

# Guan Ye Lian Qiao (Herba Hypericum)

## 貫葉連翹 贯叶连翘

**Pinyin Name:** *Guan Ye Lian Qiao*

**Alternate Chinese Names:** *Tu Lian Qiao*, *Guan Ye Jin Si Tao*, *Jin Si Tao*

**Original Source:** *Ben Cao Gang Mu Shi Yi* (Omissions from the Grand Materia Medica) by Zhao Xue-Min in 1765

**English Name:** St. John's Wort

**Botanical Name:** *Hypericum perforatum* L. (*Guan Ye Lian Qiao*)

**Pharmaceutical Name:** Herba Hypericum

**Properties:** bitter, acrid, astringent, neutral

**Channels Entered:** Liver

### CHINESE THERAPEUTIC ACTIONS

#### 1. Clears Heat, Eliminates Toxins

**Toxic heat:** *Guan Ye Lian Qiao* (Herba Hypericum) reduces swelling and inflammation to treat carbuncles, sores, snake and insect bites, and other disorders characterized by toxic heat.

- *Chang feng* (intestinal wind) with blood in the stools: combine *Guan Ye Lian Qiao* with dry-fried *Huai Hua* (Flos Sophorae) and *Zong Lu Pi* (Fibra Stipulae Trachycarpi).
- Urinary tract infection: use *Guan Ye Lian Qiao* as a single-herb remedy.
- Redness and swelling of the eyes: drink *Guan Ye Lian Qiao* as tea throughout the day.
- Snake and insect bites: ground the herb into paste and apply it topically.
- Tonsillitis: use the decoction as a gargle.

#### 2. Stops Bleeding

**Bleeding:** *Guan Ye Lian Qiao* has an astringent effect to treat hemoptysis, hematemesis, and bleeding due to trauma.

- Hematemesis: add it to *Xian He Cao* (Herba Agrimoniae).
- Profuse uterine bleeding: use this herb with *Xian He Cao* (Herba Agrimoniae), *Han Lian Cao* (Herba Ecliptae), and charred *Pu Gong Ying* (Herba Taraxaci).

#### 3. Dispels Wind-Damp

**Bi zheng (painful obstruction syndrome):** *Guan Ye Lian Qiao* dispels wind-damp from the exterior to relieve muscle aches and pain.

- *Bi zheng*: use it with *Xun Gu Feng* (Herba Aristolochiae Mollissimae), *Shen Jin Cao* (Herba Lycopodii), *Mu Gua* (Fructus Chaenomelis), and *Ji Xue Teng* (Caulis Spatholobi).

#### 4. Relieves Depression

**Depression:** *Guan Ye Lian Qiao* regulates Liver qi to treat depression. It may be used individually, or combined with *Yue Ju Wan* (Escape Restraint Pill).

### DOSAGE

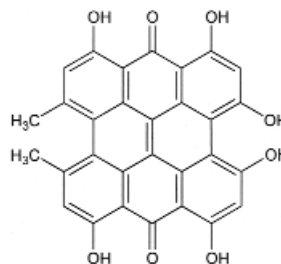
6 to 9 grams in decoction. *Guan Ye Lian Qiao* is used both internally and topically.

### CAUTIONS / CONTRAINDICATIONS

- Use of *Guan Ye Lian Qiao* may be associated with increased photosensitivity.

### CHEMICAL COMPOSITION

Hypericin, hyperforin, hyperin, pseudohypericin, protohypericin, cyclopseudohypericin, desmethylocyclopseudohypericin, emodinanthranol.<sup>1,2</sup>



Hypericin

### PHARMACOLOGICAL EFFECTS

- **Antitussive:** Intraperitoneal injection of hyperin in cats at 100 mg/kg had an antitussive effect.<sup>3</sup>
- **Analgesic:** Administration of hyperin is associated with an analgesic effect in mice.<sup>4</sup>
- **Antibiotic:** This herb has antibacterial action against *Staphylococcus aureus*, *Streptococcus pyogenes*, and *Streptococcus agalactiae*. In addition, hyperforin has an inhibitory effect against penicillin-resistant *Staphylococcus aureus* (PRSA) and methicillin-resistant *Staphylococcus aureus* (MRSA). Furthermore, hyperforin has antiviral action against herpes simplex virus, parainfluenza virus, vesicular stomatitis virus, and human cytomegalovirus.<sup>5</sup>
- **Antidepressant:** *Guan Ye Lian Qiao* extract has been shown to relieve depression by inhibiting the reuptake of serotonin

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and other neurotransmitters, such as norepinephrine and dopamine. Hyperforin is believed to be the main constituent responsible for the antidepressant activity.<sup>6</sup>

## CLINICAL STUDIES AND RESEARCH

- **Depression:** *Guan Ye Lian Qiao* and fluoxetine demonstrated equivalent therapeutic effect for treatment of depression, according to a randomized, double-blind, comparative trial involving 149 outpatients with mild or moderate depression. The duration of treatment was 6 weeks. Patients in the herb group received 800 mg of *Guan Ye Lian Qiao* extract per day (5-7:1 extract, ethanol 60% solvent). Patients in the drug group received 20mg of fluoxetine.<sup>7</sup>

## HERB-DRUG INTERACTION

- **SSRI's:** Since St. John's Wort and SSRI both inhibit the reuptake of serotonin, concurrent use of both the herb and the drug may lead to "serotonin syndrome" with symptoms such as sweating, tremor, flushing, confusion and agitation.<sup>8</sup> [Note: Examples of SSRI's include fluoxetine (Prozac), paroxetine (Paxil), sertraline (Zoloft), citalopram (Celexa), and fluvoxamine (Luvox).]
- **Antivirals:** It has been found that concurrent use of St. John's Wort and indinavir contributed to a 57% reduction in the area under the curve and an 81% decrease of the extrapolated 8-hour trough value for indinavir. The dose of St. John's Wort was 300 mg (standardized to 0.3% hypericin) three times daily, and the dose of indinavir was 800 mg every 8 hours.<sup>9</sup>
- **Digoxin (Lanoxin):** St. John's Wort taken concomitantly with digoxin resulted in a significant decrease in digoxin  $C_{max}$ ,  $C_{trough}$ , and AUC (area under the curve).<sup>10</sup>
- **Metabolic effect:** St. John's Wort may lower the plasma levels of many drugs, such as cyclosporine (Sandimmune/Neoral), ethinylloestradiol and desogestrel (combined oral contraceptive), theophylline (Theo-Dur), digoxin (Lanoxin), and indinavir (Crixivan). The proposed mechanism of this interaction is the induction of the cytochrome P-450 system of the liver by St. John's Wort, leading to increased metabolism and reduced plasma concentration of the drugs.<sup>11</sup>

## TOXICOLOGY

The LD<sup>50</sup> of hyperin in mice via intraperitoneal injection is 0.5 g/kg.<sup>12</sup>

## AUTHORS' COMMENTS

*Guan Ye Lian Qiao* (Herba Hypericum) is commonly known as St. John's Wort. Historically in China, this herb was used as a heat-clearing agent, to treat various types of infectious and inflammatory conditions. In Europe, it was used more as a nerve tonic, to address anxiety, depression, and restlessness.

## References

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