

A Hermit's Pharmacopoeia: Or Primary Botanical, Animal, and Mineral Sources for Survival and Bigu to Battle Corpse-Worm Infestation & Chu Pathogens



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Introduction

Here are some of the primary sources of substances used in ascetic practices, psycho-spiritual detoxification regimens, macrobiotic dietics, as well as survivalist and hermit contexts. The latter, intentional reclusion or isolation from the comforts of society would indicate a rugged individualist that for one reason or another (famine, social unrest, spiritual callings) has desired to retire from the world. The implications of no help, “without a net” autonomy are dramatic. Meeting or conquering the food side of the survival equation would be a chief concern to the hermit and many of these substances, uncultivated plants for wild-crafting, would be exploited to this end. Thus it may be said that the adept would endeavor to meet the brutal struggle for survival on his own terms and through his own skills rather than be dependent on society or the state. This pragmatic approach combines with the spiritual dietary complex (*fu shih*) of macrobiotics and macrobiogens.

It will be noticed that many of these plants (etc.) are psychoactive or toxic and many are also diuretic, purgative, or anthelmintic, or all of these things. The Daoist affinity for the wild, exotic and rare plants may stem from a suspicion of things cultivated or a metaphysics that equated “wild” characteristics with primal sources of power or *qi*. Toxic effects in many cases may have been viewed as success, but no doubt some adepts successfully navigated the thin line between poison and medicine. Many identifications

are tentative, provisional, or otherwise generalized from sources intentionally vague to downright cryptic and occult in the secrecy of the identity of their alchemical formula. Confusion, mistranslation, overlapping nomenclature and disagreeing taxonomies changing names and popular identifications only increase the problems. Many transcend categories of food, medicine or entheogen. The category of *bupin* (*bu* “repair”/ “substance” *pin*) as foods that are taken to tonify may be classified as macrobiotic or extended to include medicines that fight *chu* pathogens (related complexes of pathogenic corpse-demon-worms) to those that untie “embryonic knots”.

Some entries are short due to lack of references while others are brief because they will be the subject of a separate monograph, such as cinnabar for example. Precise references are omitted as they are burdensome in a “herbal” but a bibliography will be presented below. It must be noticed that “avoidance of grains” had a symbolic power that enhanced an adept’s prestige and the ability to abstain was also retroactively applied to saints. Depending on one’s orientation and opinions of internal and external alchemy, many of these substances might be classified as inferior both to some supreme elixir or magic fungi/fruit/talisman and/or to subtle methods of imbibing and circulating *qi*. Other sources insist upon a period of *bigu* before ingesting the elixir, in a process that is similar to the *dieta* of ayahuasca shamans and Vegetalista in South America.

I am of the opinion that the mythology of magic plants and fungus, such as the Vedic Soma and indigenous Chinese traditions, evolved into elixir alchemy in a mutually influencing environment with India. I speculate that elixir alchemy met with the notion of corpse-worm-demons, perhaps in a remote period, and this tended to shape alchemical Chinese elixir theory, dietics and macrobiotics. So much of the study of alchemy is off the mark in the misunderstanding of just what was its primary objective. It was not, as popularly assumed, simply a misdirected obsession of making or faking gold. It was primarily concerned with medicines, immortality, and thus some understanding of the natural/spiritual reality (blending it with notions of enlightenment). But the focus on longevity and the relationship with the chief culprits of disease and death, the Three Worms, must have informed Chinese elixir theory. Substances that would grant longevity, health or immortality would arise from the anthelmintic pharmacopeias and merging with psychoactive plants (that lift the spirit to immortal realms, and many arrest hunger during visionary experience), “enduring substances” (resins, metals, minerals like mica, cinnabar etc.) that were symbolically associated with longevity because of some quality, or perceived ancient providence, and famine foods.

To this could be added subcategories such as appetite suppressants, products esteemed for their foreign or exotic source, or ones that are so toxic that the adept simply can not eat. The height of Chinese elixir alchemy finds recipes in which plants that overlap all these designations. The majority of the elixirs, diets and talismans are thought to expel the Three worms *sanchong* and other biospiritual parasites such as the *fushi*, *chu* pathogens, and untie the embryonic knots (best discussed by Robinet and Strickmann).

I believe that “taking to the mountains” amounted to almost a technical term that meant actual reclusion on a peak or cave or retirement to a simple oratory (with psychoactive incenses). Health “gymnastics” (*daoyin*) herbal alchemy, and pragmatic exploitation of flora and fauna in extreme survival situations, which was often a microcosm of the larger social ills of a tumultuous Chinese society, combined and evolved into a practical approach to hermit life. The true hermit, at the mercy of

elements and hunger, would circulate his energy and abide in calm serenity, if he or she was a true Master... Otherwise, and especially to the neophyte hermit, the situation could get rather dire. The wonderful work of Bill Porter, which inspired the equally satisfying documentary *Amongst White Clouds*, chronicles some of the stories of the few remaining hermits in China. Here one can hear gripping tales of a female hermit near starvation in winter, barely subsisting on pine needles and scrounged roots firsthand. One can view tiny, ramshackle hermitages and see the dedication and fortitude required for such a life. (It is easy to see how self-heating “yoga” arts, like the Tibetan *tumo* were very practical arts and certain Daoist bellow-breath techniques produce similar levels of body heat when done with intensity.) Many of the modern hermits depend on the kindness of local laypeople’s support, as was the case in ancient times no doubt, but a few “advanced” masters take no food nor help. Some remain perfecting themselves today despite the cultural purge of the Red Army. (One asked Porter, who is this Chairman Mao?)

Any suggestions or corrections please email, deteasoc@gmail.com Presented for informational purposes only of course; all source transliterations are source dependent. This paper will be updated often.

“Immortals meet at the Incense Burner”



Aconitum carmichaeli, *Aconitum chinensis*, spp. *Or fu tzu* autumn root, monkshood, wolfsbane. A toxic, but in the rights hands, medicinal and psychoactive plant, much used in TCM. It is often combined with cinnamon bark, and fresh water turtle-shell to nourish *yin* and subdue *yang*, and for dehydration. It is said to bond with cinnamon bark for kidney disorders. An intense incense additive according to Needham, it was also used as the poison of the No-su and Hua Miao arrows. A “good doctor keeps it in his pouch” and its uses in demonifuges, such as by Ge Hong who used it to cleanse his laboratory of demons (which could have been a primitive disinfectant and fumigant to kill lice, insects, etc.). It is mentioned in fasting lists of plants, and was no doubt ingested or burned for intense meditation sessions that accompanied the diet.

Acorus calamus, *changpu* sweet flag *Changpu* is mentioned in many Immortal hagiographies, and cited in the scholarly literature as an entheogenic Daoist herb. It is also a food substitute thought to curtail ageing. One example is of a pig herder who ate only *calamus* and *atractylis*. Or “Han Zhong took sweet flag for thirteen years and his body developed hairs. He intoned ten thousand words of text each day. He felt no cold in winter, though his gown was open.” A special variety with nine joints per inch was especially esteemed as mentioned in Ge Hong “to be effective sweet flag must have grown an inch above the surrounding stones and have nine or more nodules. That with purple flowers are the best.” There is a related smaller species *Acorus gramineus* Soland. (*p’u*), mentioned in the *Shih Ching* or Book of Songs. This is also known as *shi chang pu* or *ch’ang-p’u* and Meng Shen wrote, “Those who wish to see the spirits use the raw fruits of *Cannabis sativa* and *chang pu* (*Acorus gramineus*) and *K’uei-chiu* (*Podophyllum pleianthum* Hance), ground in equal amounts, and make these into the size of a marble and take these every day when they look into the sun. After a hundred days, they will be able to see spirits.” It is a mainstay of elixirs and even suggested to enable invisibility. A regular ingredient in Tibetan incenses as well.

Amanita muscaria- Argued for as one of the grandest secrets of the Taoist Cannon by Needham, and quite a bit less eloquently here:

(<http://sites.google.com/site/delawareteasociety/Home/thunder-among-the-pines>)

This entheogen, medicine, combat drug, aphrodisiac and ritual sacrament was no doubt used by Daoist adepts in their incessant quests for magic mushrooms and fungi. It is an appetite suppressant as well as visionary and quite delicious (hints of dried fruit and honey). Pickled in Japan, they are a delicacy suggesting a long folk-knowledge. They are associated with the licentious *tengu* and thus mountain mystics like the *Shugendō*. I have read remarks suggesting Needham does not speculate what mushrooms the “magic mushrooms” were but this is patently false. He even has a drawing of this mushroom in 5 pt.2 of *Science and Civilization*.

Asparagus officinalis- *lung-hsu-ts’ai* or “dragon’s whiskers vegetable” One of the more delicious herbs listed, strengthens *shen* and promotes *yin* in traditional medicine, it was the wild version that adepts sought as having the most energy. It is nearly always listed in the magical herbals and dietary lists of adepts, often combined with deer bamboo and “yellow essence.” But I think in this context the planted cited in Daoist literature must be *Asparagus lucidus*, still used as a stomachic, nervous stimulant and tonic often combined with other herbs and used for impotence. Writers tend to gloss the former, cultivated variety in early Daoist texts but it was likely introduced to China very recently. The medicinal type is likely *Asparagus lucidus* as *men-tung* or *t’ien-men-tung* or “shiny asparagus” and the tuber was highly valued as medicine. This is the one mentioned in the 15th century, article cited briefly in the Bigu paper, of Chou Ting-Wang, and they must be soaked in to remove bitterness like the Native Americans made use of acorns. The cores of the tubers may then be boiled or sun-dried and cooked with honey. Another candidate is *Asparagus cochinchinensis*.

Ge Hong writes of several varieties with alternate names in the context of abstaining from grains. His “Inner Chapters” state, “If taken for a hundred days, asparagus root (*Tianmen dong*) strengthens people and causes them to walk twice as fast

as would *atractylis* root or Solomon's seal. When entering mountains, one can steam it, and if one cooks it and eats it, one can displace grains."



Fig. 1543. Drawing of a plant often eaten by adepts seeking prolongevity or material immortality, the *shu* (in this case from Chhichow). The manuscript is the *Hsiang Yao Chhao* (*Kōyō-shō*, Memoir on Aromatic Plants and Incense), written by the monk Kuan-Yu (Ken-i) shortly before +1156. Ch. 2, p. 74a; cf, Vol. 5, pt. 2, p. 330. The plant is a composite, *Atractylodes* (*Atractylis*) *ovata*.

Atractylis ovata- *Shu/Zhu* mountain thistle. This will be the subject of a separate monograph as botanical identification of what is translated as "thistle" is problematic. This was true even in Ge Hong's day as his own comments caution against simplistic or singular identifications based on common names (though Sivin has a low opinion of Ge Hong as an authority, some like an opportunist or "pop" scholar like Alan Watts, his example not mine). A principle herb in *bigu*, unites the essence of the mountains, ying and yang essences (in inner alchemy) and pneumas. Many references to its use in elixirs and described as combined with calamus or chrysanthemum, or mica (as by Hsia Fu who described it as a thistle-like plant (*pai shu*) a bitter aromatic with a resinous yellow pigment. In China there four species of *Atractylodes* used in traditional Chinese medicine are known under the generic name of "*shu*." Used as sole sustenance by some adepts. Its modern medical uses are for diuretic or stomachic purposes and it is Exceedingly rich in

vitamin A and D (more than 20 times the amount in cod liver oil). Kukai, who founded the Shingon Tantric Buddhist, sect wrote of the grains as “poisonous to the internal organs.” “Medicines that cure inner diseases are *Atractylis ovata*, *Polygonatum stenophyllum*, pine resin, the seed of the paper mulberry, the arrow of Rubus, the halberd of reed” etc. but the first was *Atractylis*. The Old Man of Mount Tai said to Emperor Wu, “A man of the Dao taught me to avoid grains, to eat only *atractylis* and drink only water, and also make a pillow for the internal spirits...”

Ge Hong: Thistle is known as Mountain Thistle or Mountain Sperm, and we read in the *Pharmacopoeia of the Gods*, “Those wishing Fullness of Live must always take Mountain Sperm.” “A certain Wen of Nan-yang has decribed how his great-grandfather had fled to the mountains during the troubles at the end of the Han dynasty, where he suffered so intensely from hunger that he wanted to die. Thereupon, some person taught him to eat thistle to alleviate his suffering. When he returned home after several decades, his complexion was that of a much younger man and his energy greater than formerly. He claimed that while in the mountains his body became so light that he wanted to dance. He mounted heights and passed precipitous places without being exhausted at the end of the day. He walked ice and snow without feeling cold. One day he noticed several men sitting facing one another on a lofty peak playing backgammon. One who was reading happened to look down and notice Mr. Wen. They overheard them sizing him up. When it was asked, “Is this man ready to summoned on high?” on of them replied, “Not yet.” Lin Tzu-ming took thistle for eleven years with result that his ears became five inches long (a common artistic motif to express enlightenment or sagehood) and his body light enough to fly. He could jump across an abyss almost twenty feet wide.

Auricularia polytricha , *yu er* Cloud ear fungus, a gourmet and medicinal herb growing on dead trees, having detoxifying and anticoagulant properties. There is a separate monograph on Chinese mushrooms.

Brassica rapa-depressa wu-ching or *man-ching* rape-turnip (seeds). Roots, leaves and seeds are eaten and thought as tonic foods. The seeds are diuretic and constructive and cooling. Mentioned in lists of dietary macrobiotics in the context of abstention from grain.



Hermit with *lingzhi* mushroom.

零妻農曰：麻爲穀屬；舊說皆以爲大麻。陶隱居



油皆入用。酒磨大麻，經冬不壞，皆益拱把。

hemp (ta-ma)—Chih-wu ming-shih t'u k'ao

Cannabis sativa- ta ma, huo ma. Another plant truly ancient in China and now demonized, its history is being rewritten thanks to such findings as in the 2500-year-old Yanghai Tombs. This incense plant, as described by Needham, would have been one of the principle methods for an adept to encounter the spirits during his fasts. The seeds would feed, the fibers clothe and the essence would be magical and medicinal. So much could be written, that its almost better to just cite its obvious uses in the diet. Though also stimulating of appetite it also has a revered folk use of abating hunger pains. If taken for a long time it “one’s body becomes light” (*chih fu thun shen ming, chhing shen*). There is much literature on the use in ancient Chinese and Paleoasiatic shamanism and Strickmann writes of its continued use as medicine in Daoism. A pipe bowl attests to smoking of hemp from at least the Han dynasty according to Weikang’s *Traditional Chinese Medicine and Pharmacology*. It was used in necromancy as well, as anesthetic, and general tonic, all of great use to the recluse. Emboden writes of its combinations with datura or thornapple (*man-t’o-lo*) and ginseng. The seeds are used in medicine, known as *hou-ma-ren* and are often mentioned in hermit diets. The Buddha during his phase of supreme austerities was said to live on two hemp seeds a day. Hemp is sometimes listed as one of the five grains or hundred grains or any number in between, depending on the sources numerical grouping, but Cannabis appears to be one of the first cultivated plants when tribes became sedentary in the north according to Zheng and Ratsch.

Gong Song, who wrote over 200 scrolls of the Dao, ingested cloud-mother (mica) and entered Hemp Island Mountain (*Zhuyu shan*) and Campany says *zhu* is a certain type of hemp, and the mountain is located out in the Eastern Sea and the island “harbored much hemp” and was populated by the descendants of Xu Fu, who was sent to find the Isle of the Immortals by the first Qin emperor. This tale might support an entheogen as the coveted fruit of immortality or plant of deathlessness.

Cassia aromaticum Cinnamon, *gui or kwei*. *Zhuangzi* “Cinnamon has a taste so they cut it down.” Extensively used in Chinese medicine for digestive orders it is no wonder this

herb is commonly mentioned in many bigu diet regimens. Some adepts lived exclusively on cinnamon, or like the master Pheng Tsu who added “magic mushrooms.” Cinnamon is in many useful recipes for the exposed hermit, such as the “Chill dispelling” *Qianjin Danggui Tang* (*Tang-kuei* Combination): with *tang-kuei*, cinnamon, zanthoxylum, dry ginger, licorice, pinellia, magnolia bark, ginseng, astragalus, and peony; used for cold spleen/stomach with pain in the chest and/or abdomen. Needham has a footnote on the “curious” Father Cinnamon (Kuei Fu) who could turn black, white, yellow, or red in succession (highly symbolic of the alchemical process as well as the colors of the “four quarters”). He lived on cinnamon (*kuei*) and mallow or *Malvo verticillata* (*khuei*) and the “brains of the turtle” which we will briefly discuss below. Needham speculates his color change could have been from ancient observations of plants changing color in change of acidity and describes Kuei Fu as the “litmus immortal.” Eliade adds sunflower (seeds?) to his diet. The cinnamon’s place on the moon with the toad and rabbit pounding the drug of immortality give it a high place in shamanic pharmacopoeia probably because it is excellent to dissipate nausea and at the same time it can potentiate certain substances or speed their absorption into the bloodstream. Kohn records the regiment of cinnamon and gymnastics (daoyin) of the adept Pengzu that enabled him to live 700 years. The shamanic Nine Songs of the Elegies of Ch’u mentions what appears to be a potent, visionary cinnamon wine.

Gui Fu the “Cassia Father” fed on pellets of cassia and sunflower seeds mixed with tortoise brains, using ten catties of cassia for every thousand pills. And Qi Fu taught a method of storing processed melon seeds, cassia fruit, aconite seeds, and angelica seeds that was consumed on the spring equinox which let him run flying in ascension to the mountains or to go underwater.

Ge Hong: Cinnamon can be liquefied by cooking with onion juice, and the sipped by mixing it with bamboo liquid. It may also be taken mixed with turtle brains. After taking it for seven years you will be able to walk on water and enjoy Fullness of Life and immortality. “Chao T’o-tzu took cinnamon for twenty years, where upon the soles of his feet became hairy and he could walk 500 miles a day; he also became strong enough to lift a thousand pounds.” There is a cassia or cinnamon excrescence as well.

Colocasia antiquorum *Yeh yu man, yeh yu yeh, yeh yu shih* Wild taro root. It is often mentioned by various sources to be used to assuage hunger by Daoists engaged in abstention from grains. Some starches seem included in diets, which contradicts other schools that either describe abstention from food entirely, or only elixirs and medicines. Ge Hong is of the opinion that abstaining from starches is insufficient for “Fullness of Life” but is perhaps a preliminary stage (he chastises charlatans who subsists on fruit and nuts as well). But other discussions, such as in *Immortal Sisters* translated by Cleary seem to indicate that it is “cooked food” that is a major obstacle to health and achievement of more subtle states. One finds periodic mentioning of masters eating other wild tubers, or yams or sweet potato in their uncultivated state, which perhaps reinforces the notion of the *qi* of wild substances.

From *Immortal Sisters*

Abstention from Grains (Same for men and women)

Once you can feed on the living energy

Your lungs will be in an extraordinary state of clear coolness.

Forget the spirit, and there are no appearances to cling to;

Merge with the ultimate, and existent emptiness is gone.

For breakfast, look for wild taro roots,

When hungry at night, pick wetland mushrooms.

If you mix in smoke and fire,

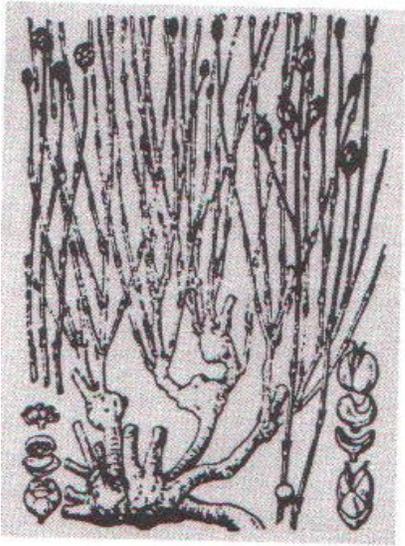
Your body will not walk on the jewel pond.

Chen Yingning's commentary discusses this as abstention from cooked, he describes the wetland mushrooms as of six varieties red, yellow, white, black and purple and they are "shiny."

Coptis chinensis, *Coptis teeta* *Huang lian* Goldenthread. The Rhizome is used extensively in TCM for digestive complaints and there are publications indicating its success in Chron's disease, UC, and other digestive disorders. This is indicative of why it may be useful to the Daoist who is purging and perhaps inflaming his guts with certain substances. The adept Feng Heng "loved the Dao" from his youth ingested *coptis* root for over fifty years. He then entered Rat Mountain and ingested "liquid silver." This may indicate its use in preliminary regimens before the "higher elixirs" were introduced. This indicates levels of dietary preparation, again like the *dieta* of Vegetalista of South America, who go on special bland, salt-free diets (most foods are taboo) that are undertaken before drinking the sacramental ayahuasca. *Coptis teeta* is known in the literature more as bitter *coptis* root, in contrast to the former variety which is sweeter

Croton tiglium patou, or *badou* or the "bean of Pa" known in the West as croton seeds" mentioned in the Pen-ching, "controls harms caused by cold...breaks up bowel-obstructions of different kinds, hardenings, stagnation of drinking liquids, mucous congestion, abdominal swellings...purges the five depots and six palaces, opens and breaks through obstructions, clears the way for water and grains, removes spoiled flesh, expels poisonings caused by demons, removes possessions by the ku and other things, kills worms and fish. Another name is *pa-chiao* or Pa-pepper." All these descriptions of purgative are consistent with the idea of the psycho-spiritual detox regimen of the *bigu* adept.

Dendranthema grandiflorum ju hua or chrysanthemum flowers. Always mentioned in lists of medicinal plants (*yaoshen*) Ge Hong and others cite that its must be pounded by pestle in secret chambers, for making it into pills, or one risks offending the spirits. Master Halewind “ingested a powder made from sweet chrysanthemum petals and cypress nuts and thus attained transcendence.” While Master Xian Men mixed his sweet chrysanthemum petals with a mysterious “green gem powder” which was perhaps some form of jade.



Ephedra sinensis- Ma huang The famous and now much maligned plant (because people have no common sense and took excessive dosages of extracted forms). It is an significant appetite suppressant good for headaches, fatigue, and “drives away malign” and ascending adverse *qi* as well is cough suppressing. It disperses obstructions in the bowels according to Needham, which the Daoist especially would be interested in. At least a use of 5000 years in China and probably longer and is a principle candidate for the Vedic soma. Mentioned in the herbal of *Shennong* and found amongst tombs and mummies of Urumchi attesting to truly ancient use. There is a Chinese recipe called *mimahuang* that is made by adding the raw herbage to honey and then roasting the stems until the honey has been absorbed or no longer sticky. Its modern use in diet drugs, now mostly illegal, affirms the ancient use in fasts and as a stimulant/food supplement to nomads and hermits.

Ganoderma lucidum lingzhi The Latin names is descriptive of a sheen or shine on the surface, perhaps certain conditions enhanced this as discussed below. But this is the famous mushroom of immortality, which may actually be a substitute. Though highly medicinal in its own right it also is known to instill a sense of peace and spiritually. Its tonic properties and medicinal actions are well studied in the modern literature but the wild species are even more potent. The iconic image of the mushroom graces shrines and artwork associated with Daoism. Treated at length in a separate paper.



From a Chinese woodcut.
The Immortal Toad



Fig. 1312. Jade girl bearing a magic mushroom plant (*ling chih*) growing in a pot, among an assembly of the immortals. Fresco from the Yung-Lo Kung, a Taoist temple of Sung and Yuan times in southern Shansi. Photo. T'eng Pai (1).

Lingzhi growing from a toad's head.

Lentinula edodes xianggu or fragrant mushroom. Known mostly by its Japanese name *shiitake*. Another gourmet and medicinal mushroom, the lore of which is treated at length in a mushroom monograph.

Mori albae Sang Shen Mulberry, Cosmological symbolism abounds from solar and lunar associations from ancient China. There mentions of the use of all parts from bark, tree, and roots, but by far the fruit bud would be the best for a wildcrafted food. The dried fruit is delicious, abundant and easily dried for storage making it a quintessential macrobiotic food packed with nutrients and with a long medicinal heritage. Adepts take the plant as their name frequently, such as Sangzi “the Mulberry master” or Zhangsang jun, “Lord Elder Mulberry” as well as masters of mulberry groves. The famous quest for the plant of Immortality, sought by Chhen Shih Huang (Needham surmises this is a mushroom possibly *Amanita muscaria*) might have been for a type of mulberry. The *Chin Lou Tzu* (Book of the Golden Hall Master):

On the magical island of the Shen-chou there grows the herb of immortality (*pu ssu chih tshao*) new sprouts of which come up in great abundance. People who have been dead for some time rise again if this herb is strewn upon them. In the time of Chhin Shih Huang Ti many people in the Ferghana (Ta-Yuan) died unjustly, but certain birds looking crows took this herb in their bills and dropped it on the ground so as to cover them, whereupon the dead immediately sat up. Shih Huang Ti sent someone to enquire of Kuei Ku who dwelt by the northern city wall, and the (answer) came that on Tan-Chou, another magical island, in the Eastern Sea the herb of immortality grew in beautiful fields. It was on hearing this that Chhin Shih Huang Ti sent Hsu Fu to sea to look for

certain golden and jade-like vegetables and also a tree producing mulberries one inch across. Thus did the Chhin emperor send Hsu Fu to search for the mulberry (*sang jen*) in the midst of the blue sea. There grew the *fu-sang* mulberry tree several times ten thousand feet high. There was a pair of them supporting each other; hence the name “mutually supporting mulberry (*fu-sang*).” The immortals ate the mulberries, their bodies gave out a golden glow, and they flew in and out of the Palace of the Primal Vitality (*yuang kung*). Ge Hong wrote that peach gum of (peach sap *taojiao*) should be macerated in ashed mulberries, this will cure all illness and taken over time will lighten the body and make it glow. Needham records the Book of Drugs and Minerals of the Adept Lu Shun-Yang, suggested an elixir called *Pao sha lung ya* which seemed to be made of nothing but mulberry leaves. Mulberry leaves (*sang yeh*) were called “precious cinnabar dragon spout” (*pao sha lung ya*) and was used extensively in internal and external alchemical recipes. The wood was used for talismans, but also, quoting Needham again, “Mulberry wood is the *ching* or essence of *Chi hsiu* (one of the 28 lunar mansions), it is a numinous wood. When the insects bore into it and eat it they form marks in patterns, if a man east of this he will be rejuvenated.



Chinese toad and mulberry from the tomb of Qianqui, 64 B.C.

A ritual bath, alchemical ablutions, consisted of perfumed water: powdered white millet, cinnabar, white honey, and mulberry ashes” need to be done in seclusion before preparing the Nine Elixirs. Ge Hong: When the red fruit of the paper mulberry is nibbled for a whole year, it will rejuvenate the old and it will enable one to look through things and see their ghosts. In the early days, the processor Liang Hsu took some at the age of seventy and became younger. At the age of 140 he could write in columns in the dark and gallop his horse. Later he left for the Ch’ing-lung mountains.



PLATE 4: Shāng-lu, *Phytolacca acinosa* (From *Chéng-lei pén-ts'uo*, 1249 edition).

Pokeberry or Pokeweed

Phytolacca acinosa *Shang lu*, *zhanglu* this lovely plant has a long folk use as a pot-herb in almost region into which its spread. The tender young shoots make for a tasty wild-grafted green for soups and broths. There are two varieties, one with white flowers and white roots (variety *esculenta*?) and the other with reddish flowers and roots. The latter is considered much more toxic though it is the seed that is the most concentrated and dangerous. It is mentioned in the *Shih Ching* as *fu*. Ethnobotanist Christian Ratsch writes of Asian recipes that “brew” the root, and mentions it as added to rice wines and *sakes*. He writes that in Ancient China it was classed with ginseng and mandrake. T’ao Hung-ching wrote, “The plant is used by Taoists. When it is boiled or brewed and consumed, it is good for lower abdominal parasites and to see spirits” in comments linking the corpse-demons, entheogens and plants that are antihelminthic. De-worming substances, meaning actual parasites, were likely thought to effect spiritual worms as well. Su Sung wrote, “In olden times, it was used a great deal by magicians, and to quote Su Ching. “There are two forms of this medicine, one red and one white. The white kind is used in healing arts. The red kind can be used to conjure spirits; it is very toxic. Otherwise, it can be used only externally for inflammations. If eaten, it is very terrible: it causes bloody stools. It can be lethal. It causes one to see spirits.

Literature on survival diets caution that to eat certain varieties or certain stages, i.e. older plants, there must be repeated washes or boiling and dumping the water to remove cyanchotoxins, similar to how natives in South America treat manioc to make it edible. Famine literature instructs the hungry to scald and throw away the water of the white variety, saying to eat of it with garlic. “The best way of preparing the slices is to place them in a basket in running, eastward flowing water, for two days and two nights. Then put them on bean leaves in a steamer and steam from the *wu* double hour to the *his* double-hour (from noon till ten o’clock). If you don’t have such leaves you can use the skin of bean-curd. Plants with white flowers confer longevity; the immortals collected them to make savouries to take with their wine.” Needham speculates that leguminous plants were used to absorb remaining phytolaccotoxin driven out by steam heat. A similar practice, but offering to the spirits (possibly a visionary experience then) is found in the third century *Lei-kung* Pharmacopeia. This plant is often mentioned as surrounding immortal hermit huts and caves.

Recipes in the *Wufu xu*, that mention other plants, “Add one *dou* (about 2 liters) of *tianmendong* (*asparagus cochinchinensis*) powder to ten *jin* (about 2 kilograms) of yeast and 3 *dou* (about 6 liters) of rice. Let the poke roots sit (in the mixture) for six days. Thereupon begin to eat them while observing ritual prohibitions. In five days your food intake will start to decrease. After 20 days, grains will be eliminated and your intestines will be so fat that they can only hold air. The various worms (the Three Worms?) will all leave. Your ears and eyes will hear and see clearly. All of your moles and scars will disappear. When the moon rests in the *yugui* constellation and the day reaches the *ding* hour (2 a.m.), gather poke root plant. Eat a piece the size of a jujube tree three times per day. Taoist adepts always grow this plant in a garden by their meditation chambers. It allows a person to communicate with the gods.” Other recipes describe pills that will eliminate the Three Worms in stool. The Lower will come out after 30 days, the Middle after 60 days, and the Upper after 100 days. Eskildsen’s research discusses that powdered

poke root brings the same results. Scholars speculate it could have been the irritating effects on the stomach that alleviated hunger by inflaming the insides.



Fig. 1242. Chhieh Sung Tzu, the Red Pine Master (from *Li Shih Hsin Chih-shan Chuan*, ch. 1, p. 82).

Pine tree, *Pinus* spp. Adepts and doctors used many parts of the pine tree, and hermits subsisted off pine nuts, needles, sap, resin (magical and utterly ancient types are mentioned, and possibly associated with amber, other thought it became *fuling*), pollen, and even bark. Modern TCM says pine products act on the channels of the liver, lung and large intestine. Yo Ts'iuan could fly through the air after eating pine seeds and Wo Chhuan presented pine-seed elixirs to emperor Yao (who never tried them though) and there is the “recluse among the Sung-shan Mountains” who “managed to live to old age by feeding on pine leaves and flower pollen” named Wang His-I cited in the *Hsin Thang Shu*. Another was Phan Shih-Ching who lived off pine leaves and water in seclusion in the valley of the Sung-shan Mountains. There was a mythical elixir found in the Hua-Shan (mountains) formed by five pine-seeds buried in the ground for a thousand years. A famous alchemical Daoist is the Red Pine Master or *Chhieh Sung Tzu Hsuan Chi* who wrote 'Arcane Memorandum of the Red Pine Master):

Successful means solidly building the Wall,
 Indispensable to distinguish the Hard and the Soft,d
 Necessary that the maturing come within man
 Due to the concentration of his heart and mind.e
 If his heart and mind have reached divinity, so will the Medicine;
 If his heart and mind are confused the Medicine will be unpredictable.
 The Perfect Tao is a perfect emptying of the heart and mind.
 Within the darkness—unknowable wonders.
 When the wise man has attained to the August Source,
 Then in time he will truly reach the clouds.

Sivin writes, “Another binary relation known to every physician in classical times was that between pine resin (*sung chih*) and the *fu*- fungus, a parasite upon the roots of pine trees, prized as an immortality medicine. The fungus was supposed to be formed when pine resin flowed into the ground and remained there for a thousand years. When it grew especially close about the roots of the tree it was called pachyma spirit, or *fu shen*. Origin

from pine resin was also ascribed to amber (*hu-po*) by Thao Hung-Ching, who introduced amber into the pharmacopoeia; though an old tradition cited by Su Ching (between + 650 and + 659) had *fu-ling* metamorphosing into amber after a second millennium, and amber into jet (i, *hsi*) after a third.” He quotes a passage, “In the great Tao of heaven and earth, what endures of the myriad phenomena is their primal and harmonious chhi. Of the things that exist in perpetuity, none surpass the sun, moon, and stars. Yin and Yang, the Five Phases (Elements), day and night, come into being out of Earth, and in the end return to Earth. They alter in accord with the four seasons, but that there should be a limit to them is also the Tao of Nature. For instance, when pine resin imbibes the chhi of mature Yang for a thousand years it is transformed into pachyma fungus. After another thousand years of irradiation it becomes pachyma spirit; in another thousand years it becomes amber, and in another thousand years crystal quartz (*shui ching*). These are all seminal essences formed through irradiation by the floreate chhi of sun and moon!” The symbolic associations of the pine and longevity in China can not be overstated. Pine needles, used as a tea in folk medicines even today, have a significant amount of vitamin C.



species of Solomon's seal (*huang-ching*)—
Ch'ung-hsiu cheng-ho pen-ts'ao

Polygonatum sibiricum deer bamboo, *huangjing* or “yellow essence” literally also called the “essence of the sun” that congeals the “nine heavens” and is used to “imbibe solar essence.” It is yellow and sweet and can be taken as a medicine or as a food. The roots are steamed or dried, powdered or added to pills and honey. A spoonful of powder is taken every day, or the berries are soaked in water and drunk. The roots are also boiled and mixed with soybean powder and into small cakes and adepts also drink the tea of the boiled roots. It is also added into porridges and soups, by adepts and peasants and in famine times. Eskildsen writes that the effects are potentiated by living an austere and unworldly life and cites passages that for the drug to confer immortality one must abandon the secular world and live alone in the mountains. He cites a recipe for the deer bamboo pills:

During the second and eighth months take the roots and shave off the fuzz. Wash thoroughly and cut into fine pieces, Boil one *hu* (about 20 liters) in six *dou* (about 12 liters) of water using a fire of moderate strength from morning until evening. When the medicine has cooked thoroughly, remove it and cool it. Press and crush it with your hands. Strain out the fluid with a wine press to make pills. Remove the impurities and dry it out to make a powder. Keep it in a kettle. If you use the powder to make pills (perhaps with honey?) the size of chicken eggs and ingest three per days, you can avoid grains and stop eating. You will feel neither coldness nor heat, and your going about will be as swift as a galloping horse. If a person is able to abstain from the bedroom (sex) he will not age, his lifespan will have no limit and he will become an immortal. If he does not abstain from the activities of the bedroom, the longest he can live is 200 years.”

The relationship to celibacy, or at least semen emission, is evidenced by examples of the deer bamboo being ineffectual because of adepts being decadent or engaging in military pursuits. If one kept his virtue intact and ate the deer bamboo “he need not avoid tigers and wolves nor fear military upheaval.” “When you go about in the mountains you can pick it and eat it raw to your mouth’s satisfaction, and drink only water when thirsty.” It is also called “food for alleviating the plight of the poor” because “in a year of famine it can be given to old people and children who can eat it while not eating grains.” Xiuyanggong was a man of Wei. He lived in a stone grotto on Mt. Huayin. In it is an overhanging stone bed that he used to sleep on. The stone is dented from erosion (because he slept on it so much). He practically never ate, but would occasionally gather and eat deer bamboo.”

The Five Numinous Treasure Talismans scripture:

“Among herbs and tress, only yellow essence is longevous. Wjem the pneumas of the Triple Yang ascend into the palaces of Grand Purity, their essences are refined in the Mystic Wonder and compliantly transformed into pure harmony. They then flow radiantly throughout the nine sectors (of the heaven and the earth) and spread through space. By means of clouds they are stored in the mountains, and in accordance with the surrounding pneumas they transform into (Solomon’s seal) plants. Roots are established; shoots follow; leaves grow; essences congeal. Their flavor is sweet and fragrant; their leaves are green and yellow. As they commune with spirits, rising and joining them, their myriad roots are engendered below. Meeting with breezes and receiving dews, their roots twist and they develop nodes, growing out at angles and spreading to the sides. As they receive pneumas they purify their essences; storing and transforming these, they in turn exhale pneumas. The perfected blossoms they put forth have nine virtues; they increase longevity and advance worthiness. Their sprouts have numinous treasures (*lingbao*); to ingest them is to become transcendent. Their roots are celestial treasures (*tianbo*); they join their radiance to chariot spirits. If you gather some of these, make powder of them, and consume this, you will attain flying transcendence.” The passage goes on to indicate the merits of consuming roots and blossoms.

Polygonum multiflorum Night Shrivel Vine, Black Hair Ho, *He-shou-wu=Ho-shou-wu*, *Yeh-chiao-t’eng*. This is a widely distributed plant in China that is used in TCM as a tonic, especially the large underground rhizome. “Poor man Ho was too sick to escape famine, dug wild root to stop starvation, the rhizome of this species saved his life;

continuing to eat the rhizome, he was cured from illness and had black hair in old age; people called him and the vine *He-shou-wu* Black Hair Ho.” This exemplifies the hermit survivalist diet growing from pragmatic concerns such as feminine and then reaching mythical panacea proportions. It is also called Chinese cornbind,

Prunus persica *Tao ren* peach seed - Bitter and sweet in flavor, neutral in nature, acting on the heart channel, liver channel, the lung channel and the large intestine channel. Owing to its bitterness, it has the functions of dispersion and purgation, promoting blood circulation and relieving blood stasis, and strong action of promoting blood flow to regulate menstruation. It is usually used to treat dysmenorrhea and amenorrhea caused by blood stasis, mass in the abdomen, and traumatic ecchymosis. It is rich of oils which act on the large intestine channel to lubricate and relax the bowels, hence it is used to treat constipation, dry colon and body fluid depletion., The peach has many magical associations to the adept, from the magical peach of immortality to the choice of peach wood as the best for magical wands, talismans and charms. Strickmann cites recipes, and there are some in *Ge hong*, using decocted and macerated peach seeds, fifty of them. The patient, suffering from corpse-demon infestation will vomit. The talismans for expelling disease demons are often called to be carved in peach tree root. A traditional Chinese detox laxative consists of peach kernels, this accords with Daoist notions of intestinal lubrication and purging of feces as essential to health:

Tao ren (*Prunus persica*/peach seed) - lubricates intestines, removes stagnation

Hu ma ren (*Linum usitatissimum*/black sesame seed) - lubricates intestines, removes stagnation

Qiang huo (*Notopterygium incisium* root) - disperses cold, relieves wind/damp/cold pain

Dang gui (*Angelica sinensis* root) - enriches blood, moistens and promotes circulation

Da huang (*Rheum palmatum*/rhubarb root) - cools internal heat and helps purge toxins.

One comes across rhubarb in Daoist contexts and “abstention from grain” recipes quite often.





Fig. 1544. Drawing of a fungus often eaten by adepts seeking prolongevity or material immortality, the *fu ling* (in this case from Kunchow). The manuscript is the *Yao Chung Chhao* (*Yakushi-shō*, Memoir on Several Varieties of Drug Plants), written by the monk Kuan-Yu (Ken-i) shortly before +1156. P. 6a, cf. Vol. 5, pt. 2, p. 361. The fungus, *Polyporus* (= *Poria*, *Pachyma*) *cocos*, parasitises the roots of pine trees. Here it is called *fu shen*. Cf. Burkill (1), vol. 2, p. 1618.

It is interesting to note that the basic technical terms given in the preceding paragraphs have been derived from sources of widely differing dates in Chinese Taoist and medical history. To show the continuity of the tradition, it may suffice to say that one can find essentially the same headings in the *Chhien Chin Yao Fang*¹

¹ 千金要方

Sclerotium Poriae Cocos China Root; *Hoelen* Tuckahoe; Indian Bread is a mushroom amphoteric in its ability to help regulate either high or low, potassium and sodium balance. Strengthens the Spleen, harmonizes the middle. Promotes urination, eliminates dampness, Quiets the Heart, and calms the spirit. It will be noticed that many of these plants are diuretics. It is classed with other "breadroots" that were used Native American peoples for food. Xi Jian who could "dispense with cereals and only take *fuling* (*Poria cocos*, a subterranean fungus) as food." Sclerotia can way up to 30 lbs. those malfunctions can be corrected and moreover the necessary factors be reinstalled in order to regain the body's primary strength. The book *Shou Shi Bao Yuan* (Longevity by preserving the source) tells us about a powerful recipe, called Yang Chun Bai Xue Gao (Snow-white Lamb of the YANG Youth) consisting of Fu-ling Indian bread (*Pachyma cocos*, *poria*), Euryalis seed, Yamaimo root, Lotus seed, mixed with rice, glutinous rice, some sugar etc. to form a small cake that, after drying is taken by old people or young women to enhance greatly the strength of spleen and kidney systems. A recipe for "communion with spirits" in the *Songgao shan ji*, that featured "*fuling*, rich liquor, and

honey” and Campany mentions more “potent” recipes and elixirs. Many of the longevity recipes, considering the context of immortality and freedom from Three/Nine worms, can be assumed to play a major part in *bigu* fasts. We will collect as many recipes in the anticipated second appendix. The Sire with Elegant Eyebrows, consumed *fuling* fungus, exclusively it is guessed, “and thus attained transcendence.

Semen Biotae orientalis Bai Zi Ren Arbor-Vitae Seed Moistens the intestines and unblocks the bowels, again a most common theme in his herbal. This is a favored fasting plant of the Immortals of the *Liexian zhuan* and *Shenxian zhuan*. There is the reference of the female adept, Xiao Zheng who ate the leaves of the arbor vitae tree. The *Art of the bedchamber* by Douglas Wile has many Daoist sexual yoga recipes or herbal supplements for gather *qi* sexually and this seed is common in the recipes.

Semen Pruni armeniaca Xing Ren Apricot Seed or Kernel. This seed falls into the same categories as peach seeds. It is used to dispel phlegm and lubricate intestines and dispel and purge waste. The seeds are essential to the Chinese herbalist, and a treasured, elite medicine according to Shiu-ying Hu, who classifies it has a *bupin*. He relates that in Chinese prescriptions the seeds are called *bei-xing-ren* (northern apricot seed). While some seeds are implemented in their raw state, the mass of the annual production is detoxified by boiling the water and loosening the seed coat, this detoxified material is *nan-xing-ren* (southern apricot seed) or *tian-xing-ren* (sweet apricot seed). While these examples are of modern Chinese apothecaries, they attest to an ancient exploitation of potentially toxic foodstuffs. A lot of apricot seed, once detoxified, is used in baking and pastry.

Semen Sesami indici; Sesamum indicum huma, Hei Zhi Ma black sesame seed. Barbarian Hemp. Sesame seed, though are several kinds, are a common reference in Daoist literature though the exact type is usually not indicated. An example of this is the reference in Bokencamp’s entry in the *Encyclopedia of Taoism* who mentions an adept “Yue Zichang who is particularly associated with the ingestion of sesame concoctions for prolonging life and gaining transcendence.” Needham distinguishes between *huma* and *wu ma* for a black sesame, that is astronomical links as well with the constellation *Pa ku*, or the eight grains. Ge Hong: Sesame, also called *hu-ma*, can be nibbled to prevent senility, to protect against drafts and wettings, and to repair the ravages of old age.

As this will be the subject of a monograph, and has been as well by as scholar (we are tracking this paper down), the botanical identifications and implications will be dealt with later. But recipes abound calling for sesame or sesame oil in hermit diets and fasting regimen. Sesame oil is indicated in strange mineralogical recipes, quote in full under the “white rock” section below. Biographies of adepts state famous adepts, like Xu Mai “ate sesame seeds” which means they did so probably exclusively, the fortitude, simplicity and discipline being a hallmark of mastery. The adept who is still hungry after all the meditation, *daoyin*, salvia and air swallowing, sexual arts (or lack of them), *Qi* imbibing, etc. has recourse to a special soup of sesame seeds, powdered Tuckahoe plant, and small amounts of milk and honey as ingredients. The soup can also include matrimony vine

(*Lycium chinense gouqi*) and have a cup one or two times a day. This is supposed to keep adept from thinking about food. The Perfect Man's Method of Abstaining Completely from Grains recipe:

“Take two *dou* (about 4 liters) of sesame seeds and five *sheng* (about 1 liters) of *fagara* (Chinese pepper *Zanthoxylum planispinum*). First remove the black skins (of the sesame seeds). Pound the two ingredients together and sift. At first eat five *ge* (about 100 grams) three times a day. If you have no water, you can use honey to make pills. Take one pill the size of a chicken egg four times a day. Naturally, you will not hunger. During years of famine you can eat this medicine by itself to completely abstain from grains. If thirsty, drink only water. Do not eat anything else. If you eat anything else you will become hungry. This medicine gives 100 times your normal energy. Coldness and heat will no longer affect you. The medicine can cure the 100 diseases. Divine Immortal-hood will naturally be brought about.” This passage is interesting for a number of reasons, especially that food, grains especially cause hunger and do not relieve it. Once a man's original nature is restored he has no need grains.”

Katlenmark wrote about sesame not being indigenous to China, indicating its ancient importation from Iran, and it was “long thought to enable abstinence from cereals and to be a food for long life.” Chunyu was proficient in numerology (*shushu*) and used to ingest pills of sesame seeds and deer bamboo

Sophora japonica huai or *huaimu* Pagoda Tree, often glossed as “locust tree” Mair informs that it's character translates to “tree of ghosts” and its also called the “scholar tree” or Chinese scholar tree perhaps suggestive an ancient affection by the literati. The *Pin Ching* lists the *huai shih* from the *huai* tree mentions its use as a disinfectant while the *Kang Mu* states that “the flowers, leaves, stem, bark of the stem or root, and the resin are all used in medicine” which Needham notes are of anthelmintic effects and well as killing pests. Importantly for this context, he states that boiled extracts of the bark were used as enemas to “flush out worms from the lower rectum” and it gets frequent citations in Taoist recipes. The *wufuxu* states, in a larger discussion of poke root discussed above, that the berries of the pagoda tree can be used for the same purpose, i.e., abstaining from grain and never feeling hungry. Ge Hong: “Seal with clay in a new jar for twenty days or more, until the skin has fallen off. Then wash the seeds, and they will be like soy-beans. Taken daily, they will be especially good for repairing the brain. If one takes them for a long tie, one's hair will not turn white, and one will enjoy Fullness of life. Locust tree is also said to be the “essence of the stars of the Barrens” (*xuxing zhi jing*), Barrens being one of the 28 lunar lodges, which Campany explains as likely why Locust is thought to reverse aging, expel the corpses and increase longevity.

Torreya grandis fei-tzu seeds. The *Tun-huang* fragment, reads for this entry, “This drug masters the treatment of the five kind of hemorrhoids. Drives out the Three Worms, Kills demonic poisons and possessions by the malevolent. Furthermore, people suffering from tapeworm should eat seven seeds a day for seven days. Then all the worms

are dispersed to water and are discharged.” This combines the ideas of real and spiritual or demonic parasites, but also shows they distinguished the two as separate. The commentary: It is good to consume large amounts of three or two sheng, no illness will result from this. It helps man to digest food and aides his muscles and bones, it pacifies one’s defense, fills one’s center, and supplements the influences; and it clears the eyes and eliminates the material weight of the body” which again attests to the use in fasts and concept of light, subtle immortals.

Tremella aurantialba jin er or golden-ear is a much prized gourmet and medicinal herb that gets passing mention in certain Daoist formula. Its revitalizing properties are still much sought after day, treated at length in the coming mushroom monograph.

Tremella fuciformis xue er snow fungus has similar descriptions and effects in the literature, though it too will be treated at length in the forthcoming mushroom piece.

Vaccinium bracteatum nanzhu This is a shrub used in fast recipes meant to slowly wean the adept of cereals and grains. The shrub is indicated to have hunger-assuaging properties and is listed in a fragment of the *Dengzhen yinjue* as a famine, poverty food. The leaves were boiled with rice, and the resultant product was called *xunfun*. Eskildsen’s discussion from the *Shangqing* texts recommends the adept to gradually reduce food intake. The adept should limit himself at first to a quota of 2.5 *sheng* (about .5 liters) of food per day, and after a year to two *sheng* to .5 *sheng* to finally, after five years, complete abstention from food. After this, he can eat nine meals a day or never eat in a year, meaning that he is oblivious to food concerns. The *Xunfan lingfang* calls for about 30 liters of nonglutinous rice that is used in a single batch of *xunfan* to which is added about 1.1 kg of *nanzhu* leaves, 3 if dried. This is boiled down to a dark “reddish-blue fluid” that is allowed to cool, and this is liquid is used to cook rice that is used to gradually diminish food. The adept can only eat dried meats, discussed below, and celibacy was a must for effectiveness. To potentiate this mixture, the adept could add, ground *kongqing* or hollow azurite (seven *liang* or about 97 grams); cinnabar *dansha* (one *jin* or 222.73 grams); *fuling* tuckahoe (two *jin*) and *jing* (*Vitex negundo*) tree leaves (5 *liang* about 7 grams) in a fine texture. This is added to the mixture for washing and cooking the rice.

Ziziphi spinosae da zao red date. This herb is used in countless Chinese herbal formula for its adaptogenic qualities and rejuvenating properties. Adepts swallowed saliva in copious amounts, accomplished by swirling the tongue around the front and back of teeth in clockwise and counterclockwise turns collecting the saliva and swallowing vigorously. Another method, in addition to pressing the far back onto the roof of the mouth, was to “suck” on certain objects, especially the jujube date. This method is essentially found in such teachings as *Yue Zichang’s method of Holding a Jujube Seed in the Mouth* and some survival manuals suggest “sucking” a button to stave off dehydration. There may indeed be something to swallowing enzyme rich saliva for digestive purposes as experienced by the author and from other anecdotal reports.

Incenses

The role of incenses in Daoism and meditation can not be underestimated nor overstated. This is the where the realms inner and outer alchemy meet, in the enclosed and smoky oratory to the laboratory cave of psychoactive fumes. As this is the subject of a whole separate volume in progress, (and in press for publication in a journal) here is just Needham's chart of primary incenses and aromatics. The appetite-suppressing properties induced by effects ranging from the subtly psychoactive to the full-blown hallucinogenic could be exploited by the adept. Although *Cannabis* is prescribed to cancer patients for stimulation of appetite many folk uses describe the effects as assuaging hunger, such as in Jamaica and in Himalayan herbals as well. Some scents are simply so pungent as to produce psychological reactions in which thinking about food is impossible while others aid deep meditations and long trances that enable the adept to invoke the inner gods that dispel the corpses demons. The magical effects of incense were systematically classified by the Masters of Recipes, whose shamanic, healing and magical smokes could produce any number of desired effects. It is this authors contention that incenses were the most primary means of altering consciousness in the ancient world, a subject largely neglected by scholars (with the exception of Christian Ratsch, Joseph Needham and Georg Luck). Needham's footnotes include all manner of examples of psychoactive incenses "hot-boxing" enclosed areas with various psychoactive and sometimes very toxic substances including hemp, aconite, mercury, etc. as well orgy-inducing aerosol perfumes.

Table 94. *Constituents of incense, and other aromatics*

			China indigenous		South-east and South Asia imported	Western Asia Europe, Africa, imported
			early	later		
A	aloes-wood (garroo)	<i>chhen hsiang</i>	—	*	*	—
	ambergris	<i>lung hsien hs.</i>	—	—	*	—
	anise	<i>hui hs.</i>	*	*	—	*
	basil	<i>lo lé hs.</i>	*	*	—	—
	bdellium (earlier)	<i>an hsi hs.</i>	—	—	—	*
	benzoin (later)	<i>an hsi hs.</i>	—	—	*	—
	Baros camphor (l-borneol)	<i>lung nao hs.</i>	—	—	*	—
	chang camphor (d-camphor)	<i>chang nao hs.</i>	*	*	—	—
	sémbong camphor (l-camphor)	<i>ai na hs.</i>	—	*	*	—
	cassia (cinnamon)	<i>kuei hs.</i>	*	*	—	—
	citronella	<i>mao hs.</i>	*	*	—	—
A	civet	<i>ling mao hs.</i>	*	*	—	—
	clove	<i>ting hs.</i>	—	—	*	—
	costus [see putchuk]		—	—	*	—
	elemi (brea)	<i>tan thang hs.</i>	—	*	—	—
	frankincense	<i>ju hs.</i>	—	—	*	*
	galbanum	<i>phi chhi hs.</i>	—	—	—	—
	gardenia	<i>chih tzu hs.</i>	*	*	—	* briefly
	garroo [see aloes]		—	—	—	—
	jasmine (<i>offic.</i>)	<i>yeh hsi ming hs.</i>	*	*	—	—
	jasmine (<i>Sambac</i>)	<i>mo li hua hs.</i>	*	*	*	*
	laka	<i>tzu thêng hs.</i>	—	—	*	—
	liquidambar (later)	<i>su ho hs.</i>	—	*	*	—
A	musk	<i>shé hs.</i>	—	*	*	—
	myrrh	<i>mu yao hs.</i>	—	—	—	—
A	onycha	<i>chia hs.</i>	*	*	—	*
	patchouli	<i>huo hs.</i>	*	*	*	—
	putchuk (costus)	<i>kuang mu hs.</i>	—	*	*	—
	rue	<i>yün hs.</i>	*	*	*	*
	sandal	<i>than hs.</i>	—	—	*	—
	spikenard	<i>kan sung hs.</i>	*	*	*	—
	storax (earlier)	<i>su ho hs.</i>	—	—	—	*
	terebinth	<i>tu nou hs.</i>	*	*	*	—
	walnut-gum	<i>pi li hs.</i>	*	*	—	—

A denotes an animal product.

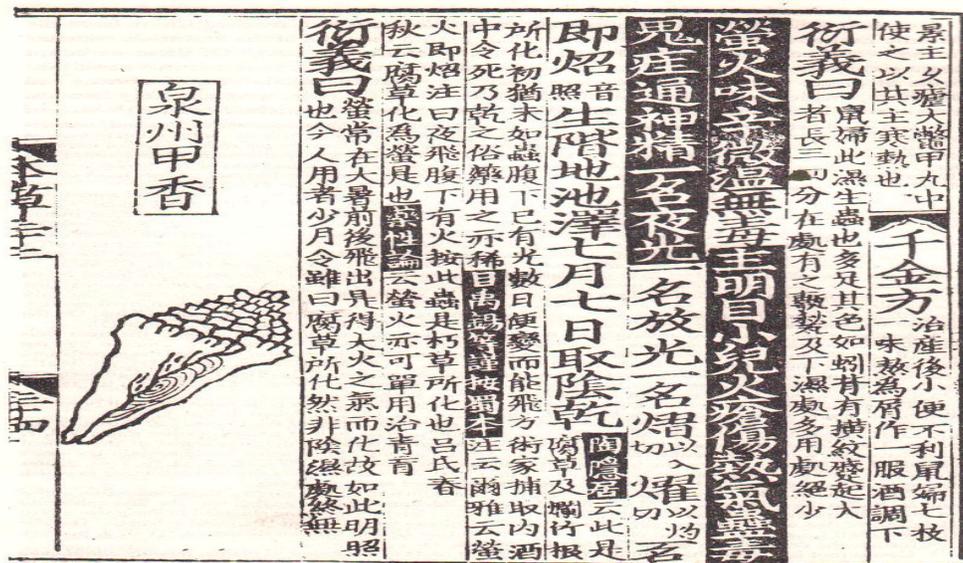


Fig. 1319. The perfumed onycha mollusk, from *Cheng Lei Pen Tshao* (+1249), ch. 22, p. 344 (p. 455, 2). The relevant text follows to the left, and the main entry on the page here shown concerns fire-flies.

Metals, Minerals, and Excrescences

A separate, lengthy work is in preparation on Daoist alchemy *weidan* so the reader will have to be contented with a partial treatment of these substances.

Table 106. Agents of immortality in the 'Lieh Hsien Chuan'

		No. of adepts consuming
<i>tan sha</i> ¹	cinnabar (HgS) ^a	1
<i>hung</i> ²	mercury (Hg)	1
<i>yü</i> ³	jade	1
<i>yün mu</i> ⁴	mica	1
<i>shih sui</i> ⁵	stalactite (CaCO ₃) RP68	1
<i>shih chih</i> ⁶	siliceous clays RP 57	3
<i>hsiao shih</i> ⁷	nitre (NaNO ₃) or saltpetre (KNO ₃)	1
<i>sung yeh</i> ⁸	pine tree leaves	1
<i>sung tzu</i> ⁹	pine tree seeds	2
<i>kuei</i> ¹⁰	cinnamon, <i>Cinnamomum Cassia</i> (= <i>aromaticum</i>) Lauraceae; CC 1318; R494 ^b	1
(<i>tshang</i> -) <i>shu</i> ¹¹	a composite, <i>Atractylis ovata</i> ; CC 34; R 14	1
<i>thien mên tung</i> ^{12, 13, 14}	a liliaceous plant, <i>Asparagus lucidus</i> ; CC 1830; R676	1
<i>phêng lei</i> ¹⁵	a bramble, <i>Rubus hirsutus</i> (= <i>Thunbergii</i>) Rosaceae; CC 1162; R459; Anon. (109), vol. 2, p. 275	1
<i>fu ling</i> ¹⁶	a fungus, <i>Poria (Pachyma) cocos</i> , 'Indian bread' or 'tuckahoe'; CC 2320; R838	1
(<i>ling</i> -) <i>chih</i> ¹⁷	perhaps a lichen <i>Gyrophora esculenta</i> (= <i>vellea</i>); CC 2327; R818 or a fungus <i>Fomes japonicus</i> ; CC 2301 ^c	1
—	miscellaneous plants in combinations	3
<i>tan</i> ¹⁸	unidentified elixir, perhaps cinnabar	1

There are the “eight minerals” (but like the five grains, exact lists vary), *bashii*, “glossed” as 1) “vermeil sand” cinnabar (*zusha*) or cinnabar; 2) “male yellow” (*xionhuang*) or red realgar; 3) “hollow verditer” (*kongqing*), malachite, or azurite; 4) “fluid yellow” (*liuhuang*) or sulphur; 5) “cloud mother” (*yunmu*) or mica; 6) “Dog-barbarian salt” (*Rong yan*), or salts precipitated in desert lakes, such as gypsum, anhydrite, and halite; 7) nitre (*xiaoshi*) or “orpiment”, saltpeter, or potassium nitrate; 8) “female yellow” (*cihuang*) or orpiment.

The *Shen Nung Pen-T'sao* lists 120 superior medicines (*shang yao*) that prolong life (*pu lao yen nien*) 18 of which are minerals or stones: cinnabar, mica, jade potion (*yu chuan*), stalactites (*shi ju chung*), potash alum (*nieh shih*), potassium nitrate (*Hsiao shih*), crude sodium nitrate (*Hsiao shih*), soapstone (*huah shih*), copper sulphate (*shih lan*), malachite (*khung chhing*), stratified variety of malachite (*tsheng chhing*), brown hematite (*Yu yu tiang*), reddish variety of brown hematite (*Thai I yu liang*), quartz (*pai shih ying*), amethyst (*tzu shih ying*), the five siliceous clays (*wu shih shih chih*) red and blue, Fuller's earth, kaolin and graphite, light-colored azurite (*pai chhing*). See Yoke, Ho Peng. *Alchemy on Stones and Minerals in Chinese Pharmacopoeias* for a detailed discussion.

Gold Au *chen huang chin, chen chin, sheng chin* This will be the subject of a lengthy treatment with a discussion between true, false and alchemical gold. Potable gold or liquefied gold (*jinyi*) is a common alchemical product from India, China, Arabia to European alchemists and the author has partaken of some in modern times. *Ge Hong's The Lesser Recipe for Nibbling Gold* Dip melted gold in and out of clear wine about two hundred times until the wine bubbles. Knead it until it comes through the fingers like mud. If the wine will not bubble and the gold will not come through the fingers when you squeeze it, remelt it and dip it in wine innumerable times. When ready, take one piece the size of one or two crossbow pellets, dividing them into smaller pills, over thirty days. You will be immune to cold and heat, and gods and fairies come down to you. Silver too may be nibbled in the same way as gold. If those who take these two substances can dwell in a cave on a famous mountain, they will levitate to become celestial genii within one year. If they take them while living among other men, they will become earth genii. *Liang-I tzu's Recipe for Nibbling Melted Gold* Prepare three pounds of the skin and fat from the back of a hog and one quart of strong vinegar. Place five ounces of yellow gold in a container and cook over an earth stove. Dip the gold in and out the fat one hundred times; likewise in the vinegar. Take a pound of this gold, and you will outlast nature. Take a half pound, and you will live 2000; five ounces, to 1200 years. It may be taken in any amount, but it must be made on lucky days to be miraculously effective. Let this recipe not be given to others, for this will make the medicine ineffective. If you wish to take medicine that will banish the Corpses from your body, you must take cinnabar.

Jade *Yu* Jade will be the subject of a separate treatment but its mystical and symbolic qualities in China are unparalleled. Jade wine *yuli*, is made by macerating jade in the sap of the plant called “vermillion herb” or *zhu cao*, which softens the jade (for pellets) or dissolves it completely, and the sap drunk.

Substance	Colour	Direction	Element
Laminar malachite	caerulean	east	Wood
Cinnabar	red	south	Fire
Arsenolite	white	west	Metal
Magnetite	black	north	Water
Realgar	yellow	centre	Earth

Malachite $\text{CuCO}_3 \cdot \text{Cu}(\text{OH})_2$. *tsheng chhing* Malachite is the essence of the young Yang (*shao yang*), Jupiter. Often cited in alchemy, cited usually as laminar malachite (*cengqing*) or nodular malachite (*kongqing*), it is often mixed with magnetite and mercury in esteemed elixir recipes.

Mica *yunmu* a generic term in the literature for hydrous silicates, which Campany informs was thought to be the “womb from which clouds were born.” Mined with the ritual taboo of “utter silence” and is referred to constantly in alchemical literature and as a food source for adepts. An ingredient in the fabulous “Never End Pellets” (*weiyang wan*) that might be a compound of mica, pine resin, mercury and asparagus root that was processed in bamboo tubes (much like “nine times bamboo salt” of Korean herbalists) while other recipes have 18 ingredients

Mercury(II) sulfide (HgS) Cinnabar *Dansha zhu sha*, cinnabarite, red vermillion. Perhaps the most important alchemical substance, which will be treated with a separate monograph. Cinnabar turns to mercury, and back to cinnabar after many firings, writes Ge Hong, meaning that its nature transcends liquid and solid states of matter. This relationship was expressed in the ouroboros. Cinnabar or mercury is a mystical substance wherever it is encountered. As Schipper notes, it is pure solar yang, and the “Taoists who live in the mountains detect the presence of cinnabar in the earth through the marvelous mushrooms that grow at that spot (and that even shine at night). There are indeed many mushrooms with luminous qualities, and this no doubt would have intrigued mystics interested in fungus and a strange substance like cinnabar. This is the source of the ink for most magical talismans, an incense ingredient and used medicinally as well.

Alchemists and doctors have elaborate processes for removing the toxic qualities or else use it in minute doses in that fine line between lethal toxin and medicine. There is surely some deeper connection to the interior cinnabar fields, and the locations of the three worms as well. The *Shangqing* texts, “Cinnabar fills the bones, increases the blood, strengthens the will, supplements the brain, increases the *qi*, and regulates the lungs. It enhances the circulation and harmonizes the joints. However, people who ingest cinnabar must not eat meat, “tread upon impurity,” or engage in sexual activity. One might assume the growing puritanical aspects in Daoism stem from a Buddhist influence, as some adepts made great use of sexual yogas. If they violate these injunctions, they will suffer from coughing, abdominal ailments, and “chronic-withering diseases.” Safe preparations are still produced in the *rasayana* of Vedic alchemy suggesting ancient knowledge or “killing” toxicity. Stony cinnabar *shi dansha* is thought to be just naturally occurring cinnabar.

Ge Hong's *The Lesser Divine Elixir* take three pounds of real cinnabar, one pound of white honey, stir together, expose to sun, and cook until it can be shaped into pills. Every morning take ten pills about the size of a hemp seed. In less than a year, whitened hair will become black, lost teeth will regrow, and the skin of your whole body will shine. Those who take it will not age, and old men will regain their youthfulness. If it is taken constantly, one will enjoy Fullness of Life and immortality.

Directions for Nibbling the Elixir Take one pound of cinnabar, pestled and sifted, three quarts of strong vinegar, and two quarts of clear lacquer. Mix these three thoroughly and cook over a slow fire until the compound can be shaped into pills. Take three the size of a hempseed twice daily for forty days, and all abdominal illness will be cured, and the Three Corpses that are in your body will depart. Take for one hundred days, and your flesh and bones will become strong and sturdy. Take for one thousand days, and the Governor of Fates will strike your name from the Book of Death; you will last as long as all nature, and the sun and moon will always shine on you. You can change shape continuously; You will cast no shadow in the sun, for you will radiate your own life.

Xian Men's elixir method:

"Mix one catty of cinnabar in three *sheng* of liquor and leave this in the sun for 40 days. Take for one day and the Three Worms and all manner of diseases will be at once expelled. Take it for three years and you will complete the Way of Transcendence, two jaid maidens will come to serve you, and you will be able to summon the traveling canteen. This elixir can expel spirits, and when the dead of the four quarters harm people and their homes by possessing them and building earthworks to obstruct them, hand this elixir facing in their direction and no harm will come."

Realgar Arsenic sulfide As_4S_4 , *Xiong Huang* Elixir Mountain Solar Animus (*tan shan jih hun* = realgar, As_2S_2), Realgar is the essence of Divine Earth (*hou thu*), Saturn. The *Pen Tshao* discusses cinnabar, realgar and orpiment as especially effective for killing ghosts and demons. Arsenic sulphides (realgar and orpiment) were used for aphrodisiac purposes and for impotence, characteristics which would have esteemed them as powerful. Arsenolite (a naturally occurring, different mineral that is chemically identical) was used for similar reason and is indicated as making the body light but too much could cause mineral poisoning (*shih fa*) and minute doses were consumed by drinking from cups carved from the mineral. For a detailed discussion of realgar and its role with other similar substances in symbolically microcosmic elixir, see Needham:

<http://www.scribd.com/doc/14187236/Joseph-NeedhamTheoretical-Background-of-Elixir-Alchemy>

I will purloin this section from <http://eng.taoism.org.hk/religious-activities-rituals/daoist-folk-customs/pg4-8-7.htm>

Hanging Up Zhong Kui's Portrait and the Realgar Wine. Realgar wine is a commonly used medicine in alchemy and Chinese traditional medicine. Kou Zongshi of Song

Dynasty ranked it "middle class in jade and stones" in vol. 3 of his Reprint of the Expanded Meaning of the Materia Medica, saying that it can kill spirits, malicious ghosts, and evil vital breath, and prevent all poisonous insects and five kinds of weapons. But it is poisonous. In Daoist nourishing food prescriptions, drinking its wine mixture is one of the many ways of taking realgar. This was mentioned in the Inner Chapters of the Master Who Embraces Simplicity by Ge Hong. The Daoist Canon contains the Immortal's Prescription of Refining Realgar with Wine 7 in the Immortal's Ways of Taking Nourishing Food, Elixir and Medicine 8 by Jing Li. In the prescription, realgar is the main medicine and wine the aid. The afterward of the prescription says that after taking this medicine, "the three insects in the belly die; the mind becomes clever and the eyes become bright. One will become so mighty that dragons avoid him in water, wolves and tigers escape him in mountains, and the five kinds of weapons can't harm him in battle." This affirmation of the effect of realgar is such that it reached the level of superstition. It influenced folk people to form the custom of drinking realgar wine.

Ge Hong: To nibble realgar, it may be cooked or sipped in wine; first liquefied in saltpeter and then congealed; it may placed in a pig's intestine and roasted in a red clay oven; it may be mixed with resin; or it may be mixed with chicken, dog, or pork meat, stretched like cloth, and taken when it is white as ice. In each case it confers Fullness of Life; all illnesses are banished; the Three Corpses drop from the body; scars disappear; fray hair turns black; and lost teeth are regenerated. After a thousand days fairies will come to serve you and you can use them to summon the Traveling Canteen. Fairies are characterized by a piece of yellow jade the size of a grain of millet on their noses. Only such are the true fairies. When this distinguishing mark is missing, it shows that there is only a ghost testing human beings.

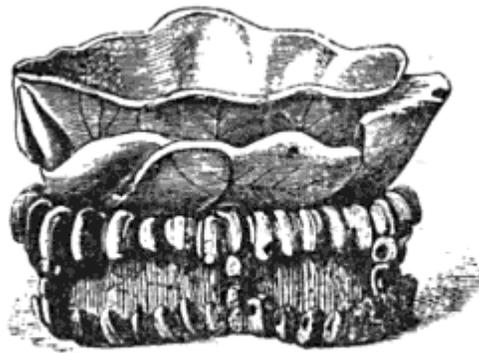
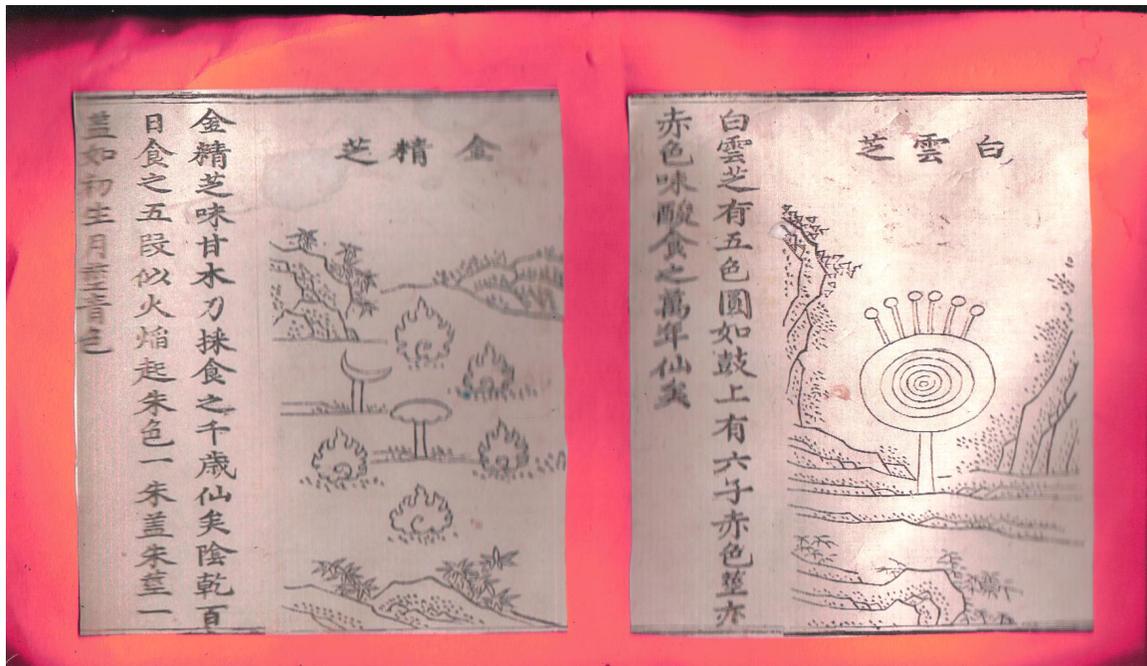


Fig. 1328. Medicine-cup carved from a lump of realgar and mounted on a wooden stand (Hanbury (1), p. 221). Probably Chhing period.

Ge Hong's Classification of the Five Types of Excrecences: rock, wood, herb, flash and the "tiny."



Cassia excrescence shigui Campany writes that Peng Zu “ate cassia excrescences, or cassia and mushrooms” and Needham thought this substance was stannic oxide, which is SnO_2 or dioxide or flowers of tin, other say its just simply the flowers of the cinnamon tree.

Rock excrescences. The rock ones are semblances of mushroom in stone. They grow on the famous mountains by the sea. Along island streams there are formations of piled rocks resembling flesh. Those seeming to have head, tail, and four feet are the best. They look like something alive. They are attached to boulders, they prefer high, steep spots, which sometimes render them inaccessible. The red ones resemble coral; the white one, a slice of fat; the black, wet varnish; the blue, kingfisher feathers; and the yellow, purplish gold. All of them glow in the darkness like ice, being easily visible at night from a distance of three hundred paces. Large ones weigh over ten pounds, the small ones three or four. This type cannot be seen, however, unless one has fasted long and meticulously and is wearing from the belt Lao Tan’s Five Powers’ Treasure Amulet for Entering the Mountains. Whenever excrescences are encountered, an initiating and an exorcising amulet are placed over them, they can no longer conceal or transform themselves. Then patiently await the luck day on which you will offer a sacrifice of wine and dried meat, then pluck hem with a prayer on your lips, always approaching from the east using Yu’s Pace (see below) and with your vital breaths well retained. When you gather a rock that resembles a mushroom, grind it with a pestle for 36,000 blows, you will live to be a thousand; after ten pounds, to ten thousand. It may be also be shared with others.

Jade-fat excrescences grow on jade-bearing mountains, always suspended from dangerous locations. They are formed from hade grease which flowed out thousands of years ago and congealed. Some are shaped like birds and animals and their coloring varies, though most of them resemble the blue jade from pure mountain waters. There are also some that are fresh and bright like rock crystal. When you get some of these, grind and mix them with cudweed juice, and they will immediately liquefy. Drink a quart, and live to be a thousand.

Seven-eyed and nine-eyed excrescences are both stones. They grow at the rocky base of high mountains overlooking streams and resemble flat bowls not more than a foot or thereabouts in diameter. They are connected by stems. Those three or four foot inches long and having seven hollows are called seven-eyed; those with nine, nine-eyed. These hollows are like stars, visible at night for more than a hundred paces, each eyes showing separately. They may be powdered, but not mixed. They are always to be seen at the autumnal equinox, and when you gather them they are to be pestled and an inch-square spoonful taken. The moment it enters your mouth it will make your body very hot and sweet with the fragrance of the Five Savors. After taking a pound you will live to be a thousand. They give a man's body a glow, so that in no matter how dark a spot he may be, we will resemble the moon and be able to see at night.

The rock-honey variety grows in Rock House on Shao-shih (a portion of Mount Sung). This "house" happens to be over a chasm so deep that it cannot be crossed and that a stone thrown into it can be heard tumbling for half a day. Some ten rods below the house there is a stone pillar on whose top is a stone capital about ten feet in diameter. As one watches these excrescences it will be noticed that after a very long interval one drop falls from Rock House onto the capital. It reminds one of the drop of rain that will occasionally fall through the roof of a house after a shower. But the drops in this case never cease, while the capital itself never overflows. There is an inscription in tadpole writing on Rock House, reading "Anyone taking one peck of this rock-honey will live for ten thousand years." Processors all feel that this site is inaccessible and that this material is to be caught only by fastening a bowl to the end of a strong pole of bamboo or wood. But no man has been able to make such an instrument. Yet, since the inscription there is known, some in the past must have been able to get to them.

The rock-cinnamon type grows in the caves of famous mountains. It resembles a cinnamon tree, but is really a rock. It is about a foot high, and the large ones are a foot in diameter. It glistens and has an acrid taste. It is branched. Pestle and take a pound of it, and you will live to a thousand.

The Yellow-fellow-in-rock species is found everywhere, but it is most numerous on the mountains near streams. When they are found in large rocks, several dozens can be obtained. In a large rock the reddish yellow will ooze like a chick embryo in its shell. It must be drunk the moment you find it, otherwise it will congeal to stone and no longer fit to take. The correct method is to drink it before it hardens. Once it hardens one is obliged to grind it and then take it. By opening one rock one can expect a maximum of one quart and minimum of several gills which may be taken immediately. Though you may not get much at a time, keep taking it as you find it until the combined accumulation is three quarts. Then you will to be a thousand. If you wish to take a larger amount, you may, but it will be difficult to obtain.

The geode variety grows in soapstone and resembles the Yellow-fellow-in-roc, but it is not found in all soapstone. In breaking open about a thousand large pieces one may be found. The moment a rock that doesn't contain one is broken, a multicolored light will appear, flashing automatically. Take a quart, and live to a thousand.

The sulphur type is found in all the five revered mountains, but it is especially numerous in Mount Chi. There is a local legend to the effect that Hsu Yu came there and took some of them, thereby achieving Fullness of Life. That is why he no longer concerned himself with riches and honors and declined to succeed to Yao.

The red sulphur variety is the red sperm of rock, probably related to the yellow sulphur variety. Both abound on the banks of streams. While moist, they may be taken in the forms of pills. After hardening they must be powdered and then taken.

There are 120 of the rock variety. The facts will be found in the *T'ai-I yu ts'e* and *Ch'ang-yu nei chi*. I cannot list them all here.

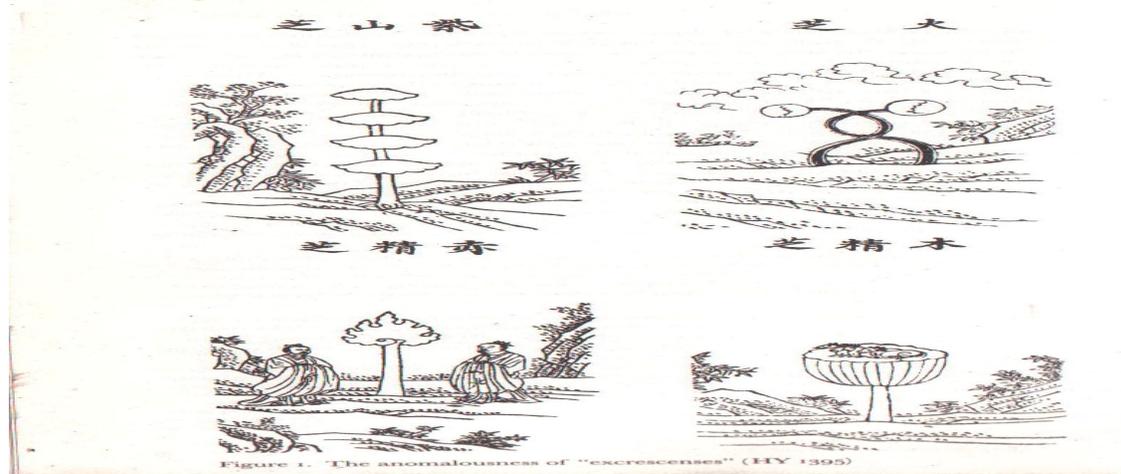


Figure 1. "The anomalousness of "excrecences" (HY 1395)

Wood excrescences Sap from evergreen soaks into the ground and after a thousand years changes into truffles. After ten thousand years, small trees resembling water lilies start growing from the truffles; therefore we call them wood-resin mushrooms. They shine at night and are very moist to the touch. They will not burn. Worn at the waist, they protect against weapons. If a chicken is bound with them and placed in a crate with eleven others, and from a distance of twelve paces twelve arrows are shot at the crate, all the other chickens will be hit, but the one bound with the resin excrescence will go unharmed. Gather those that grow higher than your belly, and on the six days of the sexagenary cycle beginning with *chia* dry them in the shade for one hundred days. Powder, and then take three inch-square spoonfuls a day. After taking a whole branch of them, you will live to be three thousand.

A thousand-year-old dead tree will have a root under it resembling a seated man seven inches tall. When this is cut, blood will ooze forth, if the sole of your feet are smeared with this, you will be able to walk on steams without sinking...By taking somewhat less than ten pounds of this blood in powdered form, one can live for a thousand years.

Beneath the bark of the limb of a pine that is three thousand years old there will be found an accumulation of sap resembling a dragon. It is called Express Token Mushroom. Some larger ones weigh ten pounds, and by taking a full ten pounds, powdered, one will live to be five hundred.

The alum-peach variety looks like a rampant dragon, with flowers and leaves resembling a red net, and fruit resembling blue birds. It is not more than five feet high, and grows on the northern slope of the famous mountains on the banks of east-flowing springs. Gather it and grind it at Summer beings (May). Take the whole piece, and you will live for five hundred years.

The triple type is red and brilliant. When struck, its branches and leaves resound like metal or stone; when broken off, it regenerates and immediately becomes as before. The wood-shield species grows against large trees, like a water lily, and has nine stalks

which form one mass. It tastes sweet and acrid. The fruit of the stabilizer variety grows in the fields of Tu-kuang. Its skin resembles a ribbon or a snake, and is marked like the make phoenix. By getting and taking these three excrescences one will ascend to heaven in broad day-light. (entheogenic mushroom?)

The three types yellow-brazier, eight-foot-tree-flower, and primal-exudate-flower grow at Yao-hsiang and Feng-kao on Mount T'ai. All who gather and eat them will live for a thousand years.

The yellow-sucker *t'an-huan* variety: Among the roots of a thousand-year-old yellow-sucker tree there will be found something resembling a three-bushel container some ten or twenty feet from the main trunk, but connected with it by this roots resembling a skein of thread. Find this, powder it, take it in its entirety and you will become an earth genie and enjoy immortality.

Of this wood category there are also 120 species, all of which are illustrated in the books.

Herb excrescences The self-shaking variety of herb excrescence moves itself even when there is no wind. Its stem is the size of a finger and red as cinnabar. Its leaves normally resemble Anaranthus. At its roots there is a large mass the size of a quart measure with twelve smaller globules the size of chicken eggs completely surrounding the main root like the twelve signs of the zodiac. Extending from these for a distance of about ten feet there are thin filaments like white hairs, all connecting with one another. It grows along the deep ravines of high mountains, where the surrounding areas have no other vegetation. Get the large mass, powder it, take it all, and you will live for a thousand years. One of the smaller globules, so treated, will bring you a hundred years and me be shared with others. The main root, kept at the breast, will tend you invisible. When you wish to become visible again, wheel to the left and remove it.

The buffalo-horn species grows in the Hu-shou mountains and along the slopes in Wu. It is shaped like an onion and noted for resembling a buffalo's horn three or four feet long. It is of a bluish hue. Powder and take an inch-square spoonful three times daily for one hundred days, and you will live for a thousand years.

The dragon genie type is shaped like rampant dragons placed back to back, its leaves representing the scales. Its roots are like a coiled dragon. By taking one of these you will live for a thousand years. The hemp-mother variety resembles hemp, its stalk is red, and its flowers, purple. (one wonders if this isn't just a hashish resin from a particularly potent type of purple Hind Kush "indica" that has purple colors, some speculate the purple color could be some type of mold though its apparently much sought after by *Cannabis* connoisseurs). Pearl-type excrescences have yellow flowers, red leaves, and its fruit resembling plums, is purple in color. Twenty-four branching hang connected with some one another like a festoon of pearls.

The white-tally kind is four or five feet tall and resembles the flowering plum tree. It always flowers at Big Snows (December) and forms its fruit in winter. The vermilion species consists of nine bends, each of which has three leaves, with three fruits to a leaf.

The five-virtue one is shaped like a towering hall. Its stem is rectangular, and its leaves are of all colors, but not variegated. The top is like a capital. Within it there is

always some nectar, and from a distance of several feet a purple vapor can be observing to rise.

Dragon-bit excrescences, in the second moon of spring, grow in pairs of three longitudinal sections and twelve branchings. The lower root resembles a seated person.

All told, there are 120 species of the herb type, any of which, if dried in the shade and taken, will enable a man to last as long as all nature or live to be one or two thousand years old.

Flesh excrescences The ten-thousand-year-old hoptoad is said to have horns on its head, while under its chin there is a double-tiered figure 8 written in red. (see the toad pictured under the entry above for *Ganoderma*) It must be captured at noon on the fifth day of the fifth moon and dried in the shade for a hundred days. A line drawn on the ground with its left foot will become a running stream. When its left foreleg is carried on the person, it will ward off all types of weapons. If an enemy shoots at you, the bow and arrow will both turn against the archer. The thousand-year-old bat is as white as snow. When perching, it hangs head down because its brain is heavy. If both of these creatures are obtained, dried in the shade, powdered, and taken, a body can live for forty thousand years.

If in the mountains you should come across a little man seven or eight inches tall riding in a palanquin or on a horse, it will be a flesh excrescence. By seizing and taking it you will immediately become a genie.

The wind-born animal, resembling a sable, blue in color and the size of a fox, is found in the huge forests of the southern seas and caught by means of nets. Several cartloads of faggots can be used to roast it, but after these faggots have been consumed, it will be found in the ashes unburned, its fur unscorched. Even an ax blade will not pierce it. It will die only after being beaten over the head a thousand times with an iron mace as though it were a leather sack. After it is dead, if its mouth is opened toward the wind, it will promptly revive and walk off. It dies at once, however, if its nose is stuffed with reeds from the surface of a rock. Mix the brain with chrysanthemum flowers and take a full ten pounds, and you will live for a five hundred years.

The thousand-year-old swallow nests on the north side. Its color is largely white, but the tail is -- . Catch one of these, dry it in the shade, powder and take it, and you will live for hundred years.

There are altogether 120 such species, all of them flesh excrescence.

Tiny excrescences These grow deep in the mountains, at the base of large trees or besides springs. They may resemble buildings, palanquins and horses, dragons and tigers, human beings, or flying birds. They may be any of the five colors. They too number 120 for which there exist illustrations. All are to be cut with a bone knife. When dried in the shade, powdered, and taken by the inch-square spoonful, they produce geniehood. Those of the intermediate class confer several thousand years, and those of the lowest type a thousand years, and those of the lowest type a thousand years of life.”

“*White stones*” ? *baishi* Adepts like Jiao Xian consumed “white stones” or *baishi* and there is a famous Master Whitestone *Baishi Xiansheng*. Scholars speculate this is milky quartz, termed “*baishi ying*” or “white stone flowers”, or hydrated magnesium silicate

(*baishi hua*) which also means stones flowers. Campany notes Ge Hong mentions a “powder for entreating the Mother made from white stone flowers” that when ingested makes one see ghosts (suggestive of entheogen perhaps). Quartz, as Campany notes, is common in Chinese alchemical recipes and also in gem stone formula from India to Arabia and found in the writings of Paracelsus. Adepts survived on a broth of these mysterious substances and they are described in texts like the *Declarations of the Perfected* as used for cutting off grains *bigu* and “entering the mountains.”

To “avoid grains and enter the mountains” the Zhengao writings mention a technique by the immortal Baishizi or the Master of the White Rocks which might be pieces of white quartz in black sesame seed oil, honey, mountain spring water with shallots. The quartz pieces are ground into the shapes of tiny eggs and tossed in after a retreat with breathing practices and chants and cooked for five days, then swallowed whole with the leftover soup being consumed as well. The process allows the adept to eat as much (without damaging his *qi*) or as little as he wants.

These are often cryptograms or otherwise veiled references and largely unidentifiable. Such lists, such as the five exudations of Mao Ying, are common in the literature. Some scholars suggest that “stoney honey excrescences” (*shini zhi*) that “grows in a stone room of the Lesser Chamber” are some from of crystallized honey or even sugar, while others opt for some special stalagmite or stalactite in a cave. The “purple beam” (*zulang*) is speculated to be an error for *cihang* or “female yellow” orpiment or *zikuang* “purple mineral” the latter of which is gum lac, a secretion of the female lac insect, known also as red gum *chijiao*, and Campany informs this was imported from Annam or Cambodia, and used in medicine and alchemical ingredient.

Some of these glowing, bioluminescent examples could range from various mushrooms or fungi, such as “foxfire” which is the he phosphorescent light emitted by decaying timber. There are quite a few examples of this and I have inquiries into to more qualified experts on this and mineralogical examples in the regions that I hope can at least make some first steps to explaining and identifying some of these references. It may be certain weather or atmospheric conditions, as certain times of year are indicated for finding these (or adding potions to the area which may catalyze reactions making the spectrum visible to the naked eye), created certain strange anomalous effects attractive to the intrepid mystic foraging strange substances on remote mountains. Strange exudations abound in certain mountainous regions. I have had personal experience with the *rasayana* and Ayurvedic *shilajit* (conqueror of mountains and destroyer of weakness) that has potent rejuvenating properties, balances digestion and is even, if I may, aphrodisiac. One wonders what types of similar substances are found only a specific mountains in China, some of which have stunning, distinct examples of biodiversity.

Animals

Amyda sinensis Soft-shelled turtles. This is murky territory for the author, and citations are limited but some adepts mention diets consisting of turtle brains. While this could code for something else, the turtle was a delicious and healthy meal for many. In Chinese

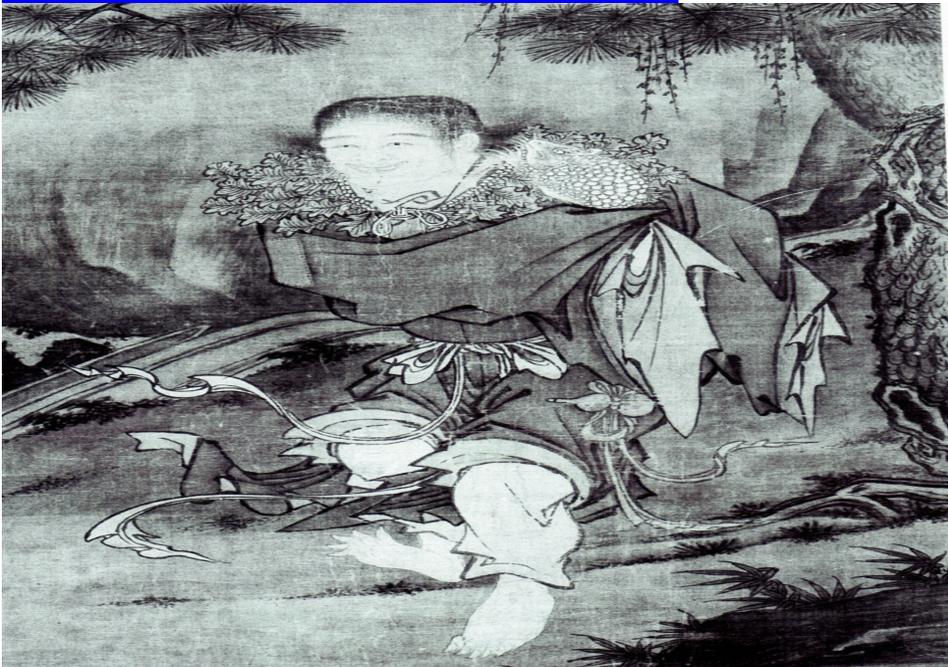
medicine the turtle shell (*bie jia*) is used extensively in tonic formulas and longevity recipes. Reports in the literature describe the actual eating of the shell as well, used raw, or after being stir-baked with vinegar. The turtle is something of a “familiar” to the Daoist master.



Bufo spp. Chan Su Toad venoms

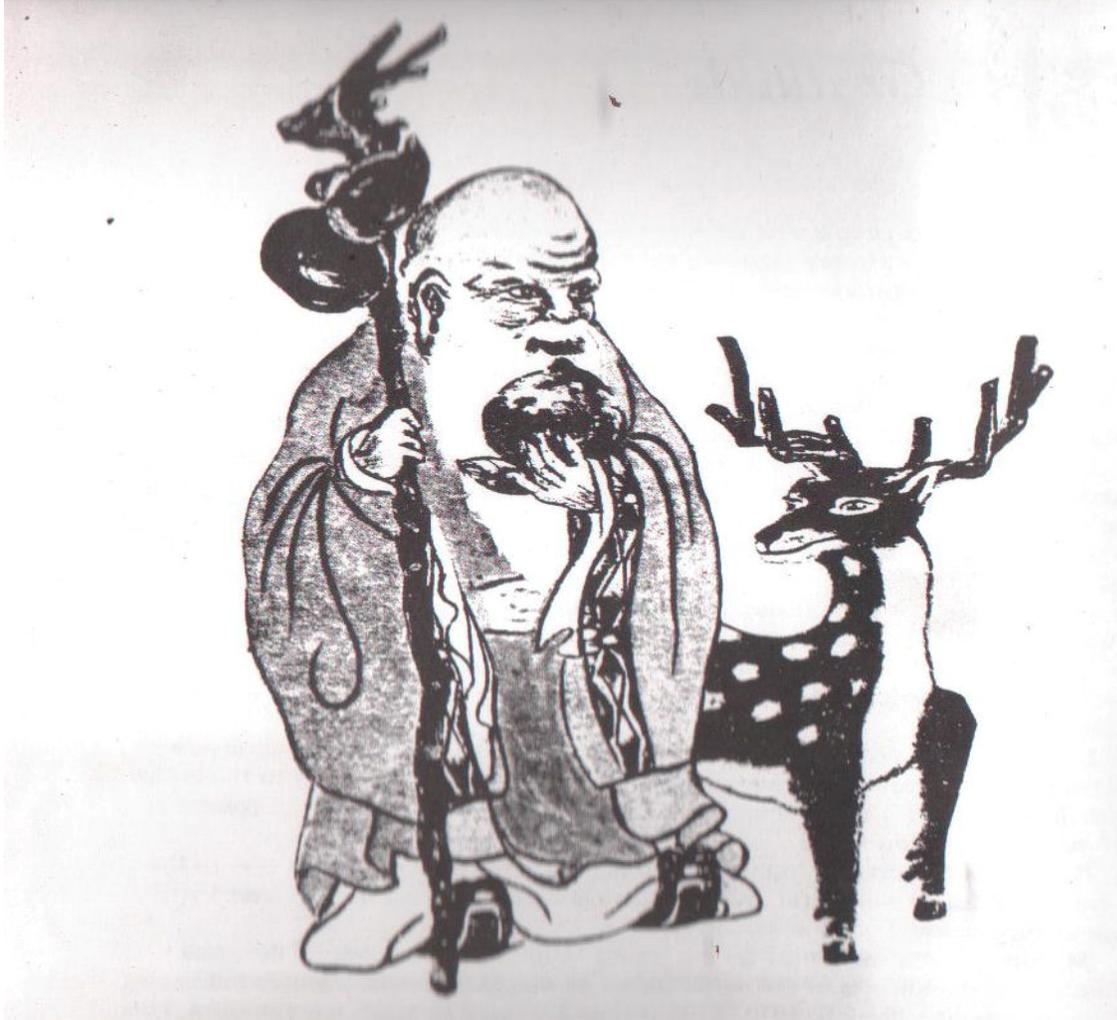
see: *A Toad on the Moon: Or a Brief Speculation on Chinese Psychoactive Toad Venoms*

<http://sites.google.com/site/delawareteasociety/a-toad-on-the-moon-or-a-brief-speculation-on-chinese-psychoactive-toad-venoms>



Odocoileus spp. Dried venison, and wine, are often in old adept descriptions, which Levy interprets as representing their wild, carnivorous and perhaps licentious behavior. The dietary regimens often allow for only dried meats, sometimes explicitly only dried venison, though these become less frequent as Buddhist vegetarian notions crept into

Daoism. Deer parts are often used extensively in Chinese medicines, and deer antler honey is a precious tonic. Some major types: Deer *malujiao* (red deer antler)", "*Meihualujiao* (sika deer antler)", "*Lujiao tuopan* (dropped disk of antler)." The Tomb Epitaph of the Recluse the honorable Mr. Chen, Master Deer Leather, of Dongyang in the Yuan exemplifies some tough, mountain-man hermit in a rough leather-skin outfit. "He wore a Daoist cap and cut up deer leather for clothes, and planted medicinal herbs" and "People called him Master Deer Leather, for he wore clothes made of deer leather, which signified his intention to be a recluse." The Daoist and certain tantric sages seem to prefer deer skin for meditation rugs as exemplified in numerous artworks. Some have speculated about the relationship between *Amanita muscaria* and the spots on the Axis deer, and the spotted deer is symbolically linked to magic fruits and immortality.



Dr. Dharmananda is quoted extensively below for his discussion on deer antler to nourish blood, bone and joints.

"The story of deer antler can be traced back to the first Chinese Materia Medica, *Shennong Bencao Jing* (ca. 100 A.D.), where it is described briefly (1). There is also reference to earlier use of deer antler in an archeological find (a set of silk scrolls named

Wushier Bingfang, from a tomb dated 168 B.C.). However, use of antler appears to have been infrequent until the animals were raised on "deer farms" starting in the mid-16th Century in China (Ming Dynasty period). This is a time when several other cultivation and animal husbandry projects were established in support of medicine. Soon after, Wu Kun included a formula in his book *Yi Fang Kao (Study of Prescriptions, 1584)* that has inspired much work with the combination of deer antler and tortoise shell, two bone-like materials rich in gelatins. His formula is *Gui Lu Erxian Jiao* (*gui* = tortoise, *lu* = deer, *erxian* = two immortals; *jiao* = gelatin). The formula is made as a firm gelatin, using the following recipe (proportioned to the amount being made):

Deer antler (<i>lujiao</i>)	5,000 g
Tortoise plastron (<i>guiban</i>)	2,000 g
Lycium fruit (<i>goujizi</i>)	1,500 g
Ginseng (<i>renshen</i>)	500 g

This formula is said to replenish yin and essence, tonify qi, and strengthen yang. It is used for deficiency of kidney yin and yang, deficiency of blood and essence in the penetrating and conception vessels, with symptoms of weakness of the lower back and legs, impotence, blurred vision, etc. (2). The penetrating vessel, (*chongmai*), one of the extra meridians, is referred to as the "sea of blood." The conception vessel (*renmai*), while sometimes associated with reproduction, is related to generation more broadly, including generation of blood. Tortoise shell and deer antler are said to nourish the marrow."

Many types of substances like honey (also eaten and mixed in soups), ox-fat and lard are mentioned for binding pills.

Magic, Meditations, and Talismans

The Mao-shan adept Master P'ei, as described by Robinet, expelled the worms by visualizing a green breath coming from the eyes, a red breath rising from the heart, and a yellow breath issuing from the navel. These three breaths are based in a single breath which travels throughout the body transforming it into a fiery light.

The adept Gan Shi, in the Inner Chapters, went a year without grains, or food at all perhaps. "Gan Shi's method for (replacing grains) was to summon the six *jia* and six *ding* jade maidens, each by her own name and style, incant them into water, and drinkit; (the water) could be also used to render oxen and horses hungerless" which accords with talismans that were said to powerful enough to assuage entire armies of hunger.

The Pace of Yu

The mystically inclined wildcrafter of herbs must take ritual precautions before entering the mountains. Besides talismans, and certain times of year and other taboos, one must take the shamanic paces known as the “Steps of Yu.”



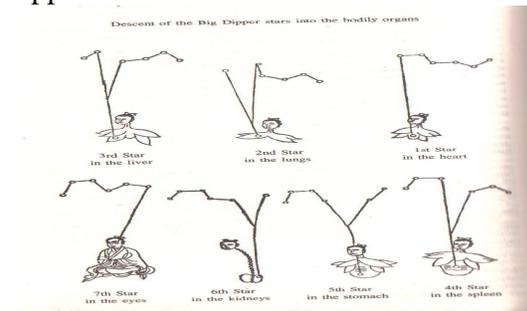
In the *Pao-p'u-tzu*:

“Standing in an upright position, the right foot should be in front and the left behind. Then bring the right foot forward and, with the left foot behind. Then bring the right foot forward and, with the left foot following the right, bring them into alignment. This is the first step. Once again put the right foot in front and then bring the left foot forward. Making the left foot follow the right, bring the feet into alignment. This is the second step. Once again bring the right foot forward and, with the left foot following the right, bring them into alignment.

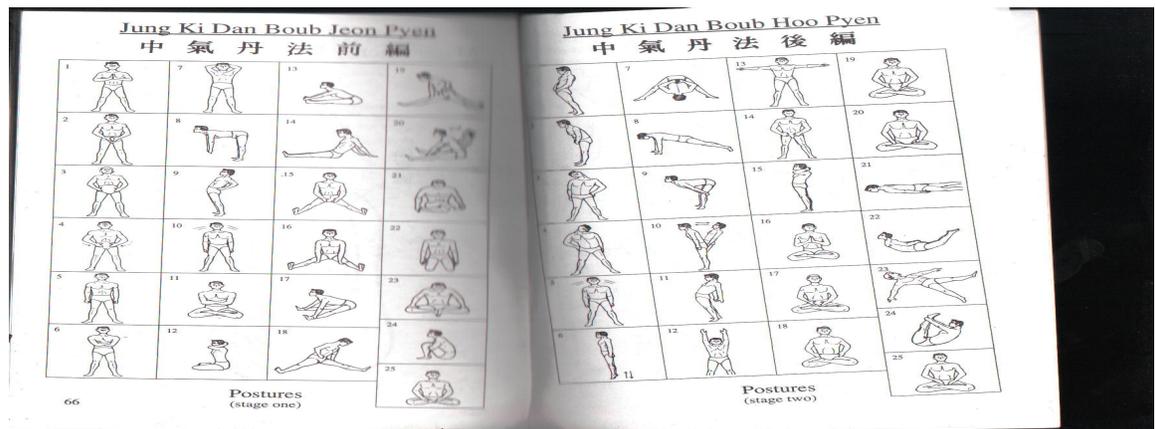
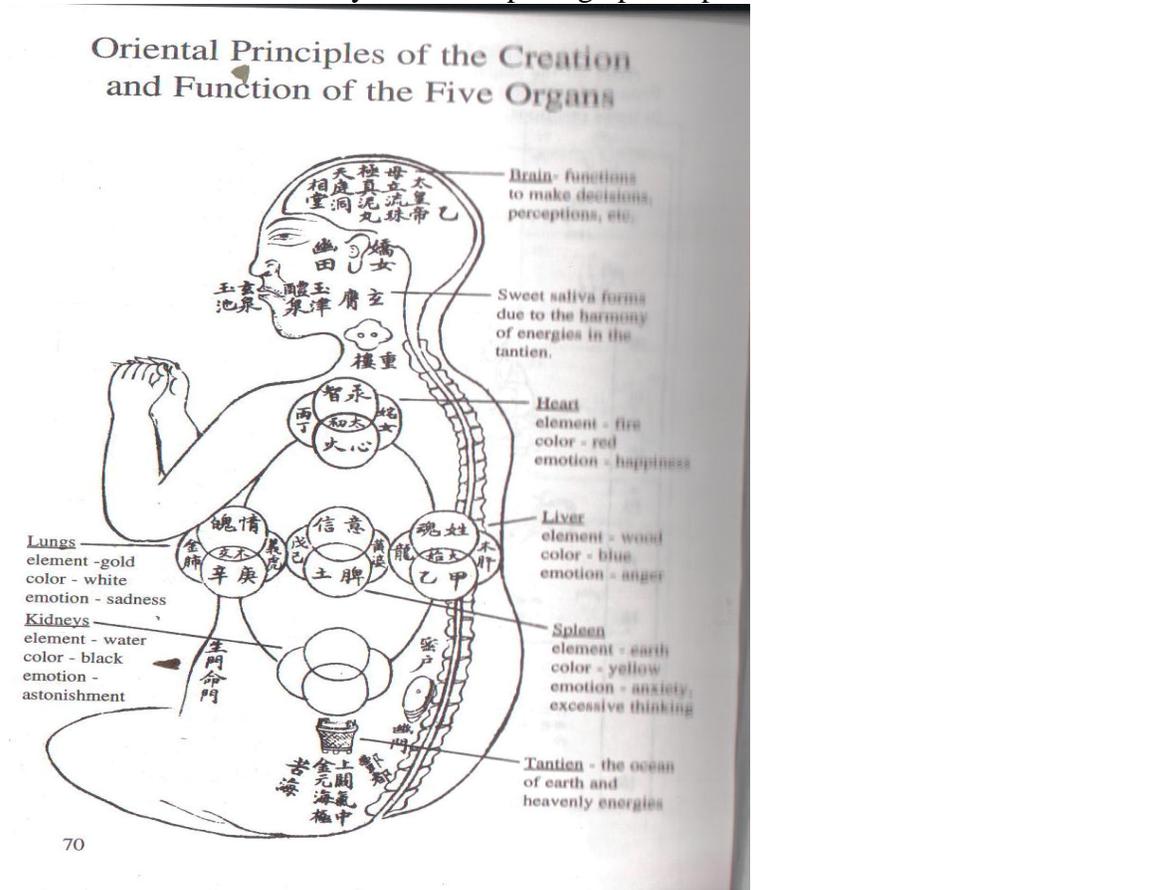
The *Yun-chi ch'i-ch'ien*

“The March on the Net (*pu-kang* means to step on the Bushel which is called the *t'ien-kang* or “heavenly net”) proceeds from the “three steps and nine tracs.” This is what is called the Step of Yu. It goes very far back in the past so that it was Yu of the Hsia dynasty who received it from the gods and transmitted it to the world.... The Three Originals and the nine stars, the Three Poles, and the Nine Palaces correspond to the great number of the Great Yang. This method (consists in) first lifting the left foot. One stride, one step, one foot forward and one foot back, one yin and one yang—the former and the latter steps are alike. Lift the leg horizontally and put the feet down to form the character *ting* (in the shape of the letter “T”) and, in this manner, to reproduce the union of yin and yang.

The adept could replace regular foods, and their by dispels demons and disease, by ingesting subtle energies, essences and celestial vapors. Here are some Chinese illustrations for imbibing power from the Big Dipper.

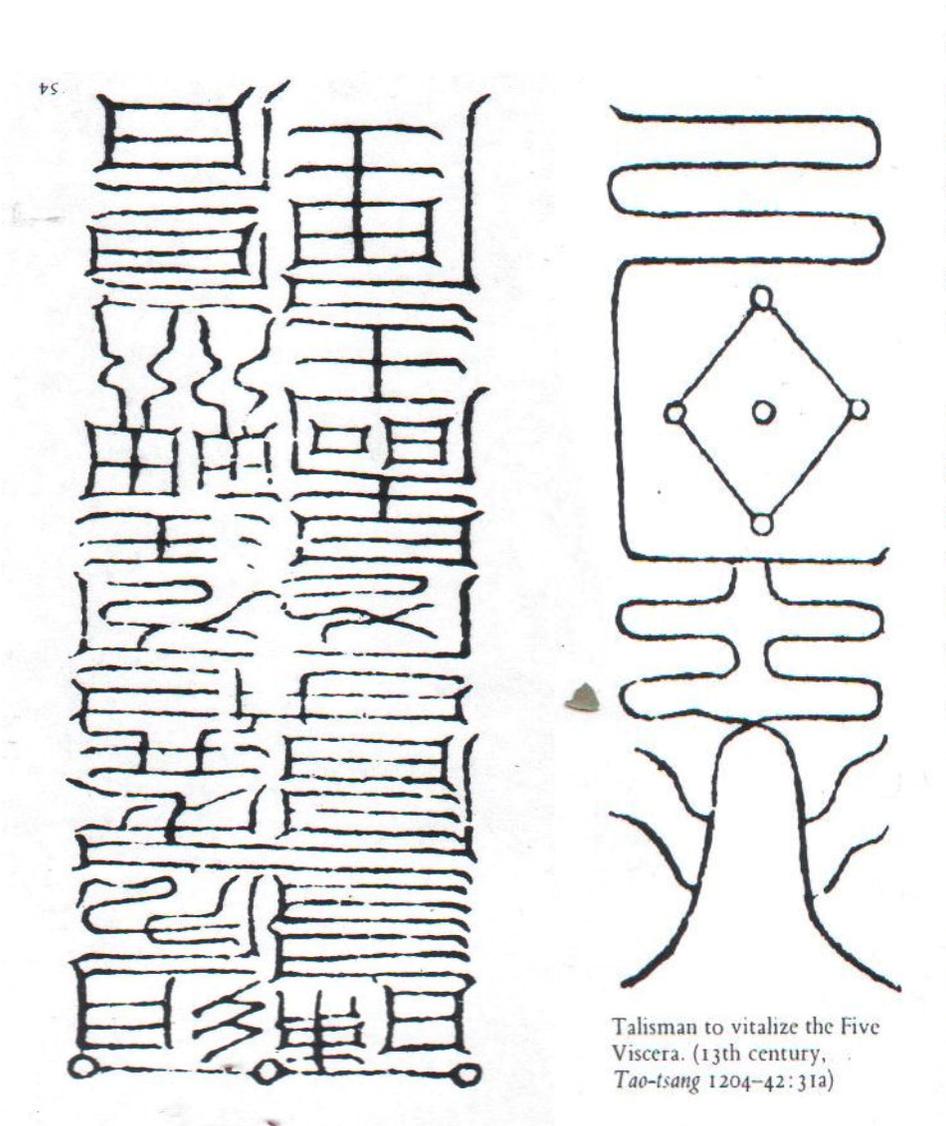


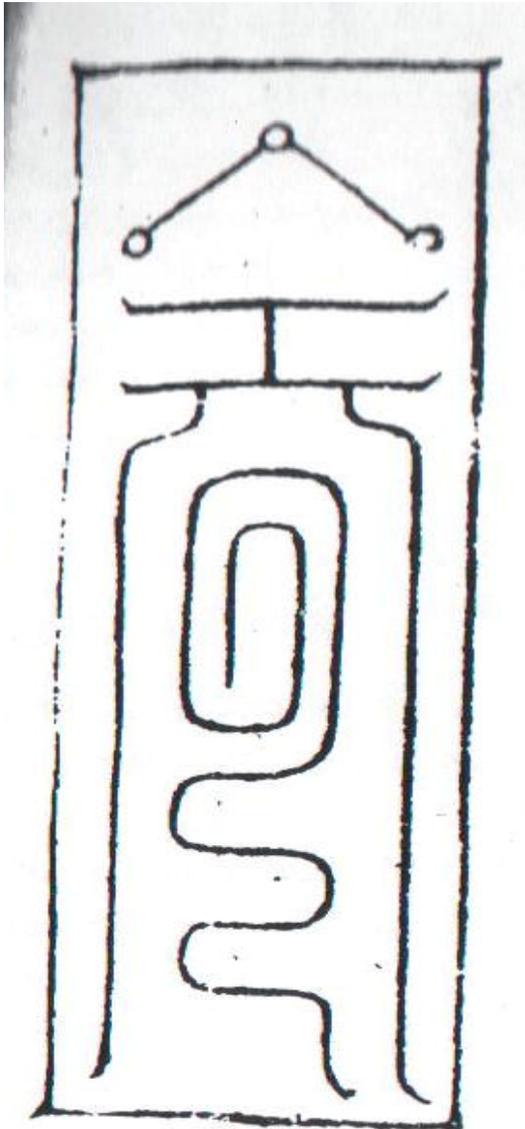
Examples of a Korean form of *daoyin* called *Sun-do*, these diagrams as examples in print and online are scarce. Many focus on opening up the spine:



I have failed to find talismans expressly for expelling the Three Worms in print, but have seen them in private collections. I hope to obtain them for a future monograph on talismans.

Talismans for long life:



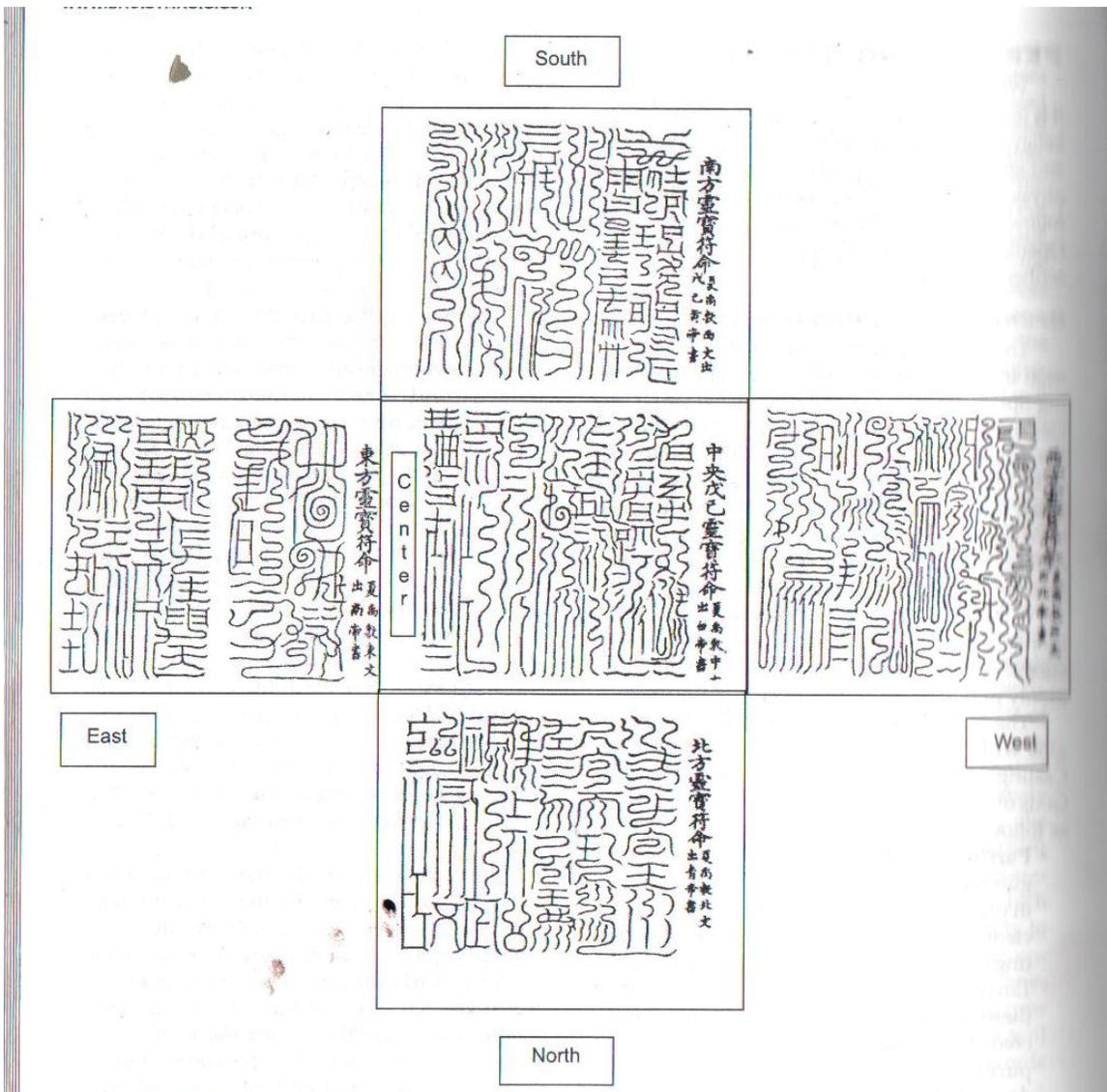


Talisman to prolong life. (Early 12th century, *Tao-tsang* 463-271: 27b)



Talisman of the Ruler of the South, to assist in refining spiritual energy, and by Taoist Inner Alchemy, to achieve immortality. The design incorporates a gourd-shaped crucible with *lien* - 'to smelt' or 'to refine' - beneath. (*Tao-tsang* 1152-29: 6b)

For “entering the mountains” one hangs talismans on the belts, with cinnabar inks, on materials such as peach wood. Below are the Lingbo Talismans, said to be originally transmitted from Emperor Yu from the Xia Dynasty (2205-1765 BCE):



The Supreme Skills from the Supreme Clarity Gold Mother for Seeking Immortality

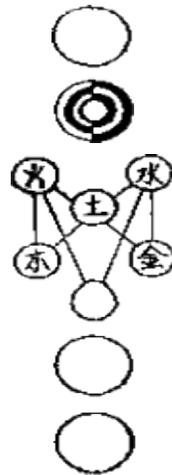
Talisman of the Sacred Mountain of the North.



北嶽常山真形圖



北
冬



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Bottle Gourd Studio- *Traditions of Recluses (Yinyi zhuan)*

Dedicated to M., who succumbed to an addiction to exotic laxatives. Whose last words were "Who needs a doctor?"