⁶ *lu-wei* "Was, as it is now, *Catechu*, a product of the *Acacia Catechu* (Sanskrit *Khadira*)." No authority for this theory is cited; but this is quite impossible as *Catechu* or *Cutch* was well known to the Chinese under the names *er-Ca* or *hai'r-Ca*" (See *Stuart, Chinese Materia Medica*, p. 2; and *Laufer, Loan Words in Tibetan*, No. 107, where the history of these words is traced).

⁶ See list of Chinese dynasties with dates at the end of *Indian Literature in China and the Far East* by P. K. Mukerji, Calcutta, 1931 (p. 4 of the list).

(19) In Section 13 of Chap. 11 of the *Cikitsāsthāna* of the *Suśrutasaṃhitā* (N. S. Press, Bombay, 1938, p. 450) the author describes the method of gathering the juice of *Khadira* (*Acacia Catechu*) directly from the tree as follows:—

“ अतः खदिरविधानमुपदेश्यामः—प्रशस्तदेशजातम् अनुपहतं मध्यमवयसं खदिरं परितः खानयित्वा तस्य मध्यमं मूलं छित्त्वा अयोमयं कुम्भं तस्मिन् अन्तरे निदध्यात् यथा रसग्रहणसमर्थो भवति, ततः तं गोमयमृदा अवलिप्तं अवकीर्य इन्धनैः गोमयमिश्रैः आदीपयेद् यथा अस्य दह्यमानस्य रसः स्रवति अधस्तात्, तद् यदा जानीयात् पूर्णं भाजनम् इति, अथ एनं उद्धृत्य परिस्त्रान्य रसं अन्यस्मिन्पात्रे निधाय अनुगुप्तं निदध्यात् etc. ”

The *Khadira-vidhāna* or the method of gathering juice of *Catechu* prescribed above was as follows:— A *Khadira* tree growing on good ground and of middle age was selected and ground about its bottom was dug out. A cut was then made in its central root and a pitcher of iron or bronze (*ayas*) was so placed underneath as to admit the exuding juice. The pitcher was then besmeared with a mixture of cow-dung and earth and later kept in the midst of fire produced from (dried) cow-dung and other fuel. When the juice had boiled over, the pitcher was lifted up and the juice poured in a separate pot and kept properly covered.

The above method of gathering the juice from a *Khadira* tree so graphically described by *Suśruta* gives us a good glimpse of the processes employed by ancient Indians in the manufacture of herbal medicines.

(20) The *Yogarātnākara* (Ānandāśrama Sanskrit Series, Poona, 1900) is a voluminous medical compendium compiled between c.A.D. 1650 and 1725 as I have proved in my article on its date (Pages 154-156 of the *Bhāratiya Vidyā*, Bombay, 1943, Vol. IV). It contains a long extract of about 20 verses on *tāmbūla* (Verses 58-79 on page 35). The ingredients of *tāmbūla* mentioned in these verses are as follows:— (1) पूग (betel-nut), (2) कर्पूर (camphor), (3) कस्तूरी (musk), (4) लवङ्ग (clove), (5) सुमनस् (nutmeg), (6) ताम्बूलपत्र or पर्ण (betel-leaf), which should be पाण्डुर (whitish yellow), the betel-leaf from *Vaṅgadeśa* (Bengal) was the best (वङ्गदेशोद्भवं पर्णं परं कटुरसं सरम्”) (7) *Catechu* (*Khadira*), (8) lime or chunam (*Cūrṇa*). The verses pertaining to *Cūrṇa* and *Khadira* are as follows:—

“ खदिरः कफपित्तघ्नश्चूर्णं वातबलापनुत् ।

संयोगतस्त्रिदोषघ्नं सौमनस्यं करोति च ॥ ७१ ॥

पूगाधिकं प्रभाते स्यान्सध्याह्ने खादिराधिकम् ।

चूर्णाधिकं निशायां तु ताम्बूलं भक्षयेत्सदा ॥ ७२ ॥ ”

The properties of *tobacco* (तमाखु) are recorded in 7 verses on pp. 17-18. At present some people chew tobacco powder along with *tāmbūla* or separately. Verse 4 tells us that the use of tobacco is a remedy against diseases of the teeth (दन्तरुक्-शमनं) and that it is a germicide (क्रिमिकण्ड्वादिनाशनं).

The foregoing notes are sufficient to prove conclusively the use of *Cūrṇa* (lime), and *Catechu* (*Khadira*) as essential ingredients of *tāmbūla* for about 2000 years say from the first century of the Christian era upto the present day. Further evidence on this topic has been gathered by me and I hope to record it in a subsequent paper.

Appendix

(The history of the use of *tāmbūla* in countries outside India must be studied critically with a view to understanding the spread of its use in India many years before c.A.D. 400. In this connection I made inquiries of my friend Mademoiselle S. Karpeles, Secretary of Ecole Francaise d'Extrême-orient at Hanoi (Indo-China) and sent to her my paper on *Indian Nut-Cracker*.⁷ She replied promptly in her letter of 16th March 1949 as follows:—

“Here is the name of the *Nut-Cracker*” :

Laotian — “MITSĀNAK”

Vietnamese — “DAO DĀŪ”

Cambodian — “PRĀNAK”

The habit of *chewing betel* is *very ancient* and current throughout the whole Peninsula and herewith a *story about its origin found in old Vietnamese books* translated into French. It is Monsieur TRAN HAM TAN, who took the trouble to find it out.”

On getting the above story about the origin of *tāmbūla* I got it translated into English by my friend Dr. R. G. Harshe, Registrar, Deccan College Research Institute, Poona. This English translation is given below. I take this opportunity of recording my best thanks to Miss Karpeles, Mr. Tran Ham Tan and Dr. Harshe for their hearty co-operation with me in the present inquiry about the history of *tāmbūla* in *Greater India*.

7 Prof. R. M. Bhusari has drawn my attention to a genuine Marathi word for the *Nut-Cracker* viz. पोफळफोडणा (*Pophal-phoḍanā*) mentioned in a Mahānubhāva Marathi text of the 13th Century viz. लीळाचरित्र (Edited by H. N. Nene — उत्तरार्ध, p. 100).

The Life-story of Tan and Lang.

(by Mr. Tran Ham Tan Hanoi).

Formerly there lived a Prince, Quan-lang, who had an imposing stature. He received the title of "Marquis of Cao" as title of nobility. Since then he took *Cao* as the family name. His two sons *Tan* and *Lang* resembled each other so much that one could not distinguish the elder from the younger. At the age of 17 or 18 they became orphans and went together to seek a preceptor for teaching them religion and philosophy. The daughter of their preceptor *Lùn Huyên* was also of 17 or 18 years of age. When she saw the two brothers she fell in love with them. Wishing to marry one of them, she did not know as to who was the elder and who the younger of the two. She gave both of them a single cup of meat-soup and one only pair of sticks in order to know the elder and the younger. The junior passed all these things immediately to the senior. She then requested her parents to marry her to the elder one. The couple sometimes lived away from their little brother. The younger brother felt it very much and saying to himself that his elder brother being in love with his wife had forgotten his brother on that account and without informing his elder brother he returned to the paternal house. Coming to a deep stream at which there was no ferry he sat all alone and wept grievously and died; then his dead-body was transformed into a tree: the *areca*.

When the elder one did not see any longer his younger brother he abandoned his wife in order to go in pursuit of him; coming to the place where his younger brother had died, he threw himself on the tree (i.e. *areca*) and died; his dead body was transformed into a huge stone, attached to the trunk of this tree. When the young wife marked the disappearance of her husband, she went in his pursuit; coming to the place she learnt that her husband was already dead, whereupon she threw herself on the stone and embraced it till her death. She was transformed into a *Creeping stock* which braided over the tree and the stone and from which were produced the odoriferous (*sweet-smelling*) leaves. They were the *leaves of the betel*.

Their parents (relatives) came there very much distressed and built a temple in their honour. At the temple, the passers-by offered to them, the incense sticks, praised their brotherly love and the conjugal duty of the victims.

In the month of autumn the king Hung made a journey to this place. Seeing this temple with the tree surrounded by the creeping stalks he asked for its reason and being supplied with the

information made the *fruit* and the *leaf* to be brought to him. He chewed them and spat its *juice* on the stone which was of a *red colour* and which emitted a good smell. The king returned taking with him a *fruit of areca* and a leaf of betel prepared with a little *lime* he chewed the betel and the areca-nut. He even ordered that these newly discovered plants be planted in his kingdom and declared that *at marriages and feasts one ought to prepare a present consisting of the betel leaves and the nuts of areca.*⁸

[This took place under the dynasty of the *Hung-Vuong* — (2880-258 B.C.)]



8 In India also we distribute *Pān-Supāri* (betel-leaf and betel-nut) to all guests at marriages, feasts and all social and cordial functions. Do we owe this custom to Indo-China and other countries adjacent to India?