



Case Study: TCM Treatment of Atopic Dermatitis

By Dr. Te-Feng Tsai

ABSTRACT

A 15 year-old male has a history of atopic dermatitis and allergic rhinitis, and was under control by taking Western medication. His atopic dermatitis relapsed one year ago, and had no significant improvement by using anti-histamine and steroid, severe itchiness worsened when the weather is hot. His pattern differentiation is wind and heat abundance. The treatment principle is to purge fire, expel wind to relieve itchiness, and the prescribed formulas are Coptis & Scute Combination (Huang Lian Jie Du Tang) and Dang Gui & Arctium Formula (Xiao Feng San). After three months of treatment, symptoms have improved. Later the itchiness is worsen again, and there is no improvement when previous treatment is applied. After careful diagnosis, the itchiness might be related to nervousness. Therefore, calming herbs are added to the previous formula, and a satisfying result is reached.

INTRODUCTION

Atopic dermatitis, also called atopic eczema, is a chronic allergic disease of skin. Patients often have family histories of allergies, and frequently accompanies by asthma, hay fever, or allergic rhinitis. Most patients first occurred during infancy, childhood or puberty, and are not contagious. Long term skin itching and scratching not only thickens the skin, causes papules; but also affects sleeping quality. Patients often are unaware of the scratching during sleep, and injure the skin, and even cause wound

infections. These symptoms usually subside after puberty, but some may persist throughout adulthood.

The Clinical Characteristics of Atopic Dermatitis includes

1. Serious skin itchiness
2. Typical skin lesion at specific region. (Eczematous dermatitis or lichen dermatitis)
 - For infant and babies, mostly occur at facial, neck, extensor and flexor side of extremities.
 - For children, mostly occur at hollow part of the elbow, popliteal fossa, and neck. If the symptoms worsen, skin lesion may occur all over the whole body.
 - For adolescents and adults, mostly occur at flexor side of joints.
3. Chronically continuous or recurrent attacks. (Usually over 6 months.)
4. Individual or family member have history of atopic constitution (including asthma, allergic rhinitis, hay fever, or atopic dermatitis.)

If patient's symptom matches 3 or more of the above criteria, it can be diagnosed as atopic dermatitis. Because of recurrence frequency, the skin is often in a chronic inflammatory state, lesions have dry, scaling, darkening, and wrinkling appearances. In acute stage, there are oozing from the wounds and patients' emotions are greatly affected, this aggravates the conditions even more.

There is no specific term for this disease in Chinese medicine, but similar terms named after different clinical stages or region of lesions exist. For example, during infancy, it is called “tai-lian-chuang (胎釵瘡)”, or “nai-xian (奶癬)”, during puberty and adulthood, it is called “jin-yin-chuang (浸淫瘡)”, or “si-wan-feng (四彎風)”. The disease often caused by insufficient innate or allergen contact. Although symptoms are in the exterior, but they are actually from the inflammation inside the body. It is the viscera and bowels causing the skin to itch, that is the internal and external dampness stagnated and transformed into heat, and their mutual contention reside at the skin. Therefore this disease is associated with lung, spleen, and kidney meridians.

Three Clinical Patterns of Atopic Dermatitis

1. Dampness-Heat Pattern:

Mostly in acute stage, skin lesions are erythematous and swelling, sometimes erosion or oozing, accompanied by vexation, thirst, hard stool, difficult urination, reddish urine, yellow and slimy tongue fur, string-like and slippery rapid pulse.

Main treatment is to dispel dampness and clear heat by using “Dang Gui & Arctium Formula (Xiao Feng San)” Jia Jian.

2. Spleen Deficiency and Dampness Predominating Pattern:

Often has longer clinical course, skin lesions have exudates or vesicles, hypertrophic or infiltrating, accompanied by fatigue, gastric stuffiness or pain, slimy sensation in the mouth and torpid intake, bland taste in the mouth but not thirsty, abdominal pain and soft stool, pale tongue, white slimy or slippery tongue fur, soggy and weak pulse or moderate and weak pulse.

Main treatment is to tonify the spleen and dispel dampness by using Dampness-Eliminating Stomach-Calming “Poria Five Formula (Wei Ling Tang)” Jia Jian.

3. Blood Deficiency and Wind-Dryness Pattern:

Often seen in chronic cases, and usually recurrent, skin lesions are often dry and dark, thickened and lichenified,

scratch scars or scaling, and accompanied by fine pulse, and pale red tongue.

Main treatment is to nourish blood and moisten dryness by using “Dang Gui & Tribulus Combination (Dang Gui Yin Zi)” or “Four-Agent Dang Gui & Arctium Formula (Si Wu Xiao Feng San)” Jia Jian. Besides the above patterns, clinical observations found patients’ emotions can cause itchiness and lead to repeatedly scratching, and causing wound infections. When under stress causing stagnant Qi and transformed into fire, worsened dampness-heat symptoms, and aggravated scratching. Therefore, patients’ emotions should be considered by adding herbs with calming effect during the treatment.

CASE STUDY

Patient Information

Name: Mr. Chen

Sex: Male

Origin: Taipei City, Taiwan

Age: 15

Occupation: Senior high school student

Date of First Visit: April 6, 2007

Major Complaint

Severe itchiness, with erythematous papule, lichen and flakes all over the body for about a year.

History of Present Illness

This 15 year-old male youth had suffered from atopic dermatitis since infancy, and began to have allergic rhinitis and taking western medicine to control the conditions since childhood. The skin symptoms began to subside after 7 years old, but recurred last year. Serious skin itchiness, especially in the extremities, facial, chest and back regions. Diffuse erythematous papules, thickening of skin and scaling was noted. He went to a dermatologist of local hospital for treatment. The diagnosis was atopic dermatitis, or eczema. Prescriptions of Fezofenadine, Methylprednisolone, Cephalexin, Lactobacillus casei,

and topical use of Mometasone furoate did not relieve the conditions. The itchiness and scratching increased, and uncontrollable scratching persisted all day, conditions worsen when the weather is hot. Air conditioning was needed to sleep, even in the winter. Suffering from scratching scars, rough skin, scaling, and severe itchiness.

Past Medical History

1. Scale was found on the scalp during first month of birth. Seborrheic dermatitis was diagnosed and treated.
2. Atopic dermatitis was improved since 7 years old. Recurs occasionally but quickly subsided.
3. Has a history of allergic rhinitis.

Personal Informaiton

1. Freshmen of senior high school, and often goes to sleep very late.
2. Dietary habits: Eats school lunch mostly and sometimes roasted and fried food.
3. Control eating habits since childhood, rarely eats seafood.

Allergy History

No known medication allergies.

Family History

1. Father and older sister both had atopic dermatitis during childhood, but improved when older.
2. Father and older sister both have allergic rhinitis.

Four Examinations by TCM

1. Observation:
Thin (163cm, 45kg). Mild kyphosis. Flush complexion, severe scaling. Multiple erythematous or dark red skin color lesion all over body, covering about 50-60% of total skin area. Diffused papules, lichen, scale and scratching scars. Agitated and impatient. Mild red tongue body, thin white tongue fur.
2. Listening and Smelling Examination:
Agitated and impatient to talk.

3. Inquiry:

Itchiness worsens when the weather is hot, affected areas are all over the whole body. Need air conditioning to sleep at night, even in the winter. Difficult sleeping, stubborn. Drink a lot of water, claimed not thirsty. Frequent urination in day time, scant urine, light yellow urine, nocturia once. Bowel movement once a day, hard and dry stool, difficult to evacuate. Symptoms subsided after taking western medicine for the last 3 months, but worsens again recently. Hoping to improve the condition by regulating with TCM.

4. Palpation:

Forceful, floating and string-like pulse. Burning sensation on scratched area.

Physical Examination and Laboratory Reports

1. Orthopedic X-ray Examination (Aug 15, 2006):
Scoliosis of T-spine
2. Hematological Analysis (Nov 18, 2006): WBC 6830, RBC 4.91×10^6 , Hb 14.6, Hct 42.5, MCV 86.6, MCH 29.7
3. Immunology Analysis (Nov 21, 2006): TSH 0.9, Free T4 1.30, Human growth hormone 0.32

Western Medicine Diagnosis

Atopic Dermatitis

Chinese Medicine Diagnosis

Damp sores (wind-heat pattern)

Therapeutic Principle

To clear heat and purge fire, dispel wind, and relieve itching.

Prescription

Coptis & Scute Combination (Huang Lian Jie Du Tang) 6g
Dang Gui & Arctium Formula (Xiao Feng San) 6g
Turmeric (Yu Jin) 1.5g
Cyperus (Xiang Fu) 1.5g
Honeysuckle Flower (Jin Yin Hua) 1.5g
Cardamom (Sha Ren) 0.1g
3 times/day × 5 days

Note:

1. The dosage listed in the article is daily dosage.
2. The classical formula “Dang Gui & Arctium Formula (Xiao Feng San)” is originated from Orthodox Manual of External Diseases.

Clinical Advice

Avoid hot and spicy food. Try not to scratch skin.

COURSE OF THERAPY

Apr 11, 2007 (1st subsequent visit)

Sign and Symptom

Skin itchiness improved a little. Still had hard stool, and difficult to evacuate. Papules and rest of the symptoms were same as before.

Tongue and Pulse

Forceful, floating and string-like pulse. Mild red tongue with thin white tongue fur.

Therapeutic Principle

Added Rhubarb (Da Huang) to free the bowels and drain heat, and Persica (Tao Ren) to move blood and expel stasis, moisten dryness, and lubricate the intestines.

Prescription

Coptis & Scute Combination (Huang Lian Jie Du Tang) 6g
 Dang Gui & Arctium Formula (Xiao Feng San) 5g
 Turmeric (Yu Jin) 1.5g
 Cyperus (Xiang Fu) 1.5g
 Honeysuckle Flower (Jin Yin Hua) 1.5g
 Persica (Tao Ren) 1.0g
 Rhubarb (Da Huang) 0.5g
 3 times/day × 7 days

Apr 18-May 9, 2007 (2nd to 4th subsequent visits)

Sign and Symptom

Skin itchiness continued to improve. Papules became lighter. Bowel difficulty improved. Sleeping quality improved.

Therapeutic Principle

Keep current treatment, and add officinal Magnolia bark (Hou Po) and Corydalis (Yen Hu Suo) to the formulation.

May 16, 2007 (5th subsequent visit)

Sign and Symptom

Facial symptoms continue to improve. Papules was mild erythematous. Scaling decreased, and itching and scratching continue to improve. Able to self-control scratching. But papules in the back improved slower with mild erythematous. Bowel movement once a day, still hard and not easy to evacuate.

Tongue and Pulse

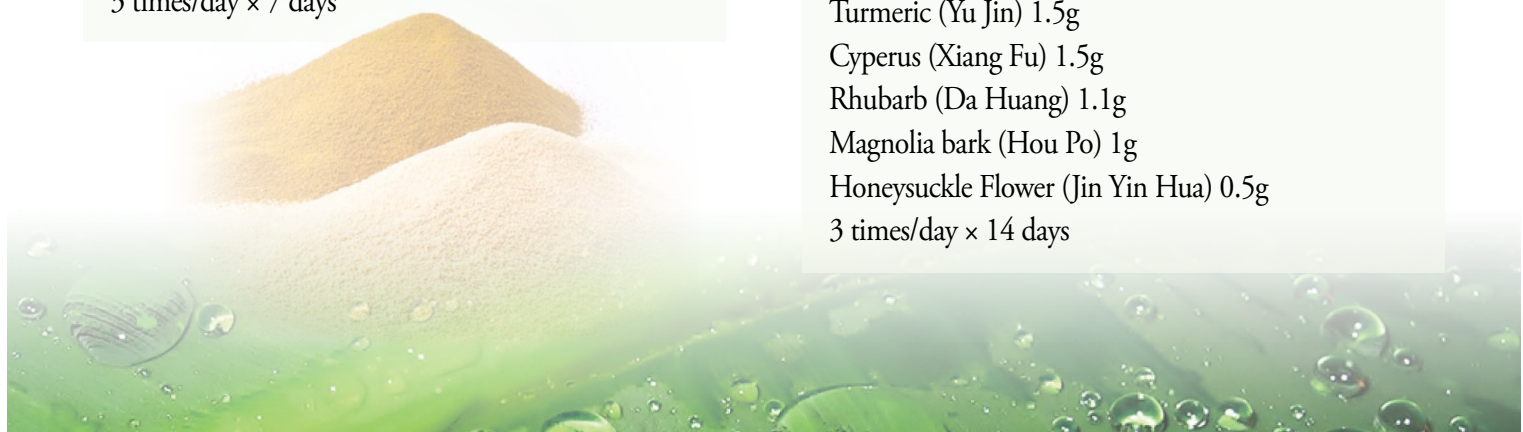
Forceful, floating and string-like pulse. Pale red tongue with thin white tongue fur.

Therapeutic Principle

Still using the previous main formulation. Because lung governs the skin and hair, Morus & Lycium Formula (Xie Bai San) was added to clear lung fire and depressed heat.

Prescription

Coptis & Scute Combination (Huang Lian Jie Du Tang) 6g
 Dang Gui & Arctium Formula (Xiao Feng San) 3g
 Morus & Lycium Formula (Xie Bai San) 3g
 Turmeric (Yu Jin) 1.5g
 Cyperus (Xiang Fu) 1.5g
 Rhubarb (Da Huang) 1.1g
 Magnolia bark (Hou Po) 1g
 Honeysuckle Flower (Jin Yin Hua) 0.5g
 3 times/day × 14 days



May 30, 2007 (6th subsequent visit)*Sign and Symptom*

Lichenized papules and skin thickening improved. Skin is less erythematous. Bowel movement once a day, still hard stool and difficult to evacuate. Patient, at his own decision, gradually decreased using western medicine for 2 weeks. Taking only Allegra (Fexofenadine) for allergic rhinitis sometimes.

Tongue and Pulse

Forceful, floating and string-like pulse. Pale red tongue with thin white tongue fur.

Therapeutic Principle

Keeping current prescription, modify formulation slightly according to the signs. Recommend topical use of Arenbia ointment (Zi Yun Gao) to moisturize skin.

Prescription

Coptis & Scute Combination (Huang Lian Jie Du Tang) 6g
Morus & Lycium Formula (Xie Bai San) 5g
Dang Gui & Arctium Formula (Xiao Feng San) 2g
Turmeric (Yu Jin) 1g
Cyperus (Xiang Fu) 1.4g
Rhubarb (Da Huang) 1.1g
Magnolia bark (Hou Po) 1g
Honeysuckle Flower (Jin Yin Hua) 0.5g
3 times/day × 14 days

June 13, 2007 (7th subsequent visit)*Sign and Symptom*

Conditions are improved and stabilized. Bowel movement once a day, stool is still a bit hard, and difficult to evacuate.

Tongue and Pulse

Floating and string-like pulse. Red tongue with thin white tongue fur.

Therapeutic Principle

Because heat pattern had subsided, so we removed the Dang Gui & Arctium Formula (Xiao Feng San) used

for dispersing wind and eliminate dampness, clear heat and moisten dryness. For remission stage, consider long term illness have damaged yin, and affect the kidney. Therefore, Anemarrhena, Phellodendron & Rehmannia Formula (Zhi Bo Di Huang Wan) was added to tonify the kidney yin and downbear the deficiency fire.

Prescription

Coptis & Scute Combination (Huang Lian Jie Du Tang) 6g
Anemarrhena, Phellodendron & Rehmannia Formula (Zhi Bo Di Huang Wan) 4g
Morus & Lycium Formula (Xie Bai San) 4g
Cyperus (Xiang Fu) 1g
Rhubarb (Da Huang) 1.1g
Magnolia bark (Hou Po) 1g
Honeysuckle Flower (Jin Yin Hua) 0.5g
4 times/day × 21 days

July 4, 2007 (8th subsequent visit)*Sign and Symptom*

All the conditions have improved and stabilized. Bowel movement once a day, stool is still hard and difficult to evacuate.

Therapeutic Principle

Added Chinese angelica (Dang Gui) for difficult bowel movement, to tonify blood, activate blood, and moisten the intestines.

Prescription

Coptis & Scute Combination (Huang Lian Jie Du Tang) 6g
Anemarrhena, Phellodendron & Rehmannia Formula (Zhi Bo Di Huang Wan) 4g
Morus & Lycium Formula (Xie Bai San) 4g
Turmeric (Yu Jin) 1g
Cyperus (Xiang Fu) 1g
Rhubarb (Da Huang) 1g
Angelica (Dang Gui) 1.5g
4 times/day × 14 days

July 18, 2007 (9th subsequent visit)***Sign and Symptom***

Condition worsened. Serious itching and scratching increased few days before this visit; the skin was scratched to erythematous that evening. When the patient came, erythematous papules were densely spread all over the body. Lichening, multiple scars and crust were noted at the lesions. But according to his mother, the severity of this itching episode is only about half of the strength compare to the first visit. (See fig. 1 to 3) Agitated, impatient and difficult to sleep. He had used some leftover topical and oral western medicine from the dermatologist three days prior to this visit for the severe itching.

Tongue and Pulse

Forceful, floating and string-like pulse. Red tongue with white tongue fur. Bowel movement once a day, stool is still hard and difficult to evacuate.

Therapeutic Principle

Suspecting the warm heat characteristics of Chinese angelica (Dang Gui) was the cause of increased itching and scratching, it was removed, and prescribed the rest of the previous formulation and continue to observe the results.

Prescription

Coptis & Scute Combination (Huang Lian Jie Du Tang) 6g
Anemarrhena, Phellodendron & Rehmannia Formula (Zhi Bo Di Huang Wan) 4g

Morus & Lycium Formula (Xie Bai San) 4g
Turmeric (Yu Jin) 1g
Cyperus (Xiang Fu) 1g
Rhubarb (Da Huang) 1.5g
Magnolia bark (Hou Po) 0.5g
4 times/day × 14 days

Aug 1, 2007 (10th subsequent visit)***Sign and Symptom***

Still itchy, scratching, agitated and impatient. Bowel movement once a day, stool is hard and difficult to evacuate. Thirsty and drinking lots of water. Continued to take western medication.

Tongue and Pulse

Forceful, floating and string-like pulse. Red tongue with thin white tongue fur.

Therapeutic Principle

Clear heat and free the bowels, discharge lung heat and tonify the kidney yin.

Prescription

Coptis & Scute Combination (Huang Lian Jie Du Tang) 6g
Anemarrhena, Phellodendron & Rehmannia Formula (Zhi Bo Di Huang Wan) 4g
Morus & Lycium Formula (Xie Bai San) 4g
Turmeric (Yu Jin) 1g
Cyperus (Xiang Fu) 1g
Rhubarb (Da Huang) 2g
Magnolia bark (Hou Po) 0.5g
4 times/day × 14 days



Fig. 1& 2 Erythematous papules were densely spread across the chest and abdominal regions. Lichening, multiple scars and crust were noted at the lesions. (This photo was taken at the 9th subsequent visit)



Fig. 3 Long term scratching caused lichening, multiple scars, and crust shown on patient's upper arms. (This photo was taken at the 9th subsequent visit)

Aug 15, 2007 (11th subsequent visit)***Sign and Symptom***

Agitated, impatient, erythematous papules, still itching severely, and difficult to sleep. Bowel movement is once a day, stool is still hard and difficult to evacuate. Not much change in diet. Had been careful to choose light food.

Tongue and Pulse

Forceful, floating and string-like pulse. Red tongue with thin white tongue fur.

Therapeutic Principle

Same as before. But after detail enquiries, we found that this episode began after receiving grade report from school. So we suspected that the poor grades lead to depression causing stagnant Qi transformed into fire. Amber (Hu Po) was added to calm the heart and spirit, resolve stasis and promote tissue regeneration.

Prescription

Coptis & Scute Combination (Huang Lian Jie Du Tang) 6g
 Anemarrhena, Phellodendron & Rehmannia Formula (Zhi Bo Di Huang Wan) 6g
 Morus & Lycium Formula (Xie Bai San) 4g
 Turmeric (Yu Jin) 1g
 Cyperus (Xiang Fu) 1g
 Rhubarb (Da Huang) 2g
 Amber (Hu Po) 1g
 4 times/day × 14 days

Aug 29-Sep 12, 2007 (12th and 13th subsequent visits)***Sign and Symptom***

Agitation improved. Skin itching and scratching have decreased. Skin lichening improved. Conditions steadily improved. The patient and his mother were quite satisfied with the treatment result.

Tongue and Pulse

Forceful, floating and string-like pulse. Red tongue with white tongue fur. Bowel movement once a day, slightly hard stool.

Therapeutic Principle

Conditions improved. Continue current treatment, modify formulation slightly according to the signs.

Prescription

Coptis & Scute Combination (Huang Lian Jie Du Tang) 6g,
 Anemarrhena, Phellodendron & Rehmannia Formula (Zhi Bo Di Huang Wan) 6g,
 Morus & Lycium Formula (Xie Bai San) 4.5g,
 Turmeric (Yu Jin) 1g,
 Cyperus (Xiang Fu) 1g,
 Rhubarb (Da Huang) 1.2g,
 Amber (Ho Pu) 1g,
 4 times/day × 14 days

DISCUSSION

Atopic dermatitis is a chronic, recurrent, and itching disease of skin. The fluctuation of symptoms can be easily affected by emotion and weather changes. Because of severe itching and unable to relieve the itchiness, patients usually keep scratching until bleeding, greatly affects the sleeping quality, and unable to concentrate. The persistent skin lesions on the face and throughout the body often causing patients feeling embarrassed and lost self confidence, lead to negative effects on daily life and future career. In recent years, air pollution, increasing daily stress, and other factors, the incidence had increased.

According to the location and morphology of lesions, this disease is similar to TCM terms “nai-xian (奶癬)”, “shi-chuang (濕瘡)”, “jin-yin-chuang (浸淫瘡)”, “si-wan-feng (四彎風)”. The disease is mostly caused by inability of constitution, spleen failing in transportation, dampness-



heat engendered internally, and contracted to wind, dampness and heat pathogens, retained in skin; from irregular diet, or moodiness damaging internals, and recurring repeatedly, enduring unhealed illness, and then damaging yin and humor, insufficient nutrient and blood, and blood deficiency and wind-dryness, and fail to nourish the skin.

In this case study, patient and his family all have atopic constitution, which belongs to insufficiency of innate constitution. The disease remission when he was 7 years old, but recurred because of the stress preparing for high school entrance exam during the last year of junior high school. During his first visit, his face was red with multiple erythematous and swelling lesions were found all over the body. Dense erythematous papules, severe scratching all over the body, worsened when the weather is warm. These are all manifestation of wind-heat pattern. Drinking lots of water, hard and dry stool, mild red tongue, forceful and floating pulse were also signs of the pattern. Therefore, treatment with modified Coptis & Scute Combination (Huang Lian Jie Du Tang) and Dang Gui & Arctium Formula (Xiao Feng San) was given to clear heat and purge fire, dispel wind and relieve itchiness. After the treatment, all signs and symptoms were improved. During remission stage, Dang Gui & Arctium Formula (Xiao Feng San) was removed, and Anemarrhena, Phellodendron & Rehmannia Formula (Zhi Bo Di Huang Wan) was added to tonify kidney yin and moisten dryness. The conditions were stabilized for 3 months. However, upon receiving school

grades, the depression caused the papules to recur, and previous treatment was not as effective. Reconsidering the agitation from the fire transformed by stagnant Qi, as a result of disharmony of emotion, Amber (Ho Pu) was added to calm, resolve stasis and promote tissue regeneration, and the conditions improved once again.

From the clinical observations, when patients showed signs of dryness-heat pattern, use of western medicine alone, like steroids and others, is usually not significant. At this time, using Chinese medicine treatment to clear heat and purge fire, dispel wind and relieve itching often have significant results. According to a 44-case statistical analysis of pattern distribution about atopic dermatitis conducted by China-Japan Friendship Hospital in Beijing, although most patient of this disease are dampness-heat pattern, blood heat and blood dryness pattern, and spleen deficiency pattern, there are also patients belong to kidney deficiency pattern or liver Qi depression pattern, and most patients have multiple patterns. The success of this case also suggests that emotional factors must be taken into consideration when treating atopic dermatitis. Adding calming herbs in time can have satisfying results.

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Sun Ten formulas & single herbs related to atopic dermatitis treatment

Product Code	Pin Yin Name	English Name
0805	Zhi Bo (Bai) Di Huang Wan	Anemarrhena, Phellodendron & Rehmannia Formula
1003	Xiao Feng San	Dang Gui & Arctium Formula
1203	Huang Lian Jie Du Tang	Coptis & Scute Combination
1801	Xie Bai San	Morus & Lycium Formula
5103	Yu Jin	Turmeric
5312	Da Huang	Rhubarb
5805	Yan Hu Suo (Yuan Hu)	Corydalis
5820	Jin Yin Hua	Honeysuckle Flower
5909	Xiang Fu	Cyperus / Nutgrass
5914	Sha Ren	Cardamom
5918	Hou Pu (Po)	Magnolia Bark
6023	Tao Ren	Persica