

APRICOT SEED & PERILLA FORMULA XING SU YIN

Apricot Seed & Perilla Formula (*Xing Su Yin*) was first published in the Late Ming Dynasty as part of *The Golden Mirror of the Medical Tradition* (Yuzhuan Yizong Jinjian, 1742). The full title of the book can be translated as “Imperially-Commissioned Golden Mirror of the Orthodox Lineage of Medicine.” The Golden Mirror project was a mandate from the emperor and was intended to be both a compilation of medical writings from the Han Dynasty and a “rectification” of medical knowledge. The book was written by more than 80 authors chosen from the court’s medical scholars.

GENERAL SIGNS/SYMPTOMS

Apricot Seed & Perilla Formula (*Xing Su Yin*) is designed to treat the initial stages of acute wind-cold invasion, with or without cough or wheezing. Common signs/symptoms include those of the common cold, such as chills without sweating, nasal congestion, headache, low-grade fever, body aches and a mildly irritated throat. Because the formula includes ingredients that release the chest and resolve phlegm, it is also used to treat asthmatic breathing/wheezing that is triggered by wind-cold. Note that **Apricot Seed & Perilla Formula** (*Xing Su Yin*) does not contain ephedra (*ma huang*).

ACTIONS

- | | |
|------------------------------|--|
| 1. Disperses wind-cold | 4. Rectifies rebellious lung qi and releases the chest from constraint |
| 2. Releases the muscle layer | 5. Relieves cough and wheezing |
| 3. Transforms phlegm | |

INGREDIENTS

PINYIN	LATIN	ENGLISH	PERCENT OF FORMULA
<i>Xing Ren</i> (chief)	<i>Prunus Armeniaca Semen</i>	Apricot Seed/Kernel	13%
<i>Zi Su Ye</i> (chief)	<i>Perilla Frutescens Folium</i>	Perilla Leaf	13%
<i>Jie Geng</i> (deputy and envoy)	<i>Platycodon Grandiflorum Radix</i>	Platycodon Root	12%
<i>Fu Ling</i> (assistant)	<i>Wolfiporia Cocos Sclerotium</i>	Poria/ Tuckahoe/ Hoelen	12%
<i>Fang Feng</i> (deputy)	<i>Saposhnikovia Divaricata Radix</i>	Siler/Saposhnikovia Root	12%
<i>Ge Gen</i> (assistant)	<i>Pueraria Montana Radix</i>	Kudzu Root/ Pueraria Root	10%
<i>Chen Pi</i> (assistant)	<i>Citrus Reticulata Pericarpium</i>	Tangerine Peel, aged	10%
<i>Zhi Ban Xia</i> (assistant)	<i>Pinellia Ternata Rhizoma</i>	Pinellia Rhizome	10%
<i>Sheng Jiang</i> (assistant)	<i>Zingiber Officinale Rhizoma Recens</i>	Fresh Ginger Rhizome	8%

GENERAL INDICATIONS / MODERN APPLICATIONS

- | | | |
|--|---|---|
| • Asthmatic breathing (from wind-cold) | • Cough, with or without sputum | • Pneumonia, wind-cold type, acute or lingering |
| • Body aches/myalgia | • Fever, low-grade | • Post-nasal drip/runny nose |
| • Bronchitis (wind-cold type) | • Headache | • Pox disorders (presenting as a wind-cold pattern) |
| • Chills, without sweating | • Influenza (wind-cold type) | • Throat, sore, mild |
| • Cold, aversion to | • Nasal congestion | • Wheezing |
| • Common cold | • Nausea, from wind-cold or from swallowing mucus | |
| • Constipation (from lung qi not descending) | • Neck, stiff | |

FORMULA DISCUSSION

From at least the 14th century, there was concern among physicians that strong diaphoretic formulas, especially those containing ephedra (*ma huang*), were too harsh for many patients. These concerns continue into the present day. In order to release exterior wind-cold, they used milder herbs which, in combination, had enough strength to expel even severe wind-cold. Popular among these combinations were pairs such as perilla leaf (*zi su ye*) and ginger (*sheng jiang*) or siler (*fang feng*) and pueraria (*ge gen*). **Apricot Seed & Perilla Formula** (*Xing Su Yin*) emerged from these strategies as a formula that could not only strongly and safely disperse cold from the exterior but could also treat wind-cold that had entered the lungs, causing cough and wheezing.

FORMULA ACTIONS

- **Disperses wind-cold**
- **Releases the muscle layer**
- **Transforms phlegm**
- **Rectifies rebellious lung qi and releases the chest from constraint**
- **Relieves cough and wheezing**

TONGUE

Usually normal. Possibly with slight red tip. The coating will range from normal to slight wet or thin white.

PULSE

Floating and tight.

CONTRAINDICATIONS / NOTES

Not to be used for chronic cough or cough from yin deficiency. Use with caution when there is diarrhea. If there are signs of significant heat, such as red throat, fever > 100.5°F (38°C), wind-heat rashes, etcetera, take **Mulberry & Lycium Formula** or **Siler & Platycodon Formula** instead. If there are swellings in the throat or in the lymph nodes of the neck, take **Yin Chiao Formula** or **Pu Ji Formula** instead. For infants, give **Children's Clear Lung Formula** instead, because of their tendency to develop quickly into a heat condition.

DOSAGE

Adults with acute wind-cold invasion should take 2-4 tablets (according to strength of constitution) every 2-3 hours. As symptoms subside, the frequency can be dialed back to every 4 hours until resolved. Children 7 years and older can take 1.5-2 tablets every 3-4 hours. Younger children can usually handle 1 tablet every 3-4 hours. Use with caution and monitor digestive function when prescribing to younger children or patients with weak spleen qi.

Apricot Seed & Perilla Formula (*Xing Su Yin*) is considered to be an associate formula of Cyperus and Perilla Leaf Powder (*Xiang Su San*), a simple formula from the early 12th century used to expel exterior cold while regulating qi in the interior. The chief association here is the use of perilla leaf (*zi su ye*) to release exterior wind-cold. In **Apricot Seed & Perilla Formula** (*Xing Su Yin*), the action to expel cold from the exterior is strongly augmented with other herbs. In order to address the lung involvement: resolve phlegm, stop cough, and arrest wheezing, **Apricot Seed & Perilla Formula** (*Xing Su Yin*) contains not only apricot kernel (*xing ren*) but also an entire other formula to this purpose, Citrus & Pinellia Decoction (*Er Chen Tang*).

When wind-cold from the exterior enters the hand *taiyin*, it inhibits the dispersing and descending functions of the lung. Cold in the exterior blocks the lungs from diffusing through the surface; cold in the lung *zang* blocks the descending function of the lungs and traps the qi and pathogen inside the chest. Rebellious qi develops, manifesting as cough and wheezing.

Every organ is paired twice. There is a yin-yang pairing and a "same name" pairing. In digestion, the ascending action of the spleen's yin (*zang*) function is paired and contrasted with the descending actions of the stomach's yang (*fu*) action. But in the "same name" pairing, the hand *taiyin* (lung) and foot *taiyin* (spleen) work together as organs of fluid metabolism. There is still ascension and descension going on with the *taiyin* pair, but instead of promoting digestion, *taiyin* prevents the formation and accumulation of phlegm and dampness. The spleen ascends into the lungs to support lung qi and to lend its transformation action to prevent phlegm and dampness from forming. At the same time, the lung's descending action moves the transformed turbid fluids into the bladder for elimination. If the product is thicker (phlegm), then the lung may move the turbidity into its own yin-yang paired organ, the large intestine. The bottom line here is that if the communication between the lung and spleen is impaired, then the spleen cannot transform dampness or phlegm efficiently, the lung cannot descend it, and the lung will become a receptacle for the standing phlegm or dampness.

When there is rebellious qi in the lungs, oftentimes the diaphragm becomes constrained as well, and this can further complicate the communication breakdown between the spleen and lung. It is because of this dynamic that so many of the substances that resolve phlegm in the lungs enter both of the *taiyin zang*. Some of them also open the chest or unblock the diaphragm, and a good many have an action to treat the nausea and vomiting that can develop as a result of a spleen being overwhelmed with dampness.

The formula is fairly straightforward. It disperses acute wind-cold pathogens from the exterior while it resolves cough and calms wheezing. External wind-cold must be confirmed in order for **Apricot Seed & Perilla Formula** (*Xing Su Yin*) to be effective for cough and wheezing. These confirmations include aversion to wind, a feeling of "coming down with something" with a lack of sweating, chills (with or without low-grade fever) and body aches. Other common wind-cold signs and symptoms include headache, stiff neck, and nasal congestion. Perhaps the most important sign will be found in the pulse. Acute wind-cold of an excess type will always be superficial and slightly tight where the *taiyang* sinew channel is reflected.¹

SYNERGY OF INGREDIENTS

This formula has two substances that perform the role of “chief.” That is because **Apricot Seed & Perilla Formula** (*Xing Su Yin*) has two equally important main actions: 1) to expel cold from the exterior, and 2) to resolve cough and wheezing. Perilla leaf (*zi su ye*) stands as the representative herb in the first action; apricot kernel (*xing ren*) governs the second. Together they serve as co-chiefs. All the other herbs in this formula support one or both of the two main actions.

Apricot kernel (*xing ren*) is bitter, heavy, moistening, and slightly warm. It is the chief herb in the formula to stop cough and calm wheezing. The combination of bitterness and heaviness means that it has a strong action to direct qi downward. It can therefore help to restore the lung’s descending action. The moistening property helps apricot kernel (*xing ren*) to loosen phlegm and to guide that phlegm to the large intestine to be excreted. To assist this chief with resolving phlegm to treat cough and wheezing and to free the chest and diaphragm, the famous formula, **Citrus & Pinellia Formula** (*Er Chen Tang* / Two Cured Decoction) was included by the Ming Dynasty physicians who formulated **Apricot Seed & Perilla Formula** (*Xing Su Yin*).

From *Er Chen Tang*, we have poria (*fu ling*), prepared pinellia (*zhi ban xia*), and aged tangerine peel (*chen pi*). The main action of *Er Chen Tang* is to resolve phlegm and dampness that has obstructed the normal flow of qi. Prepared pinellia (*zhi ban xia*) and aged tangerine peel (*chen pi*) work reciprocally toward this end. Prepared pinellia (*zhi ban xia*) restores the flow of qi by removing the phlegm obstruction; while aged tangerine peel (*chen pi*) resolves phlegm by dispersing clumped qi. Prepared pinellia (*zhi ban xia*) is acrid, warm, has a descending and dispersing action and a slippery texture. The slippery texture envelops and loosens the phlegm while the acrid, downward-dispersing action drives the phlegm out. Like prepared pinellia (*zhi ban xia*), aged tangerine peel (*chen pi*) is acrid and warm, but instead of being slippery and descending, it is aromatic and bitter. The aromatic quality can revitalize the spleen while the bitterness and warmth disperse cold and drain dampness. Poria (*fu ling*) has the ability to regulate water passages anywhere in the body because it enters all three of the *zang* involved in water metabolism (lung, spleen, and kidney). It enhances the damp and phlegm-resolving actions by supplementing the spleen, freeing the water passages and directing fluid accumulation out through the urine.

In addition to the inclusion of *Er Chen Tang*, **Apricot Seed & Perilla Formula** (*Xing Su Yin*) also contains

platycodon (*jie geng*) for transforming phlegm and stopping cough. Platycodon (*jie geng*) is one of the most utilized herbs in the *materia medica* for transforming phlegm and stopping cough and wheezing. It is unique among herbs in this category because it is also used to guide the formula to the chest (or throat, in some formulas), and therefore serves as envoy in addition to its other role. In **Apricot Seed & Perilla Formula** (*Xing Su Yin*) platycodon (*jie geng*) functions as a deputy and an envoy. By strongly freeing the lung qi, platycodon (*jie geng*) not only treats the cough and wheezing in this pattern but combines with perilla leaf (*zi su ye*) to help drive out the cold pathogen. Without freeing the lung qi, the pattern could not be resolved. Simply releasing the exterior with warm, acrid herbs would still leave cold trapped in the lungs. The diffusing function of the lungs would improve temporarily, but the descending function would not, and the cough or wheezing would remain. Combined with the apricot kernel (*xing ren*) and the herbs from *Er Chen Tang*, platycodon (*jie geng*) helps to resolve the phlegm and damp and to rectify the lung qi to stop cough and arrest wheezing.

There are three other herbs in **Apricot Seed & Perilla Formula** (*Xing Su Yin*) to assist the second chief, perilla leaf (*zi su ye*), in expelling cold from the exterior. Perilla leaf (*zi su ye*) and ginger (*sheng jiang*) enhance each other’s actions and are frequently combined to release exterior wind-cold. Perilla leaf (*zi su ye*) enters the lung and spleen channels. It combines with platycodon (*jie geng*) to relax constriction in the diaphragm and free the lungs from cold constraint.

Siler (*fang feng*) and pueraria (*ge gen*) can both address wind that has penetrated a bit deeper than the superficial level but has not yet become a *yangming* issue. They both “release the muscle layer” and drive out wind. The muscle layer lies a bit deeper than the surface, though it is still considered the external terrain. They are important additions to the strategy because once the cold has affected the spleen (which is implicated by the presence of phlegm or dampness), it will often lodge in the flesh, which is the tissue governed by the spleen. The idea is to prevent the pathogen from penetrating any deeper by driving out wind from where it is likely to enter next, or perhaps already has begun to enter. The name “*fang feng*” translates as “the guard against the wind;” strongly identifying siler as not only a substance used to drive out wind, but also one that prevents invasion from wind. In **Apricot Seed & Perilla Formula** (*Xing Su Yin*) it serves both these functions.

Pueraria (*ge gen*) is the only cooling substance in this formula. It is the main herb used to expel wind that is “about to become a *yangming* condition.” In Six-Stages Theory, pueraria (*ge gen*) is prescribed not to release the exterior, but to prevent cold from transforming into heat. Along with the siler (*fang feng*) it can address dampness blocking the flow of qi in the flesh, which presents as stiffness in the neck and upper back.

MODERN APPLICATIONS

In China, most formulas that address excess wind-cold affecting the lungs, leading to cough or wheezing include one or two ingredients that are either forbidden or difficult to obtain in the West. The main two herbs in question here are ephedra (*ma huang*) and asarum (*xi xin*). In the West, these two herbs are considered too harsh or too toxic to be in common use. The purpose of **Apricot Seed & Perilla Formula** (*Xing Su Yin*) is to be a safe and effective alternative, acting in place of harsh formulas that contain the above two substances. A consequence of this situation is that there are virtually no studies published in English on **Apricot Seed & Perilla Formula** (*Xing Su Yin*).ⁱⁱ There are, however, a number of studies published on the individual ingredients that demonstrate the benefit of their inclusion in the present formula.

Apricot Seed (Xing Ren)—A 2013 survey study showed that apricot seed (*xing ren*) was the second most utilized herb in China to treat childhood asthma.^{iii, iv}

A 2020 review discovered that apricot kernel (*xing ren*) was “the core drug for the treatment of exogenous cough” in the *Clinical Guidelines and Medical Records*, and published the mechanisms and pathways by which this substance resolves cough.^v Apricot kernel (*xing ren*) contains multi-molecule, multi-target, and multi-pathway regulators in the treatment of acute cough and bronchitis. Nineteen active ingredients in apricot kernel (*xing ren*) have been identified and matched to these actions.

Perilla Leaf (Zi Su Ye) and Pueraria (Ge Gen)—A study published in 2010 sought to discover the most common and effective combinations of herbal substances utilized in the treatment of influenzas. Rigid statistical guidelines were applied to discover single substances, pairs, and small combinations that have been shown to be effective in the treatment of influenza. An underlying purpose of the study was to apply unsupervised hierarchical clustering methods to begin the groundwork of formulating new combinations that may possibly be even more effective in treating influenza. The statistical analysis of the clustering methods yielded four suggestions for new formulas that are predicted to be highly effective in the treatment

of influenza. One of the combinations identified was perilla leaf (*zi su ye*) with apricot kernel (*xing ren*); both of these herbs became part of the four formulas suggested by the computer model. Pueraria (*ge gen*), which is also a part of **Apricot Seed & Perilla Formula** (*Xing Su Yin*), was also included in the suggested formulas.^{vi}

A 2014 Korean study examined the active constituents of perilla leaf (*zi su ye*) that effectively address inflammatory disorders of the upper respiratory tract, including allergies and bronchitis. The main isolate was luteolin, a polyphenolic flavonoid. Luteolin was shown to have anti-inflammatory and antipruritic properties. Luteolin inhibited the secretion of inflammatory cytokines such as interleukin-1 β (IL-1 β) and tumor necrosis factor- α (TNF- α) from human mast cells (HMC-1) stimulated with phorbol myristate acetate plus calcium ionophore A23187 in a dose-dependent manner. Luteolin also significantly reduced the histamine release from rat peritoneal mast cells stimulated by compound 48/80, a potent histamine liberator.^{vii}

A 2020 study looked at the antiviral actions of pueraria (*ge gen*) against influenza. The introduction points out that the “antioxidant, anti-inflammatory, antitumor, cholesterol lowering, liver protective, and neuroprotective properties” of puerarin, an isoflavone of pueraria (*gen gen*), are well established, and that the present study aimed to examine more fully the antiviral effects of the isoflavone. They found that puerarin exerted an inhibiting effect *in vitro* and *in vivo* upon the neuraminidase, the result of which is that puerarin helps to prevent the release of newly-formed virions from infected cells. The study’s authors concluded that puerarin “effectively eliminates inflammation in the lungs.”^{viii}

Platycodon (Jie Geng) and Apricot Seed (Xing Ren)—A 2010 study looked at the effectiveness of the combination of platycodon (*jie geng*) and apricot seed (*xing ren*) in the treatment of cough, using a murine model. In the study, cough was induced using ammonia stimulation. They evaluated “cough duration” and “cough latency” and phlegm composition. The conclusion was that the combination of platycodon (*jie geng*) and apricot seed (*xing ren*) “significantly relieved cough and shortened cough time” (duration of cough). Furthermore, each substance was able to reduce phlegm volume independently, but this effect was not significantly increased (nor decreased) by combining the two herbs.^{ix}

Poria (Fu Ling) and Prepared Pinellia (Zhi Ban Xia)—A research committee from Shanghai University was formed to make recommendations for strategies to treat

COVID-19. Using autopsy reports to decide their starting point, they concluded that treatment of phlegm was of major concern. The autopsy reports showed that “There were obvious lung injuries in the body. The lung looked patchy to the naked eyes, with pale foci and dark red bleeding. The plane of section showed a large amount of thick secretion overflowing from the alveoli since there was a lot of mucus in the lung, which caused inability of oxygen to enter the alveoli for air exchange and failure of oxygen therapy, ultimately leading to suffocation.” They concluded from the autopsy reports that “The mucus may be one of the causes of death in critical patients. The mucus present in alveoli and bronchioles is very sticky and reduces the effect of mechanical ventilation. *How to remove the mucus from small airways is a problem to be solved urgently.*” [Italics not in original, added by author for emphasis.] From this conclusion, the committee described ten TCM strategies for the treatment of phlegm. Prepared pinellia (*zhi ban xia*) and poria (*fu ling*) were integral parts of these strategies. Prepared pinellia (*zhi ban xia*) was recommended for 6/10 of the strategies; poria (*fu ling*) was combined with prepared pinellia (*zhi ban xia*) for two of the same six.^x

A 2015 study looked at the constituents of poria (*fu ling*) that are believed to have immune-enhancing effects. EAF and CPF were regarded as immuno-enhancing fractions of poria (*fu ling*). Further, the HPLC analysis indicated that triterpenoids are the main constituents of EAF. In addition, the triterpenoids and polysaccharides in different parts of poria cocos were compared, indicating the triterpenoids were increased in the order of poria epidermis (*fuling-pi*) > red poria (*chi-fuling*) > white poria (*bai-fuling*) and the total saccharides and soluble saccharides of red poria were higher than other parts. The polysaccharides and triterpenoids were the immuno-enhancing fractions of poria and the former is stronger.^{xi}

Siler/Saposhnikovia (Fang Feng)—The reticuloendothelial system plays a key role in the elimination of particles and soluble substances in tissues as well as in circulation. *Siler (fang feng)* is said to be able to “eliminate wind of any type from anywhere in the body.” There is a close relationship between what we call “wind” and various types of debris in circulation and in the tissues. *Saposhnikovan A*, an acidic polysaccharide, was isolated from *siler/saposhnikovia (fang feng)* and showed remarkable reticuloendothelial system-potentiating activity in a carbon clearance testing.^{xii}

Another type of wind in Chinese medicine is part of *Bi Syndrome*, most patterns of which involve some type of wind: wind-cold, wind-cold-damp, wind-heat, etcetera.

A 2013 study looked at the suppressive effects *siler/saposhnikovia (fang feng)* had on rheumatoid arthritis. They studied specifically a chromone extract that is known to have anti-inflammatory action using rat models and collagen induced rheumatoid arthritis in their subjects. Histological and radiological examination showed that the extract from *siler* “significantly reduced the inflammatory responses in the joints” of the rats. Chemical tests showed that *siler/saposhnikovia (fang feng)* regulated more than ten chemical inflammatory responses.

There are hundreds of studies that look at immuno-modulation, antiviral, and immuno-protective actions of herbs. *Siler/saposhnikovia (fang feng)* is included in a high percentage of these studies, but rarely on its own as a single herb. Its highest occurrence in such studies is as an integral part of the famous three-herb formula, *Jade Windscreen Formula (Yuping Fengsan)*. A 2016 study showed that *saposhnikovia/siler (fang feng)* was effective against the coronavirus in porcine models.^{xiii} The coronavirus in this study is not the same variant that causes SARS nor any of the variants that cause COVID-19. But a 2020 study suggested that *saposhnikovia/siler (fang feng)* may be part of an effective strategy to prevent infection from SARS-CoV-2, the variant that causes COVID-19.^{xiv}

Aged Tangerine Peel (Chen Pi) and Prepared Pinellia (Zhi Ban Xia)—Both aged tangerine peel (*chen pi*) and prepared pinellia (*zhi ban xia*) are important inclusions in the official recommendations from Beijing for the treatment of COVID-19 at certain stages of the disease development. Both herbs were recommended for the recovery phase of COVID-19 infection, while aged tangerine peel (*chen pi*) was also recommended in their prescription for early phase infection, which their experts classified as “cold and dampness constraining the lungs.”^{xv}

A study from 2021 concluded that compounds extracted from aged tangerine peel (*chen pi*) help to prevent COPD and its progression into lung cancer by regulating AKT1, IL6, VEGFA, MMP9 and TP53.^{xvi}

A 2019 study examined the anti-asthmatic, antitussive, and expectorant effects of prepared pinellia (*zhi ban xia*). They found that prepared pinellia (*zhi ban xia*) on its own could “prolong cough latency” and “significantly decrease” the number of coughs in a given time frame. Additionally, it was demonstrated that prepared pinellia (*zhi ban xia*) was able to “improve asthma recovery time.” Its antitussive mechanism was shown to be related to the inhibition of substance P release, but the exact bio-

chemical mechanisms of expectorant and anti-asthmatic effects were not discovered in this study.^{xvii}

Ginger (Sheng Jiang)—A commonly used herb in Ayurveda, Siddha, Chinese medicine and more, ginger (*sheng jiang*) is among the most thoroughly studied phytomedicinals. A study published in 2011 reviewed much of the research concerning the various properties, actions, and medical applications of ginger (*sheng jiang*), noting that among these actions and properties, ginger (*sheng jiang*) has been demonstrated to possess anti-diabetic actions, anti-microbial actions, nephroprotective and hepatoprotective actions. It has larvicidal actions to destroy parasites, anti-cancer and analgesic properties, immunomodulatory and antioxidant actions, and more.^{xviii}

FORMULA COMPARISONS

Apricot Seed & Perilla Formula (*Xing Su Yin*) and Ephedra Decoction (*Ma Huang Tang*)

Both formulas treat excess cold in the exterior, characterized by “flu-like symptoms” with a lack of sweating, chills, or simultaneous chills with low-grade fever. Both formulas address the cough that commonly is part of this presentation. Ephedra is considered a harsh medicinal and is not fully legal to use freely in some parts of the world, including the United States. The main differences between the actions of these two formulas is that Ephedra Decoction (*Ma Huang Tang*) is going to be a little stronger to expel excess cold from the exterior, while **Apricot Seed & Perilla Formula** (*Xing Su Yin*) is going to be stronger to resolve phlegm and address the accompanying cough and will be more useful if the condition is about to transform into a *yangming* condition, that is, if cold is about to transform into heat.

Apricot Seed & Perilla Formula (*Xing Su Yin*) and Cinnamon Twig Formula (*Gui Zhi Tang*)

Cinnamon Twig Formula (*Gui Zhi Tang*) is primarily used to treat external cold in a deficient constitution or a constitution where the *ying* and *wei* levels are in disharmony. Sweat will be present, though the pattern is wind-cold, not wind-heat. **Cinnamon Twig Formula** (*Gui Zhi Tang*) is more often used as a base formula upon which to build other popular formulas than it is used on its own. If *ying* and *wei* are in disharmony, **Cinnamon Twig Formula** (*Gui Zhi Tang*) can be used as a base formula and easily modified with other ingredients or even a second formula. Again, **Apricot Seed & Perilla Formula** (*Xing Su Yin*) will be stronger to resolve cough/wheezing and is more specifically for “excess cold,” whereas **Cinnamon Twig Formula** (*Gui Zhi Tang*) is

more appropriate for “deficiency cold.”

Apricot Seed & Perilla Formula (*Xing Su Yin*) and Fritillaria & Pinellia Formula (*Chuan Bei Ban Xia Tang*)

Both formulas treat excess conditions of bronchitis, pneumonia, and cough with phlegm. **Apricot Seed & Perilla Formula** (*Xing Su Yin*) treats these conditions when the pattern is wind-cold causing phlegm to develop; **Fritillaria & Pinellia Formula** (*Chuan Bei Ban Xia Tang*) treats these indications when the pattern is phlegm-heat in the lungs. In the latter pattern, the phlegm is the main pathogen; the heat is seen as developing from the blockage caused by the phlegm. Phlegm-heat in the lungs is generally considered an internal condition. The pulse will likely not be floating. **Apricot Seed & Perilla Formula** (*Xing Su Yin*) treats an external condition where external cold is trapped in the lungs, causing the lungs to attempt to protect themselves by producing phlegm. The phlegm in a **Fritillaria & Pinellia Formula** (*Chuan Bei Ban Xia Tang*) pattern will usually be yellow or green. In the **Apricot Seed & Perilla Formula** (*Xing Su Yin*) pattern, the phlegm will usually be white or clear. In addition to the pulse, the tongue presentation will be an important differentiation between the applications of these two formulas. **Apricot Seed & Perilla Formula** (*Xing Su Yin*) cases will present with a normal tongue, possibly with a slight red tip. The tongue coating will range from normal to slight wet or thin white. In the **Fritillaria & Pinellia Formula** (*Chuan Bei Ban Xia Tang*) pattern, the tongue coat will be thick or sticky and yellow. The tip will be red more often than not.

USEFUL COMBINATIONS

For severe wind-cold headache	Combine with black tea
For wind-cold cough or wheezing with sweating	Combine with Cinnamon Twig Formula
For wind-cold in <i>taiyang</i> with inhibited urination	Combine with Poria Five Formula
For pronounced/severe phlegm in chest	Combine with Fritillaria & Pinellia Formula
For severe nasal congestion with runny nose	Combine with Xanthium & Magnolia Formula

ENDNOTES

ⁱ The sinew channel pulses reflect the *wei* qi level, which should be the only level of qi involved in a purely exterior condition. The *taiyang* sinew channel can be found between 1 and 3 beans on either the right or the left wrist.

ⁱⁱ Please note that there is another formula with a similar name: *Xing Su San* (Apricot and Perilla Powder) is not the same formula as the one under discussion here (*Xing Su Yin*). There are English language published studies of *Xing Su San*, but the two should not be confused.

ⁱⁱⁱ *Zhe bei mu* was 3.9% more commonly used than *xing ren* for childhood asthma.

^{iv} Chen HY, Lin YH, Thien PF, Chen JL et al., “Identifying core herbal treatments for children with asthma: implications from a Chinese herbal medicine database in Taiwan,” *Evidence-Based Complementary and Alternative Medicine*. 2013, Article ID 125943. <https://doi.org/10.1155/2013/125943>

^v Sun JY, Fan YH, Zhou QY, Li XJ, and Zhou GT, “Analysis on the mechanism of core drugs in treating exogenous cough in Clinical Guidelines and Medical Records,” *History and Philosophy of Medicine*, 2020;2(4):110-118.

^{vi} Tang SH, Chen JX, Li G, Wu HW, Chen C, Zhang N, Gao N, Yang HJ, and Huang LQ, “Recipes Research: Research on component law of Chinese patent medicine for anti-influenza and development of new recipes by unsupervised data mining methods,” *Journal of Chinese Medicine*, 2010;30(4):288-293.

^{vii} Jeon H, Kim HS, Kang HJ, Lee HS, Jeong SI, Kim SJ, and Jang SI, “Anti-inflammatory and anti-pruritic effects of luteolin from perilla leaves,” *Molecules*, 2014;19(6):6941-6951.

^{viii} Wang HX, Zeng MS, Ye Y, Liu JY, and Xu PP, “Antiviral activity of puerarin as potent inhibitor of influenza neuraminidase,” *Phytotherapy Research*, 2021;35:324-336.

^{ix} Zhang JY, He P, and Li YK, “Experimental study on effect of bitter apricot seed, platycodon root, and their combination for relieving cough and expelling phlegm,” *Chinese Journal of Traditional Medical Formulae*, 2010;16(18):1-5.

^x Wang QQ (Lead Author), “Key to treating COVID-19: removing phlegm from small airways,” *Chinese Medicine and Culture*, 2020;3(3):164-168.

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