

# NATURAL HEALTH PRODUCT

# HORSERADISH – ARMORACIA RUSTICANA

This monograph is intended to serve as a guide to industry for the preparation of Product Licence Applications (PLAs) and labels for natural health product market authorization. It is not intended to be a comprehensive review of the medicinal ingredient.

#### Notes

- Text in parentheses is additional optional information which can be included on the PLA and product label at the applicant's discretion.
- ► The solidus (/) indicates that the terms and/or statements are synonymous. Either term or statement may be selected by the applicant.

Date

December 18, 2018

## Proper name(s), Common name(s), Source material(s)

Proper name(s)	Common	Source material(s)		
	name(s)	Proper name(s)	Part(s)	Preparation(s)
Armoracia rusticana	Horseradish	Armoracia rusticana	Root	<ul><li>Dried</li><li>Fresh</li></ul>

Table 1. Proper name(s), Common name(s), Source material(s)

References: Proper name: USDA 2018; Common name: McGuffin et al. 2000, Felter and Lloyd 1983; Source material: Barnes et al. 2007, Blumenthal et al. 2000, Grieve 1971, Wren 1907.

## **Route of administration**

Oral

## **Dosage form(s)**

This monograph excludes foods or food-like dosage forms as indicated in the Compendium of Monographs Guidance Document.

Acceptable dosage forms for the age category listed in this monograph and specified route of administration are indicated in the Compendium of Monographs Guidance Document.



## Use(s) or Purpose(s)

- Traditionally used in Herbal Medicine to aid digestion (Barnes et al. 2007; Blumenthal et al. 2000; Moerman 1998; Meyer 1993; Felter and Lloyd 1983; Wren 1907).
- Traditionally used in Herbal Medicine as a diuretic (Barnes et al. 2007; Blumenthal et al. 2000; Moerman 1998; Mills 1985; Felter and Lloyd 1983; Grieve 1971; Wren 1907).

## Note

Claims for traditional use must include the term "Herbal Medicine", "Traditional Chinese Medicine", or "Ayurveda".

## **Dose(s)**

## Subpopulation(s)

Adults 18 years and older

## Quantity(ies)

Methods of preparation: Dry, Powder, Non-Standardised Extracts (Dry extract, Tincture, Fluid extract, Decoction, Infusion)

2 - 20 grams of dried or fresh root, per day (Blumenthal et al. 2000; Mills 1985; Grieve 1971; Wren 1907)

#### **Direction**(s) for use

No statement required.

## **Duration**(s) of use

Diuretic

For occasional use only (Berardi et al. 2002; CPA 2002)

Other uses

No statement required.



## **Risk information**

## Caution(s) and warning(s)

- Consult a health care practitioner /health care provider/health care professional/doctor/ physician if symptoms persist or worsen.
- Consult a health care practitioner/health care provider/health care professional/doctor/ physician prior to use if you are breastfeeding, have hypothyroidism, excess stomach acid or gastroesophageal reflux (Brinker 2010; Barnes et al. 2007; Blumenthal et al. 2000; Mills 1985).
- Consult a health care practitioner/health care provider/health care professional/doctor/ physician prior to use if you are taking thyroid replacement medications or antacids (Brinker 2010; Barnes et al. 2007; Blumenthal et al. 2000; Mills 1985).

## **Contraindication(s)**

Do not use this product if you are pregnant, have a kidney disorder, stomach or intestinal ulcers, or stomach inflammation (Brinker 2010; Blumenthal et al. 2000; McGuffin et al. 1997).

#### Known adverse reaction(s)

No statement required.

## **Non-medicinal ingredients**

Must be chosen from the current Natural Health Product Ingredient Database (NHPID) and must meet the limitations outlined in the database.

#### **Storage conditions**

No statement required.

## **Specifications**

- ► The finished product specifications must be established in accordance with the requirements described in the Natural and Non-prescription Health Products Directorate (NNHPD) Quality of Natural Health Products Guide.
- ▶ The medicinal ingredient must comply with the requirements outlined in the NHPID.



## **References cited**

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

Berardi RR, DeSimone EM, Newton GD, Oszko MA, Popovich NG, Rollins CJ, Shimp LA, Tietze KJ, editors. Handbook of Nonprescription Drugs: An Interactive Approach to Self-Care, 13<sup>th</sup> edition. Washington (DC): American Pharmaceutical Association; 2002.

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

Brinker F. Herb Contraindications and Drug Interactions, 4<sup>th</sup> edition. Sandy (OR): Eclectic Medical Publications; 2010.

CPA 2002: Canadian Pharmacists Association. Patient Self-Care. Helping Patients Make Therapeutic Choices. Ottawa (ON): Canadian Pharmacists Association; 2002.

Felter HW, Lloyd JU. King's American Dispensatory, Volume 1, 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].

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

McGuffin M, Hobbs C, Upton R, Goldberg A, editors. American Herbal Products Association's Botanical Safety Handbook. Boca Raton (FL): CRC Press; 1997.

Meyer JE. The Herbalist. Glenwood (IL): Meyerbooks; 1993.

Mills S. The Dictionary of Modern Herbalsim. Wellingborough (UK): Thorsons Publishers Ltd; 1985.

Moerman DE. Native American Ethnobotany. Portland (OR): Timber Press; 1998.

USDA 2018: United States Department of Agriculture, Agricultural Research Service, National Genetic Resources Program. Germplasm Resources Information Network (GRIN). *Armoracia rusticana* P. Gaertn. et al. National Germplasm Resources Laboratory, Beltsville (MD). [Accessed 2018 September 28]. Available from: https://npgsweb.ars-grin.gov/gringlobal/taxonomydetail.aspx?4234

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



## **References reviewed**

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

Mills S, Bone K. Principles and Practice of Phytotherapy. Toronto (ON): Churchill Livingstone; 2000.

Williamson EM. Potter's Herbal Cyclopaedia: The Authoritative Reference work on Plants with a Known Medical Use. Saffron Walden (UK): The C.W. Daniel Company Limited; 2003.

Williamson EM, Evans FJ, Wren RC. Potter's New Cyclopaedia of Botanical Drugs and Preparations. Saffron Walden (UK): C.W. Daniel Company Limited; 1988.