



Excerpt from the American Herbal Products Association's [*Botanical Safety Handbook*](#), 2nd ed. (online)

Abortifacients

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Abortifacients are agents used to induce abortion and terminate pregnancy. Herbal abortion is not a recommended method of intentional pregnancy termination.

Adverse effects

There is a long history of use of select botanicals as abortifacients. Research, however, on the use of botanicals to induce abortion is extremely limited, and available information comes from historical or empirical reports. Little reliable data exist on the effectiveness, toxicity, or possible effects of these plants on the developing embryo or fetus and the pregnant woman.

When attempting to utilize botanicals for the purpose of abortion, the dose of most of the herbs used historically (and listed below) to induce an abortion generally exceeds doses that are considered safe for other purposes, and may pose toxicity risks to the pregnant woman, or may have negative effects on the developing embryo or fetus if unsuccessful. The amount of an abortifacient herb required to terminate a pregnancy is likely enough to pose significant risk to the pregnant woman's health, including potential kidney and liver damage, and may not result in a successful abortion. Because of the potential risks to the pregnant woman and the developing embryo or fetus, this method is not recommended. Should an attempted herbal abortion be ineffective, follow-up medical care, including medical abortion, would need to be discussed with a qualified health care provider.

To date, no reports of failed herbal abortions resulting in fetal damage have been identified, although case reports of maternal toxicity have been reported in the literature and anecdotally. Reported cases include a single fatal event of a mother recorded in 1978 following consumption of an extremely high dose (one ounce) of pennyroyal essential oil (identified as *Mentha pulegium* or *Hedeoma pulegioides*) in an attempted abortion. The victim suffered two heart attacks, liver and kidney failure, and disseminated vascular coagulation before her death (Sullivan et al. 1979). Additionally, a case of nicotinic poisoning was reported after an attempted abortion using blue cohosh (*Caulophyllum thalictroides*) in excessive doses (Rao and Hoffman 2002; Rao et al. 1998).

Mechanism of Action

Botanical abortifacients have many different purported mechanisms of action. Some may act indirectly through peripheral systems such as the endocrine, cardiovascular, gastrointestinal, or nervous systems. Others may be more direct-acting agents that

target the uterus, endometrium, or that interfere with implantation. Certain abortifacients have drastic purgative effects or are gastrointestinal irritants that can produce reflex uterine contraction. It is not possible to generalize the action, efficacy, or safety of plants listed in this text as abortifacients, since the mechanisms of action of these plants has not been well studied (Bingel and Farnsworth 1980).

Herbs listed in the *Botanical Safety Handbook* with potential abortifacient action:

- *Andrographis paniculata* herb
- *Carthamus tinctorius* flower
- *Catharanthus roseus* herb
- *Caulophyllum thalictroides* root
- *Chamaemelum nobile* flower
- *Chrysopogon zizanooides* root
- *Crocus sativus* stigma
- *Cytisus scoparius* flowering tops
- *Gossypium herbaceum* root bark
- *Gossypium hirsutum* root bark
- *Juniperus virginiana* leaf, berry
- *Mentha pulegium* leaf, essential oil
- *Podophyllum peltatum* root
- *Podophyllum hexandrum* root
- *Ruta graveolens* herb
- *Tanacetum vulgare* herb
- *Thuja occidentalis* leaves

Ingesting small amounts of these herbs during pregnancy, except in rare cases, is not a cause for alarm, whereas others may be toxic in small amounts. Some of the herbs listed, such as saffron (*Crocus sativus*), safflower (*Carthamus tinctorius*), and Roman chamomile (*Chamaemelum nobile*) may be safely used during pregnancy in amounts typically consumed in foods or beverages.

LITERATURE CITED

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