## This section examines Herb-Drug Interactions and other specific issues, including Pinellia and Ginseng concerns

## **Herb-Drug Interactions**

Herbs and (Pharmaceutical) Drugs, when taken together, may interact. Generally, this is not a case of chemical interaction of two substances, but rather a combining of *similar substances* that end up producing an exaggerated physiological effect.

## **Herb-drug Combinations**

The problem with herb-drug interactions affects the practice of herbal medicine. There actually have been very few problems reported with herb-drug interactions, but with the first report emerging several years ago, a concern has been forthcoming. Since we know little about herbs and the possibility of interaction with drugs, these few reports might be only the beginning of serious problems. In a few cases, the interactions might have caused severe reactions.

In 1984, this statement was made by an herbal instructor at SAMRA University of Oriental Medicine (she was a Medical Doctor [M.D.] and Acupuncturist with many years of experience in Chinese hospitals): "In China, we give western drugs along with herbal remedies, without any concern for the mixing - because there is no problem with the mixing."

But now (in some cases) that has changed. Herb-drug interactions are not a chemical reaction between a drug and an herb that produces toxicity. Rather, the interaction involves the herb causing an increase or decrease in the pharmaceutical drug in the blood.

A <u>decrease</u> in the drug could occur when the herb locks-up the drug and prevents it from entering the blood, or when the herb causes the production of enzymes that lessen the drug's ability and prepares it for elimination.

An <u>increase</u> in the pharmaceutical drug might happen when an herb assists in the absorption of the drug, or blocks the enzymes that catabolize the drug and prepare it for elimination.

A <u>decrease</u> in drug effect through interaction may make the drug not work. An <u>increase</u> in drug effect may cause it to produce side effects. Also, the herb may cause an effect that is opposite to the effect of the drug, thus lessening the drug's effects - or, the herb may cause the same effect as the pharmaceutical drug and cause a synergistic increase in the drug's effects.

## **Ephedrine in Pinellia**

Ephedrine, a naturally-occurring substance in Ephedra, acts like amphetamine and dexamphetamine (Dexedrine), drugs that are used for stimulating energy, reducing appetite, and promoting weight loss. The similar action of these substances is due to the fact that ephedrine is only a little different in chemical structure from these drugs.

The matter for herbalists is compounded because reports of ephedrine in pinellia are from examinations of the herb, **Pinellia ternata** ("northern *ban-xia*"), yet most pinellia used in China and the U.S. is really from a similar herb having the same use: **Typhonium flagelliforme** ("southern *ban-xia*"), which contains no **ephedrine.** 

Source: http://www.itmonline.org/arts/ephpin.htm