

## MALAY MEDICINAL USE OF PLANTS<sup>1</sup>

CHRISTINE S. WILSON

*Department of Epidemiology and International Health  
University of California  
San Francisco, CA 94143*

**ABSTRACT.**—Use of plants for medicinal purposes was observed and recorded during extended study of the effects of culture on diet and health in a Malay fishing village. Beliefs about properties of plants and their parts were elicited by informal questioning of inhabitants and unstructured interviews of traditional healers. Treatment that was efficacious appeared to result from empirical experiences. Some uses were based on imputed heating or cooling properties of the substances, others were magical.

### INTRODUCTION

Earliest written literature in the Malay language was in Perso-Arabic script (Winstedt 1969), which probably was brought to the Peninsula by Muslim traders from Arabia and India, who had been active in the region beginning about the tenth century, A.D. Although their religion, Islam, received impetus for spread in this part of Southeast Asia when the Sultan of Malacca was converted in 1414 (Burling 1965), there is evidence for earlier Islamicization in Terengganu, on the Malayan East Coast, where the present research was conducted. A stone or stele with religious instructions in Malay in Arabic script, found in this century in the ancient capital, Kuala Berang, is believed to have been inscribed in the 14th century, although there have been disputes among scholars on the actual date (Coedes 1968, Winstedt 1969, Syed Mohd. Naguib 1970). Despite a subsequent literature of folk tales, legends, histories, legal digests and poetry (Winstedt 1969), traditional Malaya herbals seem not to have been produced in Malay. Writings on medical topics were limited prior to extensive influx of Europeans into the region.

A body of systematic information on Malay use of plants in medical treatment was recorded by bilingual English civil servants in the 19th and 20th centuries. Skeat's *Malay Magic* (1900) and Burkill's *Dictionary of the Economic Products of the Malay Peninsula* (1966) are familiar to ethnobotanists and anthropologists who have worked in Malaya. Burkill's two volumes in particular have pertinent information for researchers in the tropics in pharmacology, ethnobotany and anthropology, as well as in medicine and nutrition. Gimlette and Thomson's *Dictionary of Malay Medicine* (1939) and Gimlette's *Malay Poisons and Charm Cures* are also germane to this topic. Because Gimlette's two works were initially published 40 to 60 years ago, and reprinted in the Oxford-in-Asia series (1971), they may be less known to western researchers.

This paper presents a more recent Malay folk pharmacopoeia than that found in the foregoing publications. I learned of it during ethnographic study of diet and health in a Terengganu fishing **kampung** (village) on the East Coast of the Peninsula. These treatments, orally transmitted from generation to generation and resembling those cited by Gimlette and Thomson (1939), were in use in the late 1960s and early 1970s during my first two study periods in the community. Their persistence may be related to continued practice in the village by a number of traditional medicine men—**bomoh**—and two traditional midwives—**bidan kampung**—who prescribed roots, barks, leaves and other plant parts for a variety of disorders that were locally perceived to be alterations of normal health. These treatments were seldom administered singly as medications are prescribed by western medical professionals. Instead they were accompanied by charms,

spells or incantations, and by "blowing" (*tiup*, a practice that may, if prolonged, put the medium into a state of trance), in the manner described by Skeat (1900) and Gimlette and Thomson (1939). Villagers also prescribed these medicines for self-diagnosed conditions, and recommended them to family and friends.

Neither the pharmacopoeia nor the compendium of perceived illnesses presented here is complete. Medical problems and their treatment, save for those affecting diet and nutritional status, were not the primary focus of my research. This paper is based on what I observed or learned regarding *kampung* approaches to illness in day-to-day conversations with villagers, supplemented by semistructured interviews conducted with the traditional healers.

### THE KAMPUNG AND ITS PEOPLE

This community of seafishers and their families, totalling just under 600 people, was economically and dietarily dependent on the sea. Fish was the chief source of income and the major contributor of dietary animal protein. The diet was typically a meal of large amounts of rice with smaller quantities of fish prepared in one or more ways, a relish of chili peppers and prawn paste, and an occasional side dish of vegetables, eaten twice a day. (Breakfast was considered a "snack," and was most often a Malay cake and coffee.) The population by its own account was generally healthy, and medical and dietary surveys made in the village confirmed this belief (Wilson 1970, Wilson *et al.*, 1970). There was, however, a certain amount of complaining, some of which probably was psychosomatic in nature, a legitimate way in which to get individual attention in an otherwise egalitarian society.

These Malays, in common with other Southeast Asians, adhered to a folk medical system based on Hippocratic-Galenic humoral theories, that, together with their Islamic religion, was brought to them by the Arabic traders and other followers of Mohamed. This system assigned "heating" and "cooling" qualities to foods, ingestants, disease states and physiologic alterations or abnormalities (Wilson 1981). These Malays categorized meat, eggs, tapioca (manioc, *Manihot utilissima*),<sup>2</sup> coffee and certain common spices as "hot," fruits and vegetables as "cold." They considered rice and fish, the backbone of the diet, to have neutral qualities. As has been noted for other societies that hold these beliefs (Foster and Anderson 1978), consumption of foods to which these qualities were imputed was increased or restricted only when it was felt that the individual's physiologic state required such an alteration due to illness or a marked change such as pregnancy (Wilson 1981).

Medicines, like other ingestants, were categorized within this humoral system. They included *pinang*, "hot" betel nut (*Areca catechu*, properly a seed), chewed throughout South and Southeast Asia in a quid containing calcium carbonate powder made from chalk or pounded seashells, and gambier, essence of the leaves of a woody vine (*Uncaria gambir*), wrapped in a leaf of the pepper *Piper betel*. The alkaline calcium carbonate releases an addictive, mildly narcotic substance from the nut. It may therefore be considered to have pharmacologic properties, although its chief use in this village, aside from an oral activity, was as a "hot" substance chewed by women after child delivery, when eating and using "hot" things was recommended. Old folks in the village reported they sometimes chewed *sireh* (Malay word for the pepper leaf and, by extension, the quid) to clean their teeth. The quid and most of the saliva it stimulates were spat out. The nut is known to have vermifugic properties (Burkill 1966).

DATA COLLECTED: MALAY-PERCEIVED DISORDERS  
AND THEIR FOLK TREATMENT

In the second phase of this research, when I was well acquainted with and accepted by the village, a medical student from my university and I queried four of the **bomoh** in the **kampung**, using open-ended interviews to learn how they classed and perceived health disorders. Much of this paper is based upon excerpts from those interviews. Some of what they reported I had not read of previously or encountered in the country. I was unable to define or translate some of their terms into English using standard Malay dictionaries (Winstedt 1965, Wilkinson 1969). East Coast word usage and pronunciation differ from those of other Malay speakers (Brown 1935). In translating some of the statements of these men I had to guess meanings of particular phrases or words from context. I am, however, reasonably certain of the correctness of the information which this paper reports.

I have pointed out previously (Wilson 1981) that Malays resemble people in other emergent nations in recognizing some of the serious disturbances of health westerners define as diseases, while at the same time possessing an array of folk-defined disorders. Preferred treatment of the latter was **kampung** medications of "natural" substances such as plant parts administered together with the use of **jampi** (spells)—magical incantations or invocations, done by the practitioner in a trance-like state—and censing (**rabun**, passing the patient or afflicted part through smoke), all performed by an experienced **bomoh**. The medicines used were considered **penawar**—antidotes.

Each **bomoh** specialized to some extent. The esteemed elder **bomoh** had practiced full-time for many years and was expert in treating mental disorders. Of the three who functioned on a part-time basis one used only **jampi**—spell-saying and "blowing"—and **air tawar**, water over which incantations had been said. He used no medicines by **kampung** or western definition. There was otherwise general agreement among these men regarding types of medicines to be used and conditions for which these medications were indicated. A few examples may illustrate (Table 1).

**Beguk** or **bengkak**—swellings of the throat or neck. Whether actually mumps, goiter, or nonspecific swollen lymph nodes, these conditions were treated by washing the affected part with a liquid made from bark of a tree they did not name, soaked in water.

**Bengkak dalam**—swollen prostate. This was treated by "hairs" of the bamboo tree (a species of *Bambusa*), sometimes mixed with roots or medicinal powder, taken internally. Such Malay medicines were also recommended for testicular problems.

**Seduan**—upper respiratory infection. The local description of this condition closely resembled sinus infection. Characterized by a clogged, stopped-up nose, and thought to be caused by **badi**, an "evil influence," it was treated by giving the fruit **sentul** (*Sandoricum indicum*, which is not nutritionally remarkable). Alternatively the sufferer recited a prayer to Allah or King Solomon while bathing, at the same time throwing water on the nose. Liquid from roots or wood not specified by villagers was also applied externally. Despite frequency of mild upper respiratory infections, **seduan** was much feared as having the potential to lead to damaging, irreversible conditions. (*Seduan* was defined by Gimlette and Thomson (1939) as a serious malady such as lupus or syphilis.)

**Sawan**—this Malay-defined affliction of small children was seen as two different syndromes in this village. The first was thrush, or stomatitis, an infection of the mucous membranes of the mouth caused by the fungus *Candida albicans*. An infant whose relatives believed he was suffering from this "hot" disorder was treated by rubbing on his abdomen the cut end of a young coconut. A powder made from leaves of the **kemunting** (rosemyrtle, *Rhodomyrtus tomentosa*) and **gajus** (cashew tree, *Anacardium occidentale*; Fig. 1) together with a cashew bud was first placed on the coconut.

TABLE 1.—Some Malay-defined illnesses and treatments.

| Disease or condition  | Treatments  |
|---|---|
| <b>Beguk</b> (swelling of throat, neck)                         | External: Liquid from (unnamed) tree bark   |
| <b>Bengkak dalam</b> (swollen prostate)                         | Internal: Mixture of bamboo "hairs" ( <i>Bambusae</i> ) with unnamed roots  |
| <b>Seduan</b> (upper respiratory infection)                     | External: prayers while throwing (unnamed) bark or root liquid on nose<br>Internal: <b>Sentul</b> ( <i>Sandoricum indicum</i> ) fruit                                     |
| <b>Sawan</b> (thrush, infant disorder) (first definition)       | External: Powdered leaves of rosemyrtle ( <i>Rhodomyrtus tomentosa</i> ) and cashew ( <i>Anacardium occidentale</i> ) rubbed on stomach using cut-open young coconut      |
| <b>Sawan</b> (convulsions, infant disorder) (second definition) | External, preventive: Amulet ( <b>tangkal</b> ) on cord fastened on neck, wrist, ankle, or abdomen  |
| <b>Cacing</b> (intestinal parasites)                            | External, preventive: <b>Tangkal</b> as above<br>Internal: coconut water, "blessed" water, <b>kuini</b> (horse mango, <i>Mangifera odorata</i> )                          |
| <b>Batuk</b> (cough)  | External: Steam with or without <b>raja</b> ( <i>Dracaena congesta</i> ) root infusion, liquid from <b>cermai</b> (Malay gooseberry, <i>Ciccada acida</i> ) root on chest |
| <b>Demam</b> (fever)  | External: Steam<br>Internal: <b>Raja</b> ( <i>Dracaena congesta</i> ), other roots in liquid, "blessed" water   |
| <b>Barah</b> (cancer; boils)                                    | External: Poultices of leaves, <b>medang</b> (laurels), <b>gaji baju</b> tree (unidentified)  |
| <b>Kurap</b> (ringworm)   | External: Leaves of <b>kupang</b> shrub ( <i>Cassia alata</i> )   |



FIG. 1.—Cashew tree in a *kampung* dooryard showing fruit buds and leaves.

The second condition diagnosed as *sawan* by these Malays was convulsions. Villagers thought they were caused by the individual being startled in sleep, and feared they might be fatal to babies. This "hot" disorder was diagnosed locally by the condition of the child's mouth and tongue, and by frequent crying. Convulsions in toddlers were prevented by fastening an amulet or charm—*tangkal*—around the child's neck, wrist, ankle, or more commonly the abdomen, "when the baby teeth finish coming"—at the age when the child began to walk, 18 months to 2 years. The amulet was made by the *bomoh*, who "blew" on it to make it efficacious. It consisted of a small piece of cloth containing numbers and words or verses in Arabic from the Koran, into which some "spiced vegetables from the shop" (not specified) were sewn. The cloth portion of the amulet, which was about 1.25 cm,<sup>3</sup> was attached to a cord. The *bomoh* fastened it on the child. It remained in place for several years until it fell off, when its protective powers were assumed to be no longer needed. A few villagers said the *tangkal* were used to prevent children from becoming *amuk* (frenzied) or surly.

The two clinically different manifestations of *sawan* seen in this community may be due to local mispronunciation of the correct name of the first condition described. Termed *sawan* in the village, it should more properly be called *seriawan*, Malay for thrush or sprue. The full Malay name for thrush is *sakit seriawan lidah* (Gimlette and Thomson 1939), literally thrush illness (of the) tongue.

*Cacing*<sup>3</sup>—worms. *Tangkal* were more commonly fastened on toddlers to prevent *cacing*, a nonspecific term for ubiquitous intestinal parasites that westerners would, nonspecifically, call "worms." *Ascaris lumbricoides*, the common nematode roundworm, was the most prevalent, although hookworm and *Trichuris trichiura*, whipworm, were also present (Wilson 1970). Medically, it is sensible to fasten the amulet for this purpose at this age, since this is the time the child begins to run about, away from the comparative cleanliness of the family home, and to encounter a variety of parasitic organisms in the

environment. Parents recognized "worms" as a cause of appetite depression. Some knew that certain "worms" could be acquired from going barefoot out of doors, and urged footgear on their children when leaving home. Those whose offspring had become infested bought liquid vermifuge from a local shop, if they could afford it. One of the **bomoh** reported that an effective means of ridding a child of worms was to feed the fibrous wild mango called **kuini** (*Mangifera odorata*). He believed the fibers would "net" the parasites and sweep them from the intestine, but he warned the treatment would also cause stomach ache. Other village worm remedies were to drink coconut water, which is sometimes considered **bisa** (poisonous), and **air tawar**, water which had been "blessed" by incantations and blowing. One of the **bomoh** thought worms could cause fever in children.

Malays used to believe that intestinal pin-worms or thread-worms (**cacing kerawit**) could rise to a child's eyes. They blamed these "eye worms" for the drying and clouding of the cornea, known medically as xerosis, that results from prolonged vitamin A deficiency. Excellent sources of provitamin A such as papaya, together with the animal protein food needed to transport this vitamin in the body—fish, eggs—were prohibited to children because these foods would be "too stimulating" to the worms (McKay 1971), spurring them to **naik mata** (rise to the eyes). The senior **bomoh** riveted the attention of the interviewers by commenting that "cloudy sight" in a child (corneal opacity, another symptom of vitamin A deficiency) might be cured by goat liver, which we knew to be an excellent source of vitamin A. However, his use of it was magical rather than medical—he smeared the material on the eyelid. Whether any of the vitamin in the liver could be absorbed through the skin or enter the tear duct, subsequently to reach the blood stream for transport to the eye, remains to be determined.

**Batuk**—cough. Several cures for cough were reported that made use of plant parts. Some were self-administered. The elder **bomoh** used a western folk treatment, steam from the tea kettle. He also recommended taking syrup or drops intended for children that could be bought from the shop, or external application of a powder "like stone" to the chest. Another **bomoh** put the root of a shrub called **raja** (*Dracaena congesta*) into hot water to make steam. A third said cough comes from **kembang**, swelling in the stomach. He treated it with a mixture of tree roots and the seed of basil (**selaseh**, *Ocimum basilicum*), and rice, to be taken internally. Self-treatment of cough usually involved making a liquid from bits of tree roots and bark, to be drunk or applied externally to throat and chest. One root that was identified was that of the Malay gooseberry tree or **cermai** (*Cicca acida*).

**Demam**—fever. Malays perceive a number of different types of fever. The elder **bomoh** treated the type caused by "spiritual fire" (possibly spirit possession) by unspecified Malay medicines and steam from the kettle. Another **bomoh** thought the fever that occurred in the dry season following monsoon flooding was caused by **kuman**, germs, a case of syncretism with western ideas. He showed us a variety of **ubat kayu penawar**, wood and root antidotes suitable for treating fever. He could not remember names of all the trees from which they came, but they included pieces that were black, yellow and white, all of which could be "eaten" (ie., made into a decoction and ingested) for fever. One tree he knew was **raja**, the *Dracaena* mentioned above. The **bomoh** who treated only by incantation and "blowing" would make **air tawar** to be drunk by a child with fever. He also "blew" on the sick child. His pragmatic approach to treatment was suggested by his remark, "Sometimes it works, sometimes it doesn't."

**Panas kepala**—"hot" head. For the "hot" head that accompanies colds in children, one **bomoh** used shots and leaves, apparently as poultices. He called the plant he used for this purpose **baji kepala** (meaning "split head"). The plant could not be identified. Small wood shoots were also used.

**Pening kepala**—dizziness. Small wood shoots made into a decoction were given for "reeling head," another rather common Malay-defined affliction. This condition more than others cited appears to be about equally psychosomatic and physiologic in origin.

**Barah**—cancer. East Coast Malays fear cancer as much as western people do. However, their word for tumor also means abscess or boils. The old **bomoh** indicated there were nine kinds of **barah**. He treated some with external applications of material from the tree **gaji baju**, which I was unable to identify (the name translates "wage shirt"). He also made poultices of many kinds of laurels (*Lauraceae*), called **medang**.

**Other folk ailments**—a few other Malay-defined health problems may be mentioned. Women often complained of **medu**, nausea or heartburn accompanied by flatus and eructation, that they believed was caused by eating "cold" things—fruits and vegetables—or sour foods, which were "bad luck." Treatment, aside from avoidance of such foods, was to take a pill (possibly a commercial antacid), followed by coconut water to counteract any bad effects of the pill. Some people described digestive disorders as "**ta' sedap makan**," eating wasn't tasty. They blamed these conditions on constipation, but they may well have been due to the presence of intestinal parasites, or the normally spicy diet. **Kudis**, infected scratches, or lesions caused by the scabies mite (*Sarcoptes scabiei*), to which children were particularly susceptible, was believed to come from the bones, and could only be cured by the **bomoh** by "blowing" and incantations. Some disturbances of child health that were not readily diagnosed by local people were treated by censings—the child was passed back and forth through smoke from a fire into which tobacco or herbs had been sprinkled. **Kurap**, ringworm, as well as other frequent forms of fungal infections of the skin caused by *Tinea* organisms that left scaly depigmented lesions, was also thought to "come from within." Leaf poultices were recommended, though they were seldom observed in use. The leaf of the leguminous **kupang** shrub (*Cassia alata*) was cited by Gimlette and Thomson (1939) as having antiparasitic effects on ringworm.

A **bomoh** specializing in treatment of toothache applied to the victim's cheek a solution of the calcium compound (burnt seashells) that is chewed in the betel quid. Other villagers made their own leaf poultices for aching teeth, asked the investigator for aspirin, or applied medicated adhesive plasters available in local shops to the painful jaw.

#### MALAY TREATMENT OF WESTERN-PERCEIVED DISORDERS

Despite a long list of Malay-defined illnesses, of which the foregoing are a selection, these Malays correctly recognized certain diseases familiar to westerners. These included **puru** (yaws), which they thought came from hell, **batuk kering** or dry cough (tuberculosis) and **campak** (measles). The latter was sometimes confused with more generalized red rashes called **penyakit awal**. Villagers distinguished between "real" smallpox—**cacar betul**—and chickenpox—**cacar air**, water blisters—and knew one could get "shots" (injections, *cucuk*) as a preventive against the former. They recognized nine different types of malaria (**demam kura**, literally "spleen fever"), including the hot and shivering phases, although their categories were based on the relative degree and type of fever accompanying the disease rather than on variations perceived in the condition itself. They were aware that the condition involved splenic enlargement; the **bomoh** massaged the abdomen with oil to help shrink the spleen.

Villagers knew that diabetes (**kencing manis**, sweet urine), obesity and high blood pressure (**darah tinggi**, "high blood") were public health problems. Although Gimlette and Thomson (1939) do not mention use of the following plants for these conditions, **kampung** people indicated that the **jering** (*Pithecolobium lobatum*) and **petai** (*Parkia speciosa*), beans or pods from two trees of the mimosa family that smelled strongly of garlic and were taken in season as side dishes at meals, were effective treatment for

diabetes (Fig. 2). Both legumes are diuretic. They contain volatile oils and probably alkaloids as well (Burkill 1966). They are worthy of further study of the compound or compounds responsible for their seeming pharmacologic properties.



FIG. 2.—Bunches of pods of *petai* beans for sale in main market, Kota Baru, Kelantan, surrounding women on lower right.

#### MALAY PERCEPTIONS OF DIAGNOSES AND WESTERN MEDICINES

It is probable the East Coast Malay attitude toward illness and its treatment will change increasingly toward western diagnoses and medications with modernization, inevitable after recent institution of offshore oil production. At the time this research was conducted (1968-71), *kampung* people believed there were disorders the doctor could cure and others better handled by the *bomoh*. *Kampung* medicines might not always be swiftly efficacious, but the attention that accompanies treatment is well known to be palliative, even curative in some cases. Because they were chiefly plant parts, villagers saw Malay medicines as minimally harmful to an invalid, whereas doctor's pills, potions and shots were considered *ubat panas*, "hot" medications that could harm someone suffering from a "hot" illness such as fever or rash. Doctor's medicines, which to these Malays included over-the-counter cough drops, worm medicines, medically impregnated adhesive plasters, *minyak angin* ("wind oil," camphorated oil), gentian violet, and various kinds of tonics—all latter-day introductions—were nonetheless used quite freely, often without professional medical instructions to do so. It was important, however, in their minds, not to take any of these "hot" medications and *kampung* remedies at the same time, for the two different types of medicines would war inside, causing the indisposed consumer to become *mabuk*—drunken or dizzy. The kinds of foods eaten while taking doctor's medications also needed to be chosen with care, as



has been detailed in an earlier paper [Wilson 1981]. Different *kampung* treatments could be taken together without fear of consequences, even though some—barks especially—were “hot” while leaves were “cold.” The “cold” types of village remedies, it was indicated, were best for *bisa* (toxic) illnesses, chills, fevers, headaches, or dizziness.

The villagers as well as the *bomoh* and *bidan* knew some conditions were better treated by scientific medicine and its practitioners. For example, severe cases of malaria and complications of pregnancy were better cared for and more readily resolved by western-trained health professionals. Both *bomoh* and *bidan* were prompt to refer serious illnesses or injuries to *ospital* (hospital). Along with the *kampung* people, however, these traditional healers felt that some of their treatments, such as frequent massaging instead of immobilization of broken limbs, were better than those of the doctor. Western medical science now recognizes that this traditional treatment of injured bones speeds recovery.

A mix of traditional *kampung* treatments and “modern” store-bought medications was emerging in this part of Malaya by the 1970s. Traveling salesmen of various nostrums, ancient and modern, Malay, Indian and Chinese, appeared at weekly markets or public celebrations, touting their remedies like patent medicine men in the U.S. in time gone by [Wilson 1981]. These purveyors of potions used microphones and amplifiers along with entertainment to capture an audience. One of the more recent introductions was *panisilin* (penicillin), which could be bought in local shops in the 1970s, and was taken without prescription as a universal cure-all. Other western treatment favored among Malays was “shots.” People believed that a shot existed for every ill, and should be sought, if *kampung* treatment failed, from the doctor or government clinic.

The pragmatism of these Malays in choosing medical treatment is further and perhaps best shown by two personal observations. A village school teacher came home from Kuala Lumpur where he was taking courses, with a number of remedies, wood chips, herbs and powders, that he had bought for his family’s use from a Chinese apothecary. When my premedical colleague and I interviewed the senior *bomoh* we asked him if Chinese medicines were good or not. He said, “yes, they are good, too,” indicating that they were commendable according to Islamic religion, and their preparation was the known trade of their formulators. “Can Malay people use Chinese medicines?” we asked. “Certainly,” he replied, “there is nothing wrong (with them), they can use (them) all.” In medical usage, if not politically, these fishing peasants were multiethnic as well as pragmatic.

#### FOODSTUFFS AS MEDICINES

A number of herbs and spices with which western cooks are familiar were recommended by *bomoh* and villagers for their curative powers. Anise and cumin (*jintan manis* and *jintan puteh*, *Pimpinella anisum*, *Cuminum cyminum*), ginger (*haliah*, *Zingiber officinale*), cinnamon (*kayu manis*, *Cinnamomum zeylanicum*) and similar “hot” spices served as tonics. Liquid made from cinnamon bark was smeared on cuts. *Selaseh* or *kemangi* (*Ocimum basilicum*, *O. sanctum*), basil, was used as a decoction or in poultices, as was *medang*, laurel leaves.

Some vegetable foods were also used medicinally. Sweet shoots (*cekur manis*, *Sauropus androgynus*), manioc leaf, and swamp cabbage or water convolvulus (*kangkung*, *Ipomoea aquatica*), taken as meal vegetables, were also used in plasters and potions, as was fragrant pandanus (*pandan wangi*, *Pandanus tectorius*), bean leaf, hibiscus leaf (*bunga raya*, *Hibiscus rosa-sinensis*) and the leaf of the *gelam* (paper-bark tree, *Melaleuca leucadendron*). Eating garlic was recommended for stomach ache, and for joint pain when mixed with bean sprouts and bamboo shoots. Ginger taken internally was considered good for fatigue. Fenugreek (*halva*, *Trigonella foenumgraecum*), boiled as a drink, or a drink made from seven young cashew leaves plus some of the bark, were recommended

for upset stomach. The *kemudu* or *mengkudu* (*Morinda elliptica*) was considered good for conditions requiring "hot" medication, and the leaf of the aromatic *tanjun* (*Mimusops elongi*) tree was said to be good for headache.

Not all inhabitants of the village used traditional remedies from plants. One plant food that was a universal panacea was the ubiquitous staple, rice. It was always urged on a sick person as a conveyer of strength and restorer of energy and well-being. Soft-boiled rice actually is soothing to an upset digestive system; this simple carbohydrate is more readily digested in illness than other foods available to Malays. Rice powder (from pounded raw grains) in water was used as an antidote called *tepung tawar*, as magic in ceremonies and in some of the medical treatments outlined above.

### CONCLUSION

Although neither the *bomoh* nor I was able to name or identify all the species of trees, shrubs and herbs from which the traditional healers of this village obtained medicinals, plants and their parts were viable items of the pharmacopoeia of this peasant fishing village. This research, which was neither intensive nor extensive, illustrates the pragmatic approach of traditional peoples to medical problems and their cures. They sought the most efficacious remedies. If one did not work, they tried another, crossing ethnic and cultural boundaries to do so. Thus their inclusion of Chinese remedies as cognates of their own village medicines was more surprising to me than to them. How long this eclectic use of the medications of another population group has been going on may be a matter of interest to some historian of Chinese herbal medicine.

Since the research reported here was conducted, more modern ways have come to the East Coast in the wake of proliferating economic and technologic change accompanying successful offshore oil production. The senior *bomoh*, who was in his 80s when he was interviewed in 1971, has died, as have two of the younger men whose data have been used in this report. The fourth no longer practices. The two *bidan kampung* have retired. There are still *bomoh* in the region and the village, but their help is sought by villagers only for conditions the western-trained clinic, hospital and medical practitioners are not able to alleviate. Malaysian government health education has more successfully persuaded many *kampung* people to seek "scientific" medical care for more of their ills.

There is need to analyze further some of the traditional medicinal treatments used by peoples in emergent societies such as this one before their village-perceived efficacy is forgotten, or the ways in which they have been used disappear from memory.

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## NOTES

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<sup>2</sup>Plant specimens were identified with the aid of the following botanical publications: Holtum (1954), Johnson (1965), and Burkill (1966).

<sup>3</sup>In August 1975 Indonesia and Malaysia agreed officially to adopt the same spelling for their common language. As was the case before this agreement, words are spelled phonetically. By the newer accord the letter "c" represents the sound formerly written as "ch" in Malaysia and "tj" in Indonesia. The hard "k" sound of the letter "c" is represented by "k" in the binational orthography.