



BOLDO

- Date:** January 15, 2008
- Proper name(s):** *Peumus boldus* Molina (Monimiaceae) (USDA 2007)
- Common name(s):** Boldo (McGuffin et al. 2000; Wiersema and León 1999)
- Source material(s):** Leaf (Blumenthal et al. 2000)
- Route(s) of administration:** Oral
- 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 treat digestive disturbances (dyspepsia) (Bradley 2006; ESCOP 2003; Blumenthal et al. 2000; Felter and Lloyd 1983 [1898]; Wren 1907).
 - ▶ Traditionally used in Herbal Medicine to stimulate digestion (Bradley 2006; Felter and Lloyd 1983 [1898]).
- Dose(s):** Preparations equivalent to 150-5,000 mg dried leaf, 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, frequencies of use and directions for use, according to cited references. The purpose of Appendix 1 is to provide guidance to industry.

Duration of use: Consult a health care practitioner for use beyond 4 weeks (ES COP 2003).

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 have impaired kidney or liver function (Barnes et al. 2007; Bradley 2006; Brinker 2001).

Contraindication(s): Do not use if you are pregnant or breastfeeding (Brinker 2007; Bradley 2006; Mills and Bone 2005).

Known adverse reaction(s): No statement required.

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: Must comply with the minimum specifications outlined in the current NHPD *Compendium of Monographs*.

References cited:

Barnes J, Anderson LA, Philipson JD. Herbal Medicines, 3rd edition. London (UK): Pharmaceutical Press; 2007.

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, 3rd edition. Sandy (OR): Eclectic Medical Publications; 2007. [Accessed 2007-11-21]. Available from: <http://www.eclecticherb.com/emp/updatesHCDI.html>

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

Felter HW, Lloyd JU. King's American Dispensatory, Volume 1, 18th edition. Sandy (OR): Eclectic Medical Publications; 1983 [Reprint of 1898 original].

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

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

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

USDA 2007: United States Department of Agriculture, Agricultural Research Service, National Genetic Resources Program. Germplasm Resources Information Network (GRIN). *Peumus boldus* Molina. National Germplasm Resources Laboratory, Beltsville (MD). [Accessed 2007-11-21]. Available from: http://www.ars-grin.gov/cgi-bin/npgs/html/tax_search.pl

Wiersema J, León B. World Economic Plants: A Standard Reference. Boca Raton (FL): CRC Press LLC; 1999.

Wren RC. Potter's Cyclopedia of Botanical Drugs and Preparations. London (UK): Potter and Clark; 1907.

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Barnes J, Anderson LA, Philipson JD. Herbal Medicines: A Guide for Healthcare Professionals, 2nd edition. London (UK): The Pharmaceutical Press; 2002.

BHP 1983: British Herbal Pharmacopoeia. Cowling (UK): British Herbal Medical Association; 1983.

Bisset NG, Wichtl M, editors. Herbal Drugs and Phytopharmaceuticals: A Handbook for Practice on a Scientific Basis, 2nd edition. Stuttgart (D): Medpharm GmbH Scientific Publishers; 2001.

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

Wichtl M, editor. Herbal Drugs and Phytopharmaceuticals: A Handbook for Practice on a Scientific Basis, 3rd edition. Stuttgart (D): Medpharm GmbH Scientific Publishers; 2004.

Appendix 1: Examples of appropriate dosage preparations, frequencies of use and directions for use

Dried leaf:

- ▶ 60-200 mg, 3 times per day (Bradley 2006)
- ▶ 200-3,000 mg, per day (Mills and Bone 2005)
- ▶ 200-600 mg, per day (ESCOP 2003)
- ▶ 3,000 mg, per day (Blumenthal et al. 2000)

Infusion:

- ▶ 60-200 mg dried leaf, 3 times per day (Bradley 2006)
- ▶ 200-3,000 mg, dried leaf, per day (Mills and Bone 2005)
- ▶ 2,000-5,000 mg dried leaf, per day (ESCOP 2003)
- ▶ 3,000 mg dried leaf, per day (Blumenthal et al. 2000)

Directions for use: Pour 150 ml of boiling water on dried leaf and steep for 10 minutes (Blumenthal et al. 2000).

Fluidextract:

- ▶ 100-300 mg dried equivalent, 3 times per day (1:1, 45% alcohol, 0.1-0.3 ml) (Bradley 2006)
- ▶ 300-900 mg dried equivalent, per day (1:1, 0.3-0.9 ml) (Mills and Bone 2005)
- ▶ 500-1,000 mg dried equivalent, per day (1:1, 80% ethanol, 0.5-1.0 ml) (ESCOP 2003)
- ▶ 3,000 mg dried equivalent, per day (1:1, 3 ml) (Blumenthal et al. 2000)

Tincture:

- ▶ 50-200 mg dried equivalent, 3 times per day (1:10, 60% alcohol, 0.5-2 ml) (Bradley 2006)
- ▶ 350-1,000 mg dried equivalent, per day (1:2, 0.7-2 ml) (Mills and Bone 2005)
- ▶ 300-1,200 mg dried equivalent, per day (1:5, 1.5-6 ml) (Mills and Bone 2005)
- ▶ 180-600 mg dried equivalent, per day (1:10, 1.8-6 ml) (Mills and Bone 2005)
- ▶ 200-600 mg dried equivalent, per day (1:5, 80% ethanol, 1-3 ml) (ESCOP 2003)
- ▶ 200-400 mg dried equivalent, 3 times per day (1:5, 60% alcohol, 1-2 ml) (Hoffmann 2003)
- ▶ 3,000 mg dried equivalent, per day (1:5, 15 ml) (Blumenthal et al. 2000)