



## HORSE CHESTNUT

- Date:** March 27, 2008
- Proper name(s):** *Aesculus hippocastanum* L. (Sapindaceae) (USDA 1995)
- Common name(s):** Horse chestnut (McGuffin et al. 2000)
- Source material(s):** Seed (Bradley 2006; Blumenthal et al. 2000)
- Route(s) of administration:** Oral (Bradley 2006; ESCOP 2003)
- Dosage form(s):** Those suited to the allowable route(s) of administration. This monograph is not intended to include food-like dosage forms such as bars, chewing gums or beverages.
- Use(s) or Purpose(s):** Statement(s) to the effect of:
- ▶ Traditionally used in Herbal Medicine to help treat haemorrhoids (Bradley 2006; Mills and Bone 2005; Hoffmann 2003; Felter and Lloyd 1983 [1898]; Grieve 1971 [1931]).
  - ▶ Used in Herbal Medicine to help treat chronic venous insufficiency and associated symptoms (Bradley 2006; Mills and Bone 2005; ESCOP 2003; Blumenthal et al. 2000).
  - ▶ Used in Herbal Medicine to help treat varicose veins (Bradley 2006; ESCOP 2003; Hoffmann 2003; Blumenthal et al. 2000).
- Dose(s):**
- ▶ Preparations equivalent to 0.3-5 g dried seed, per day (Mills and Bone 2005; Hoffmann 2003; Blumenthal et al. 2000; Grieve 1971 [1931])
  - ▶ Preparations equivalent to 50-150 mg aescin (synonym: escin) (triterpene glycosides), per day (Bradley 2006; Mills and Bone 2005; ESCOP 2003; Hoffmann 2003; Blumenthal et al. 2000)

See Appendix 1 for examples of appropriate dosage preparations and frequencies of use, according to cited references. The purpose of Appendix 1 is to provide guidance to industry.

**Duration of use:** No statement required.

**Risk information:** Statement(s) to the effect of:

**Caution(s) and warning(s):**

- ▶ Consult a health care practitioner if symptoms persist or worsen.
- ▶ Consult a health care practitioner prior to use if you are pregnant or breastfeeding (Brinker 2008; Mills and Bone 2005).

**Contraindication(s):** No statement required.

**Known adverse reaction(s):** Some people may experience headache, dizziness, gastric irritation, or itchiness (Bradley 2006; Mills and Bone 2005; ESCOP 2003).

**Non-medicinal ingredients:** Must be chosen from the current NHPD *List of Acceptable Non-medicinal Ingredients* and must meet the limitations outlined in the list.

**Specifications:**

- ▶ The finished product must comply with the minimum specifications outlined in the current NHPD *Compendium of Monographs*.
- ▶ The medicinal ingredient must conform to one of the following criteria:
  - i. the horse chestnut seed has been adequately processed, such that the outer capsule (pericarp) has been completely removed and discarded, to ensure that the finished product does not contain esculin or
  - ii. the horse chestnut seed complies with the specifications outlined in the Horse Chestnut, Powdered Horse Chestnut, or Powdered Horse Chestnut Extract Monographs published in the US Pharmacopoeia.

## References cited:

Blumenthal M, Goldberg A, Brinkmann J, editors. Herbal Medicine: Expanded Commission E Monographs. Boston (MA): Integrative Medicine Communications; 2000.

Bradley PR, editor. British Herbal Compendium: A Handbook of Scientific Information on Widely Used Plant Drugs, Volume 2. Bournemouth (UK): British Herbal Medicine Association; 2006.

Brinker F. Online Updates and Additions to Herb Contraindications and Drug Interactions, 3<sup>rd</sup> edition. Sandy (OR): Eclectic Medical Publications; 2008. [Accessed 2008-03-27]. Available from: <http://www.eclecticherb.com/emp/updatesHCIDI.html>

ESCOP 2003: ESCOP Monographs: The Scientific Foundation for Herbal Medicinal Products, 2<sup>nd</sup> edition. Exeter (UK): European Scientific Cooperative on Phytotherapy and Thieme; 2003.

Felter HW, Lloyd JU. King's American Dispensatory, Volume 2, 18<sup>th</sup> edition. Sandy (OR): Eclectic Medical Publications; 1983 [Reprint of 1898 original].

Grieve M. A Modern Herbal, Volume 1. New York (NY): Dover Publications; 1971 [Reprint of 1931 Harcourt, Brace & Company publication].

Hoffmann D. Medical Herbalism. Rochester (VT): Healing Arts Press; 2003.

Mills S, Bone K. The Essential Guide to Herbal Safety. St. Louis (MO): Elsevier Churchill Livingstone; 2005.

McGuffin M, Kartesz JT, Leung AY, Tucker AO, editors. Herbs of Commerce, 2<sup>nd</sup> edition. Silver Spring (MD): The American Herbal Products Association; 2000.

USDA 1995: United States Department of Agriculture, Agricultural Research Service, National Genetic Resources Program. Germplasm Resources Information Network (GRIN). *Aesculus hippocastanum* L. National Germplasm Resources Laboratory, Beltsville (MD). [Accessed 2008-03-27]. Available from: [http://www.ars-grin.gov/cgi-bin/npgs/html/tax\\_search.pl](http://www.ars-grin.gov/cgi-bin/npgs/html/tax_search.pl)

## References reviewed:

Brinker F. Herb Contraindications and Drug Interactions, 3<sup>rd</sup> edition. Sandy (OR): Eclectic Medical Publications; 2001.

Felter HW. The Eclectic Materia Medica, Pharmacology and Therapeutics. Sandy (OR): Eclectic Medical Publications; 1983 [Reprint of 1922 original].

**Appendix 1:** Examples of appropriate dosage preparations and frequencies of use

- Dried seed: 1-2 g, per day (Mills and Bone 2005)
- Decoction: 1-2 g dried seed, per day (Mills and Bone 2005)
- Fluidextract:
- ▶ 1.0-2.5 g dried equivalent, per day (1:1, 1-2.5 ml) (Mills and Bone 2005)
  - ▶ 0.3-1.3 g dried equivalent, per day (1:1, 0.3-1.3 ml (5-20 drops)) (Grieve 1971 [1931])
- Tincture:
- ▶ 1-2.5 g dried equivalent, per day (1:2, 2-5 ml) (Mills and Bone 2005)
  - ▶ 1-3 g dried equivalent, per day (1:5, 5-15 ml) (Mills and Bone 2005)
  - ▶ 0.2-0.8 g dried equivalent, 3 times per day (1:5, 40% alcohol, 1-4 ml) (Hoffmann 2003)
- Solid extract: 1.25-2.5 g dried equivalent, 2 times per day (5-8:1, 0.25-0.31 g) (Blumenthal et al. 2000)
- Other extracts:
- ▶ 100-150 mg aescin, per day (Bradley 2006)
  - ▶ 100 mg aescin, per day (Mills and Bone 2005)
  - ▶ 50-150 mg triterpene glycosides (calculated as aescin), per day, usually in divided doses (ESCOP 2003)
  - ▶ 50 mg aescin, 2-3 times per day (Hoffmann 2003)
  - ▶ 50 mg aescin, 2 times per day (Blumenthal et al. 2000)