

NOTES ON THE SCENTED WOODS OF THAILAND.

BY A. KERR.

Information on the scented woods of Eastern Tropical Asia is to be found in three dictionaries of economic products covering much of that area; namely, Watt's of India,¹ Burkill's of the Malay Peninsula² and Crevost & Petelot's of Indochina,³ not to mention those dealing with the Malay Archipelago. More recently Metcalfe has written a paper on Scented Woods from the East.⁴ There is still, however, much to be learned about those of Thailand, and obscurities in their nomenclature to be cleared up. It is hoped that these notes, in showing something of what is known, may induce others to investigate the much that is unknown concerning these scented woods; particularly points that can be only studied on the spot.

The trade in scented woods is now of much less relative importance than in former days, but it still continues. Its beginnings go back to very early times, when the Arabs were voyaging between the West and the East. Chinese traders were probably still earlier in the field, and to-day hold the major part of the trade.

Most of these woods are not scented in the fresh healthy state. The scent in some cases is developed as a result of disease in the living tree, in others it does not appear till the tree has fallen and lain dead in the forest for some years. A few woods are fragrant in the fresh state: such as *tepataro* (เทพทาร์), *Cinnamomum Parthenoxylon* Meissn., *puton* (ปู้ตั้น), *Cinnamomum siamense* Craib and others, chiefly belonging to the family Lauraceae. These are not of great value commercially or medicinally, at least as far as their fragrance is concerned, and need not be considered further here.

True sandal-wood, obtained from *Santalum album* Linn., a wood that is fragrant in the fresh state, does not occur in Thailand. It is often imported from India, being much used at cremations, and is known by the Sanskrit name *Chan* or *Chandhana* (จันทน์). Though India produces the bulk of commercial sandal-wood, it is an introduced tree there, as Fischer⁵ has shown; so the name *Chandhana* when it occurs in the older Indian literature must refer to some other species. In Thailand the word *chan* is used in connection with a number of scented woods, and is also applied to the nutmeg. Under

จันทร์ in the Ministry of Education Dictionary there appears the name *Sirium myrtillifolium*, which is a synonym of *Santalum album*.

The appellation *hawm* (หอม) is more particularly applied to the tree producing eagle-wood, but it may at times be used for several of the other species, yielding scented woods.

The words *kawn daw* (ขอมดอ) require some explanation. They imply a kind of disease, evidenced by irregular passages and cavities, filled with disorganised tissue, in the wood. This disease is found in several different trees and gives the affected wood a certain fragrance. There is no great trade in such woods, which are chiefly used for medicinal purposes.

It should be noted that the local name of the same tree often varies from district to district, while the same name may be applied to different species in different districts.

The following are the chief scented woods known in Thailand, given in the alphabetical order of their botanical names:

***Aglaia pyramidata* Hance.**

This tree, and its scented wood, is known as *Chan chamot* (จันทร์ชะมด), which might be translated 'musk sandal.' It is not uncommon in the forests of Prachinburi district and also found in Cambodia and Cochin-China. Its scented wood is used medicinally and is not an article of commerce.

***Aquilari crassna* Pierre?**

This species is very closely related to the Indian species *Aquilaria agallocha* Roxb., about which there is a voluminous literature. In Thailand the tree is known as *mai hawm* (ไม้หอม), while the scented wood it yields is called *kritsna* (กฤษณา), a word derived from Sanskrit. It is found most abundantly in the provinces of Chanthaburi and Trat, both on the mainland and on some of the larger island off the coast. *Kritsna* is the best known of all the Thai scented woods, and was a royal monopoly, till that, with other monopolies, was given up by King Mongkut. Nearly all the early European writers mention it under a variety of names, such as *agila* or *aquila wood*, *agallochum*, *eagle-wood* and *lignum aloes*. Watt¹ gives *calumbac* as an alternative name for the Indian wood. Some of the older writers on Thailand give *calumbac* as another name for eagle-wood, others state that it comes from a different species of tree.

The Sanskrit name for the Indian tree, and its product, is *agaru* or *aguru*. No name resembling *kritsna* has been found applied to the Indian tree, yet it seems that that name must have been derived from an Indian source. The name is, no doubt, very old. The earliest reference found to its use is by Kaempfer⁶ in 1712. Kaempfer gives a description of how the scented wood occurs, and states the choice pieces are called *calamba*, while others are called *kissina*. Watts gives the Siamese name for eagle-wood as *nwalmi*, and, moreover, enumerates, as one of the three kinds of eagle-wood found in the Indian market, *Siam* or *marwadhee*. The only suggestion the writer can make as to the origin of these names, which are not in use in Thailand, is that Thai eagle-wood may have reached Burma, and eventually India, by way of the Burmese frontier town Myawadi, which hence gave its name to the product. The route from Thailand to Burma via Myawadi is a well known one, much used by traders in the past. The name *kritsna*, or a corruption of it, is also applied to this wood in Cambodia and CochinChina. No doubt the specific name given to this species by Pierre is so derived.

The scented wood, as is well recognized, is developed as the result of some kind of disease. It is only found in a small percentage of trees, and in them often only in quite small quantity. Nor can it be ascertained with certainty that any tree has such wood, till it is felled and cut up. There are various theories about the cause of this disease, but most of them are mere speculations, with very little foundation in fact. It may be of interest to give Koenig's account,⁷ derived from local informants at Chantabun in 1779: "The stem, when perfectly sound, does not furnish this valuable wood, or at least not the kind so much sought after in trade, but the birds, which come to peck at the fruits, break the branches and in these places a kind of blight is thus originated, the plant begins to sicken and the sap is irregularly distributed, so that there is more in some places, whence it grows resinous. The tree dies, and the ants gnaw the loose, much putrified wood and build their nests in it." He is hardly correct in saying the tree dies, as most of the scented wood is obtained by felling living trees. Crevost and Petelot,³ speaking of the tree as found in the southern part of the Annamite Range, give another account, which may be roughly translated as follows: "This wood results from a molecular change in the heart-wood caused by a disease induced, as they say, by the decom-

position of bird-droppings in the forks of the branches." The same authors go on to tell us that the name *eagle-wood* is derived from the plumage-like markings on the wood. A more probable view is that the appellation *eagle-wood* is ultimately derived from the Sanskrit *agaru*, which became in Portuguese '*pao d'aguila*' and in French *bois d'aigle*, as suggested by Burkill.²

***Celtis cinnamomea* Lindl.**

The smell that may develop in wood after its death is not always a pleasant one. The wood of this tree, known as *ki praruang* (ขี้พระร่วง) in Thai, and *hat yuang* (หาดเชียง) in Northern Lao, after it has fallen and lain some time in the forest, has a most unpleasant faecal odour. The tree is not uncommon in the hill forests of the northern provinces. The wood is used medicinally and as a protection against evil spirits. It is of no great commercial value.

***Dracaena Loureiri* Gagnep?**

This is a fairly common plant on many of the limestone hills of the districts from Ratburi to Ubon, and also extends to Annam and Cochinchina. In this country it is known as *chan deng* (จันทน์แดง). Occasionally, but apparently not often, scented fragments of wood are found in large old specimens. The wood is chiefly valued for medicinal purposes.

***Eugenia cumini* (Linn.) Druce.**

This common and widespread tree, known in Thai as *wa* (หว้า), is sometimes affected by *kawn dawk*, so producing *kawn dawk mai wa* (ขอนดอกไม้หว้า).

***Euphorbia antiquorum* Linn.**

A curious cactus-like succulent, known as *salat dai* (สลัดไต), forms part of the characteristic vegetation on limestone hills in most parts of Thailand. Rarely, at the base of old fallen trees, pieces of scented wood are found. Such wood is known as *kalampak* (กะลัมปาก). Whether this is the *calambac* of the older writers or not is uncertain, but it seems to be the only wood called so at the present day in Thailand. Nicolas Gervaise⁸ tells us "The *Agila* wood, *Calambuc* wood and *Calambac* wood are found in the forest on the Cambodian side. They are the most valuable and rarest in the Indies, because nature has hidden them in the heart of a tree which produces them only at a certain time. It is not easy to know them.

Therefore it is a common thing for one to make a mistake; and often many trees are cut down without the search proving fruitful. *Agila* wood is the commonest; that of *Calambuc* not so common, but there is none so rare as *Calambac*." We have seen what *Agila* wood is, and what may be the *Calambac*, but *Calambuc* is rather a puzzle. There is a common tree, found on low-lying ground in many parts of Thailand, *Randia uliginosa* Poir., which is known as lumpuk (ลุมพู), or kalampuk (กะลัมพู). It is possible that this tree may occasionally yield scented wood, but such has not come to the knowledge of the writer. On the other hand there is the possibility that Gervaise's names refer to different grades of eagle-wood.

A description of scented wood obtained from *Euphorbia antiquorum*, as well of some of the other woods mentioned here, is given by Metcalfe in the Kew Bulletin for 1933.

Hymenocardia Wallichii Tul.

This small tree, called *feb* (เฟบ), sometimes yields *kawn daw* *mai feb* (ขอนดอกไม้เฟบ). Like the other *kawn daw* woods it is of little commercial value, being used chiefly in medicine.

Lagerstroemia floribunda Jack.

This is another common tree, for which the Thai name is *tabek* (ตะแบก), that may be affected by disease, so producing *kawn daw* *mai tabek* (ขอนดอกไม้ตะแบก).

Mansonia Gagei J. R. Drummond.

At the present day this is perhaps the most important commercially of Thai scented woods. The tree, yielding it, is found on some of the limestone hills in the southwest corner of Nakhonratsima Province and, more plentifully, on the hills bordering on Tenasserim from Ratburi province to Surat. In Nakhonratsima the tree, and its wood, is called *chan kao* (จันทน์ขาว) or *chan hawm* (จันทน์หอม), in Prachuapkhirikhan and Surat it is known as *chan chamot* (จันทน์ชมด), *chan pama* (จันทน์พม่า) or *chan hawm* (จันทน์หอม). The Burmese call it *kalamet*, which the Thai speaking people on the Burma side of the border render *karame* (การามะ). The appellation *chan pama*, or Burmese sandal-wood, sometimes given to it in Prachuap, may be due to the demand for the wood that came from the Burma side. The tree is a fairly large one, whose wood in the fresh state is without

fragrance. After a tree has fallen naturally and lain for some years in the forest, its wood develops a distinct fragrance. It is from these fallen trees that the product is obtained. As the tree is more or less plentiful, a considerable quantity of the wood can be obtained, the most costly business being its extraction. It is now often used as a substitute for true sandal-wood. The wood is sometimes loaded on ships at Prachuapkhirikhan and sent round by sea to Rangoon, being transhipped in the Straits. An account of the trade in the wood in Burma will be found in a paper by Prain in the *Journal of the Linnean Society*, London.⁹

Mimusops sp.

One variety of *kawn daw* is *kawn daw mai pikun* (ขอมดอกไม้พิกุล), probably derived from the commonly cultivated *pikun* (พิกุล), *Mimusops Elengi* Linn.

Tarenna hoacensis Pitard.

This is usually a rather small tree, known as *chantana* (จันทนา), and in Trat province also as *chan kao* (จันทน์ขาว). It is not uncommon in dry evergreen forests in the provinces bordering the Gulf from Trat to Surat, and also extends to CochinChina. The writer has been able to find no published statement that it may yield scented wood. This fact, however, is well known to the local inhabitants wherever it grows, and has been recorded by most collectors. According to local information, such wood is only obtained from fairly large trees. It is said not to be of commercial value, but is used for medicinal purposes.

There is yet another tree yielding scented wood, found in Trat province, which the writer has not been able to trace. It is called *chan deng*, but is not in any way related to *Dracaena Loureiri*, listed above, also usually known by the same name. It is said to be used in medicine, but not to be an article of trade.

Samples of many of the woods mentioned in these notes may be seen at the Economic Museum.

References:

1. Watts, G. *Dictionary of the Economic Products of India*. London 1885-1894.
2. Burkill, I. H. *Dictionary of the Economic Products of the Malay Peninsula*. London 1935.

3. Crevost, Ch. and Petelot, A. Catalogue des Produits de l'Indo-Chine. Vol. V. fasc. 2. Hanoi 1935.

4. Metcalfe, C. R. The structure and botanical identity of some scented woods from the East. Kew Bulletin 1933, pp. 3-15.

5. Fischer, C. E. C. Where did the Sandalwood Tree (*Santalum album* Linn.) evolve? Journ. Bombay Nat. Hist. Soc. XL 458-466. 1938.

6. Kaempfer, E. Amoenitates Exoticae. Lemgo 1712.

7. Koenig, J. G. Journal of a voyage to Siam and Malacca in 1779. Journ. Straits Br. Roy. As. Soc. Nos. 26 and 27. Singapore 1894.

8. Gervaise, N. Natural and Political History of Siam. English transl. by H. S. O'Neill. Bangkok 1928.

9. Prain, D. *Mansonia Gagei*. Journ. Linn. Soc. Lond. XXXVII. 250, t. 10. 1905.

