

MISCELLANEOUS NOTES.

No. I. An Edible Mountain-Stream Alga.

Under the names dok hin (rock flower) and kai hin (rock egg) the people of the Chiengmai region in North Siam designate small, dark green spheroidal plants which grow in abundance in clear, cool streams attached to the top, sides, and under surfaces of stones and boulders. The plants when apparently full-grown are 10 to 15 mm. in diameter, and have a bladder-like form, a gelatinous consistency, and rather thick walls that are complete except at the place of attachment to the stones.

These plants are rather extensively eaten by the local people. On the Mekhan, a mountain stream southwest of Chiengmai, on February 8, 1932, four men from the nearest village were observed scaping or pulling the plants from the rocks with their fingers and holding them in baskets and loose-mesh bags attached to their waists, their combined product at the time of observation being over two liters. The plants are prepared for use by boiling, and are eaten with sugar, salt, or dried prawns.

Specimens preserved in formalin were submitted to the Department of Botany of the British Museum, and the assistant keeper of that department, Mr. Geoffrey Tandy, reported thereon as follows under date of August 19, 1932:

The plant belongs to the Myxophyceae (Cyanophyceae, blue-green algae) and to the family Nostochopsidaceae. I have no hesitation in referring it to the genus *Nostochopsis* Wood, but I am not quite certain that it ought to be called *N. lobatus* Wood which came originally from North America. A plant has been reported by that name from Sumatra and I think you may use it in good company. By its hollow thallus it is distinguished from other species of the genus, and if it is not *N. lobatus* I think it will need a new name. It is a very interesting plant taxonomically and I am glad to have had the opportunity of seeing it.

HUGH M. SMITH.

Bangkok, October 5, 1932.

No. II. A Poisonous Horseshoe Crab.

Two species of horseshoe crabs or king crabs abound in the waters of Siam, namely, *Tachypleus gigas*, of which *Limulus moluccanus* is a synonym, and *Carcinosecorpius rotundicauda*. Both of these are called *mangda*. The former, however, which is essentially a marine species, is known as *mangda tale*, while the latter, which is a creature of the estuaries and can live in water that is practically fresh, is called *mangda fai*, *mangda tuey*, and *hera*. The *hera* is readily identified by the presence of conspicuous hairs on the

back and tail, and its size is smaller and its eggs are smaller than in the other species.

Horseshoe crabs are commonly used as food in the coastal districts. While there is little available "meat", the green unlaidd eggs form a considerable mass and are much esteemed. The important point is that while the flesh and eggs of *Tachypleus* are wholesome, the flesh and eggs of *Carcinoscorpius* are highly poisonous and have been responsible for numerous deaths. The tissues of the *hera* contain a powerful alkaloid which acts very quickly on human beings and domestic animals.

During the past few years I have received information regarding various fatalities among people who have eaten *Tachypleus* through ignorance; and it seems important that its poisonous nature should be made known to the people by the local authorities in all the lower river and coastal districts. The following cases will show the deadly character of this species:

On December 31, 1925, at 7 a. m., three prisoners in Changwad Cholburi, Southeast Siam, partook of the eggs and flesh of three king crabs. In half an hour symptoms of poisoning began to appear: dizziness, nausea, headache, numbness of lips, fluttering of heart, loss of voice, feeling of heat in mouth, throat, and stomach, inability to lift arms and legs, drowsiness, and exhaustion. The man who ate most freely of the crab died at 11 p. m. The two others were out of danger in six hours, but even the next morning the pulse was weak, the heart was beating only 58 times per minute, and the temperature was 96° F. The shells from which most of the flesh had been eaten by the men were thrown to a mother dog with a young one, both of which were affected; they could not walk; and the young one died, but the mother recovered.

In June, 1928, a girl 11 years old, living in Changwad Chacherng-Sao, Monthon Prachin, Southeast Siam, ate a king crab. Ten minutes after eating, she became dizzy and began to vomit, and her jaws became stiff; and in about one hour she died. The local physician of the Department of Public Health investigated the case and reported that the king crab eaten by the girl was of the kind called *mangda tuey* or *hera*, its back and tail being covered with hair; the crab was roasted and eaten without admixture with any other kind of food: the girl had the symptoms and died as stated; a dog to which scraps of the crab were thrown was made sick but recovered by the next morning.

A third case was that of two brothers in Tambon Krok Krak, Changwad Samud Sakorn, Monthon Rajburi. At noon on February 19, 1932, they went to fish their pongpang net in the Tachin River, and when they returned home they brought a king crab of the kind known to the people as *mangda tuey*. The crab was cooked and eaten. One brother vomited, had convulsions, and died about three hours after partaking of the crab; the other brother had the same

symptoms and died an hour later. The local physicians reported that death was the direct result of eating the *mangda*, called *hera* by some people and characterized by having hairs on its tail.

HUGH M. SMITH.

Bangkok, October 7, 1932.

No. III. Yellow-banded Leaves in *Saccolabium giganteum*.

In the present possession of Phya Bhakdi Narong of Bangkok there is a specimen of the white-flowered variety of the orchid *Saccolabium giganteum* whose leaves have both the margins banded yellow, up to half a centimetre in width, and have in addition one or two narrow longitudinal stripes of similar colour next within either marginal band, the remaining stripes being pale green as in the leaves of ordinary specimens. This interesting sport is said to have been brought as a very young plant, with the variegation already plainly evident, from the forest of Wieng Chan, in the French Laos, about sixteen years ago.

As the specimen appears singular, it would be interesting if readers could cite other instances of the kind elsewhere.

PHYA WINIT WANANDORN.

Bangkok, 20th December 1932.

No. IV. A Reputed Rejuvenator.

It is interesting to note that in the last number of the Supplement Dr. A. Kerr has made some reference to a drug under the above title afforded by the root tubers of *kwao kua* (*Butea superba*), concluding with an appropriate remark that if the drug soon drops into oblivion, as most of such drugs do, we may take it that the claims made for it are baseless, and that on the other hand it may turn out a serious rival to monkey-glands.

The *kwao kua* drug, in its compound with honey, it may be said, has been used as a general tonic by some people in Northern Siam for some years. The issue in 1931 of Luang Anusarn's pamphlet, in which different ways of compounding the drug were prescribed and many miraculous virtues of it proclaimed, however, created a vogue in its use as a rejuvenator. Now the vogue has subsided and we do not hear much about this precious drug. The cause of the subsidence is of course obvious. But whatever the general opinion to the contrary as to its value may be, the drug is nevertheless known to have actually expressed the following powers:—developing the breasts, inducing menstruation (or something like it) in women of 60–80 years of age, causing a regrowth of hair on bald