# Questions and Answers on Materia Medica

## A Short Introduction to Tang Zonghai's Běncăo wèndá

In the vast corpus of the běncǎo or materia medica literature of China, Tang Zonghai's (唐宗海, 1862-1918) Questions and Answers on Materia Medica (本草問答) occupies an exceptional place. Tang, also known by his style or courtesy name Rongchuan (容川), wrote it late in his career at the request of one of his followers who argued that, because of all the trees (the enormity of information in the existing literature), it had become impossible to see the forest. The ability of one drug to cure a hundred diseases, as described in the materia medica, had made it hard, if not impossible, to cure even one disease. Another point in his argument to convince Tang to write the book was Tang's knowledge of Western medicine. Through an exposition of general principles, the nature and action of both Chinese and newly introduced Western drugs could be extrapolated.

Tang is recognized as one of the main proponents of the movement to integrate Western and Chinese medicine. This is extensively reflected in his oeuvre, first and foremost by his *Quintessence of the Medical Classics in view of the Convergence of China and the West* (中西匯通醫經精義). While he embraced new knowledge from the West, he also countered the ridicule of Chinese medicine by Western scientific circles with elaborate and astoundingly convincing arguments. In fact, he utilized Western anatomical drawings to give further evidence for concepts like qi transformation. In the first section of the *Běncǎo wèndá*, after explaining how the ancient Chinese arrived at their knowledge of the viscera and bowels, he wrote:

且西洋剖視只知層折而不知經脈,只知形跡而不知氣化。與中國近醫互有優劣。若與 古聖內經本經較之則西洋遠不及矣

Moreover, the Western world's anatomical observations only [lead to] knowledge of layers and broken up [fragments] but not of channels and vessels, and they [lead to] knowledge only of traces of forms but not of qi transformation. [Western medical science] and China's contemporary medicine each have their strengths and weaknesses, but if we compare with the ancient sages, the [Huang Di] neijing and the [Shen Nong] benjing, [the knowledge of] the Western world does not come close!

Tang also contributed substantially to the theory and clinical treatment of diseases of blood, as reflected in the key work *On Blood Patterns* (血證論). His elaborate thinking about the formation of and relation between qi and blood is apparent in *Questions and Answers on Materia Medica* as well.

In the course of that latter text, we are guided from the general to the specific. Philosophical questions are raised in the first set of questions. Why are animal, mineral and herbal substances, being of different classes than humankind, able to treat illness in humans? How do substances achieve their nature? How do methods of observation inform medical theory, and why is the ancient method of observation and tasting of drugs not inferior to the Western method of proving efficacy? As the questions begin to focus on groups of, as well as individual medicinal substances, Tang manages to swiftly move back and forth from theory to practical implications. A recurring question is: Why do drugs do what they do, such as up- and downbearing, floating and sinking, attacking and harmonizing,

supplementing and draining? In the answers, Tang demonstrates the relevancy of environment, growth patterns (form, color, qi, and flavor) and/or timing and method of both harvesting and processing. The writer manages to capture and hold the reader's attention by avoiding dry facts, choosing instead an enjoyable style of informative story-telling. The thorough investigation of how the action and quality of *huángqi* (astragalus root) depend on where and how it grows, is a fascinating example of this. He also explains several aspects of medical theory in new ways and combines them directly with clinical applications.





flowering astragalus

黄芪 astragalus root

An interesting aspect of his answers to questions on why drugs with the same flavor can have different actions is that he proposes and illustrates a refinement of established theory. All the five flavors (sweet, bitter, acrid, sour, and salty) are true to their original nature when 'normal', but their action transforms when they are 'extreme'. For instance, 'slight bitterness' has the original nature of fire and thus the ability to warm heart fire, but 'great bitterness' turns into the opposite and acquires the cold nature of water (established theory holds that 'bitterness can drain'). He combines this with what Xu Lingtai (Xu Dachun) already noted about the actions of medicinals, namely that these can variously depend on their particular qi, flavor, color, form, substance, or time and location of growth.

With all these insights partially introduced and illustrated with examples in the 75 questions, the reader gains an understanding of many principles regarding the medicinal actions of some 340 medicinals and 35 formulas. The analyses offered by Tang have the potential of widening and deepening the foundation of the practice of Chinese medicinal therapy. The writer himself says: "Although this tome

is not exclusively a běncăo book, still all the essential meanings of the běncăo are contained in it."

Even though the text, rich in diversity as it is, ought to be read in its entirety to fully benefit from it, the following excerpts may serve to give a first impression:

#### 問曰

入氣分入血分,其理未易明也,請再言之。

#### Question:

The principles of 'entering the qi aspect' and 'entering the blood aspect' are not easy to understand. Could you please elaborate on this?

#### 答曰

秉於天水而生者入氣分,秉於地火而生者入血分。氣本於天,味本於地,氣濃者入氣分,味濃者入血分。入氣分者走清竅,入血分者走濁竅。有如大蒜,氣之濃者也,故入氣分走清竅,上為目瞀而下為溺臭。海椒味之濃者也,故入血分走濁竅,上為口舌糜爛而下為大便辣痛。 觀此二物,即知入氣分入血分之辨矣

#### Answer:

That which grows by grasping from heaven and water, enters the qi aspect. That which grows by grasping from earth and fire, enters the blood aspect. Qi is rooted in heaven. Flavor is rooted in earth. Concentrated qi enters the qi aspect. Concentrated flavor enters the blood aspect. That which enters the qi aspect travels to the clear orifices. That which enters the blood aspect travels to the turbid orifices. Dàsuàn (garlic), for example, is concentrated qi, and thus enters the qi aspect and travels to the clear orifices. Ascending, it creates visual distortion, descending, it leads to fetid urine. Hăijiāo (= làjiāo, hot pepper) is concentrated flavor; therefore, it enters the blood aspect and travels to the turbid orifices. Ascending, it causes ulceration of the mouth, and descending, it leads to hot painful stool. If you look at these two substances, you will understand the distinction between entering the qi aspect and entering the blood aspect.

蓋得天水之氣而生者入氣分, 人參、黃芪最顯者也。外如澤瀉、苡仁生於水而利水,二物同而不同。苡仁生於莖上則化氣下行,引肺陽以達於下。澤瀉生於根下則化氣上行,引腎陰以達於上。百合花覆如天之下垂,旋覆花滴露而生,本天之清氣,故皆入氣分,以斂肺降氣。

As for those [medicinals] that grow by acquiring the qi from heaven and water and enter the qi aspect,  $r\acute{e}nsh\bar{e}n$  (ginseng) and  $hu\acute{a}ngq\acute{i}$  (astragalus) are the most obvious [examples]. Other examples are  $z\acute{e}xi\grave{e}$  (alisma) and  $[y\grave{i}]y\check{i}r\acute{e}n$  (coix), that grow in water and [have the ability to] disinhibit water. The two substances are similar yet different:  $[Y\grave{i}]y\check{i}r\acute{e}n$  grows on a stalk and so moves downward when it transforms qi. It draws lung yang to reach down to the lower body. Because  $z\acute{e}xi\grave{e}$  grows down at the root, the transforming qi moves upward, and [consequently] it draws kidney yang to reach to the upper body.  $B\check{a}ih\acute{e}hu\bar{a}$  (flower of the tiger lily) is turned upside-down as if it droops down from heaven.  $Xu\acute{a}nf\grave{u}hu\bar{a}$  (inula flower) grows from dripping dew. They [express] clear qi rooted in heaven; therefore, both enter the qi aspect in order to constrain the lung and downbear qi.



百合花 flowering tiger lily

## [... ...]

紅花色赤,自入血分而味苦則專能泄血。又凡花性皆主輕揚,上行外走,故紅花泄肌膚脈絡在 外在上之血。丹皮色味亦類紅花而根性下達與花不同,故主在內及泄中下焦之血。

The color of *hónghuā* (carthamus) is red. It naturally enters the blood aspect. Its flavor is bitter, so that it has the special ability to discharge blood. Moreover, the nature of all flowers is to govern lightness and buoyancy. They move upward and travel to the exterior. Thus, [the action of] *hónghuā* is to discharge blood in the skin, vessels and networks at the external and upper [body]. [Mŭ]dānpi (moutan)'s color and flavor is of the same category as *hónghuā*, but the nature of roots is to reach downward, which is different from flowers. Therefore, it governs the inner body and discharges blood of the center and lower burner.



紅花 carthamus, dried flowers

桃花紅而仁味苦,皆得地火之性味者也,仁又有生氣,故桃仁能破血亦能生血。茜草色赤味苦 根甚長,故下行之力更重,專能降泄行血也。

*Táohuā* (peachflower) is red and the flavor of the kernel (*táorén*) is bitter. They both acquire their nature and flavor from earth and fire. The kernel additionally has vital qi. That is why *táorén* has the ability to both break blood and engender blood. *Qiàncǎo* (madder)'s color is red, its flavor bitter, and its root is very long. Therefore, its power to move downward is rather strong, and its special ability is to downbear, discharge and move blood.

## 問曰

大黄苦寒之性自當下降,而巴豆辛熱之性,宜與大黄相反,何以亦主攻下?而較大黄之性尤為迅速,此又何說?

#### Question:

The nature of dahuáng (rhubarb) is bitter and cold, so it naturally should precipitate and downbear, whereas  $b\bar{a}dou$  (croton), which has an acrid and hot nature, should do the opposite of dahuáng. Why then does it also govern offensive precipitation, and how can it be explained that compared to dahuáng's nature it is even more rapid?



大黄 rhubarb root

#### 答曰

此又以其油滑而主下降,其能降下則是油滑所專主,而非辛熱所專主也。凡食麻油、當歸,皆能滑利下大便,巴豆、蓖麻子皆有油,皆滑利皆能下大便。但麻油不熱則其行緩,不辛則氣不 走竄,故其下大便也緩。蓖麻子味辛氣溫,是有氣以行其油滑之性,故其行速。巴豆之油與麻油、蓖麻同一滑性,而大辛則烈,大熱則悍,以悍烈行其滑利,故剽劫不留也。

#### Answer:

Here, as well, it is by its oily slipperiness that it governs downbearing. Its ability to downbear is singularly governed by that oily slipperiness and not by its acridity and heat. Whenever you eat  $m\acute{a}y\acute{o}u$  (sesame oil) or  $d\~{a}nggu\~{i}$  (Chinese angelica root), they are able to lubricate and precipitate the stool.  $B\~{a}d\`{o}u$  and  $b\grave{i}m\acute{a}z\~{i}$  (castor bean) both contain oil, and both are lubricating and can precipitate stool. However, sesame oil is not hot, so its moving [action] is slow. It is not acrid, so its qi is not mobile and penetrating. Therefore, it is slow in its precipitation of stool. The flavor of castor bean is acrid and its qi is warm. This means that it has qi to move its oily-slippery nature; therefore, its movement is rapid. The slippery nature of  $b\~{a}d\~{o}u$  oil is similar to that of  $m\acute{a}y\acute{o}u$  and  $b\~{i}m\acute{a}[z\~{i}]$ , but it is highly acrid and thus harsh; highly hot and thus fierce. Because it carries out its lubricating and disinhibiting harshly and fiercely, it plunders without lingering.

麻仁亦油滑,而無辛烈之性,故但能潤降不能速下。葶藶亦有油,自能滑利,又有辛味,是與 巴豆之辛而有油相似。其味又苦,是又與大黃之苦而滑潤相似。然則葶藶隱寓巴豆、大黃二者 之性,故能大瀉肺中之痰飲膿血,性極速降。蓋有大黃、巴豆之兼性,誠猛藥也。恐其太峻, 故仲景必以大棗補之。杏仁亦有油,但得苦味而無辛烈之氣,故降而不急。

[Huŏ]márén (cannabis seed) is also oily and slippery, but it does not have an acrid and harsh nature. Hence, it is only able to moisten and downbear and cannot rapidly precipitate. Tingli[zi] (lepidium/descurainia seed) has oil as well, and naturally can lubricate. It also has an acrid flavor and is similar to acrid and oil-containing bādòu. Its flavor is bitter as well, so it also resembles bitter, lubricating, and moistening dàhuáng. In that way tingli[zi] harbors the natures of bādòu and dàhuáng; therefore, it has the ability for major drainage of phlegm-rheum, pus, and blood from the lung. Its nature is extremely rapid downbearing. As it has the combined natures of dàhuáng and bādòu, it is a truly fierce medicinal. Out of fear of it being overly drastic [Zhang] Zhongjing insisted on ameliorating it with dàzăo (jujube). Xìngrén (apricot kernel) contains oil as well, but it acquires a bitter flavor and lacks an acrid and harsh qi. Thus, it downbears but not urgently.

## 問曰

藥有以天時名者如夏枯草、款冬花,得無以時為治乎

#### Question:

There are medicinals that are named after the seasons, like *xiàkūcǎo* (prunella) and *kuǎndōnghuā* (coltsfoot). Isn't it so that what they treat is in accordance with [those] seasons?

 ${translator's note: 夏 [xià] = summer; 枯 [kū] = wither; 冬 [dōng] = winter; 花 [huā] = flower}$ 

### 答曰

然天時者五行之流運,陰陽之分見,故凡論藥,又當論其生之時與成之候。雖不盡拘於時而亦 有以時為治者。夏枯草生於冬末,長於三春,是正得水木之氣。遇夏則枯者木當火令則氣其退 謝,故用以退肝膽經之火。款冬花生於冬月冰雪之中而花又在根下,乃坎中含陽之象,故能引 肺中陽氣下行而為利痰止咳之藥。二物皆以時名,皆得其時之妙用也。

#### Answer:

Now, the [seasons or] heavenly periods [correspond to] the movements of the five phases and are observed as distinctions of yin and yang. Therefore, whenever we discuss medicinals, we also must discuss the seasons in which they grow and the periods in which they mature. Although it is not always so that the treatment [abilities of medicinals] are restricted by the [influences of] seasons, still there are those that derive them from the seasonal [influences].  $Xiak\bar{u}cao$  grows at the end of the winter and matures during the three months of spring. This means that it principally acquires the qi of water and wood. Once summer arrives, it withers; when wood comes under the command of fire, the qi retreats and declines. That is why  $[xiak\bar{u}cao]$  is used to abate fire in the liver and gallbladder channel. Kuandonghua grows in the icy and snowy winter months, and its flowers are also at the base of the root. As  $kan \equiv$  (water) contains the manifestation of yang (represented by the center line of the trigram), it therefore has the ability to draw yang qi from the lung downward and thus is a phlegm-disinhibiting and cough-suppressing medicinal. The two substances are named after the season [in which they grow] as both acquire the subtle effect of that season.

Questions and Answers on Materia Medica is full of little gems in between enlightening insights in the working of medicinals. Why do bones not rot after death, and what profundities are hidden in the relationship between blood and hair? How do you obtain bezoar from oxen, and why is it that you can treat disease with the product of a disease? What medicinals should be used for different kinds of phlegm and why? Master Tang's explanations are sometimes surprising and do not fail to offer modern practitioners new ways of thinking about their pharmacies.

\*\*\*\*\*\*

See the Appendix below (p.viii) for a list of discussed medicinals with their Chinese, pinyin, common English, and Latin pharmaceutical names.

Nicolaas Herman Oving is the author and translator of this introduction and he can be reached via hermanoving@gmail.com. This article was first published on <u>Aowen Chinese Medicine</u>, December 2016. Nicolaas wishes to thank Nadine Luchtman-Levie for her editorial work.

All photography, except for the flowering tiger lily, is by the author. Please contact him if you want to use any of the photographic materials.

Sharing, copying, printing, etc. of the entire article is not allowed without permission of the author. For citations, please add the author's name, the title of the article, and the web address of publication.

An annotated translation of the complete text of the *Bencao wenda* will be published by <u>Passiflora Press</u>.

# Appendix

# List of medicinals in order of appearance in the text:

Chinese	pīnyīn	common English	Latin pharmaceutical*
黄芪	huángqí	astragalus	Astragali Radix
大蒜	dàsuàn	garlic	Allii Sativi Bulbus
海椒 = 辣椒	hăijiāo = làjiāo	hot pepper	Capsici Fructus
人參	rénshēn	ginseng	Ginseng Radix
澤瀉	zéxiè	alisma	Alismatis Rhizoma
[薏]苡仁	[yì]yĭrén	coix	Coicis Semen
百合花	băihéhuā	lily	Lilii Flos
旋覆花	xuánfùhuā	inula	Inulae Flos
紅花	hónghuā	carthamus	Carthami Flos
[牡]丹皮	[mŭ]dānpí	moutan	Moutan Cortex
桃花	táohuā	peachflower	Persicae Flos
(桃)仁	(táo)rén	peach kernel	Persicae Semen
茜草	qiàncăo	madder	Rubiae Radix
大黄	dàhuáng	rhubarb	Rhei Radix et Rhizoma
巴豆	bādòu	croton	Crotonis Fructus
麻油	máyóu	sesame oil	Sesami Oleum
當歸	dāngguī	Chinese angelica	Angelicae Sinensis Radix
蓖麻子	bìmázĭ	castor bean	Ricini Semen
[火]麻仁	[huŏ]márén	cannabis seed lepidium/descurainia jujube apricot kernel	Cannabis Semen
葶藶[子]	tínglì[zĭ]		Lepidii/Descurainiae Semen
大棗	dàzăo		Jujubae Fructus
杏仁	xìngrén		Armeniacae Semen
夏枯草	xiàkūcǎo	prunella	Prunellae Spica
款冬花	kuǎndōnghuā	coltsfoot	Farfarae Flos

<sup>\*</sup>note: Latin pharmaceutical names are chosen instead of botanical names because they indicate parts used and are thus more relevant for the practice of medicine.