

Medicinal Plants Answer Key

1. Name of the plant I need to research: **American Ginseng**
- /3 2. Where did/does it grow?
It used to grow in woodlands from southern Quebec to southern Manitoba and well south into the United States. It grows in deciduous forests.
- /4 3. What are its traditional uses?
Improve mental functioning; treat fevers, coughs, and headaches.
- /3 4. Is it currently grown and harvested commercially? If so, what is the value of the crop (you may not be able to find this information, if this information cannot be found then state that it cannot be found)?
Yes, and Canada has become the world's largest commercial grower of American ginseng. By the year 2001, the total value of Canada's ginseng harvest reached \$68 million.
1. Name of the plant I need to research: **Arnica**
- /3 2. Where did/does it grow?
It mainly grows in the western mountains, from the Yukon and Northwest Territories in the north to the southwestern United States, but it can also be found in small, isolated pockets as far east as Lake Superior.
- /4 3. What are its traditional uses?
Soothe strained muscles and bruises.
- /3 4. Is it currently grown and harvested commercially? If so, what is the value of the crop (you may not be able to find this information, if this information cannot be found then state that it cannot be found)?
Most commercial arnica products have been made from the European species, *Arnica montana*. Due to over-harvesting, this plant is becoming increasingly rare in its native habitat, increasing the demand for other species and for farm-grown arnica. Some arnica is gathered from the wild in Canada, but commercial production of the native and/or European species is also being fostered in several regions. (Couldn't find the value of the crop.)
1. Name of the plant I need to research: **Black Cohosh**
- /3 2. Where did/does it grow?
It is native to North America. It was originally found in southern Ontario and the northeastern United States.

/4 3. What are its traditional uses?

Reducing symptoms of menopause like hot flashes, alleviating painful menstruation and PMS, slowing development of osteoporosis.

/3 4. Is it currently grown and harvested commercially? If so, what is the value of the crop (you may not be able to find this information, if this information cannot be found then state that it cannot be found)?

Over 95% of the black cohosh used in medicines is gathered in the wild. It has been declared “threatened” in several U.S. states. If the demand for black cohosh continues to increase, it may become a more significant commercially farmed crop. Over two million dollars.

1. Name of the plant I need to research: **Cascara**

/3 2. Where did/does it grow?

It is native to the Pacific Coast, from British Columbia to northern California, and to Rocky Mountain regions near the Canada – U.S. border.

/4 3. What are its traditional uses?

The yellow inner bark of this tree was used as a remedy for constipation. It is actually still an ingredient in many over-the-counter laxative products.

/3 4. Is it currently grown and harvested commercially? If so, what is the value of the crop (you may not be able to find this information, if this information cannot be found then state that it cannot be found)?

Cascara bark is mainly collected from the wild. About five million pounds of dried bark are gathered in North America each year, and over-harvesting has reduced the number of trees. British Columbia now regulates the harvest. Interest in cultivated production is increasing as wild sources become rarer. The value of the bark was approximately \$100 million in 1999.

1. Name of the plant I need to research: **Coneflowers**

/3 2. Where did/does it grow?

It is native to southern Saskatchewan and Manitoba, and to prairie lands in the central U.S., from Mississippi Valley west to the Rocky Mountains and in most eastern states as well.

/4 3. What are its traditional uses?

Treatment of headaches, toothaches, and swollen glands, and for insect bites and stings.

- /3 4. Is it currently grown and harvested commercially? If so, what is the value of the crop (you may not be able to find this information, if this information cannot be found then state that it cannot be found)?

Most of it that is harvested in North America is gathered from the wild in the United States. In Canada, it is cultivated on a small scale, with the principal producers located in British Columbia, Saskatchewan, and Ontario. The value of the crop is around \$800 million USD.

1. Name of the plant I need to research: **Cranberry**
/3 2. Where did/does it grow?

It is native to bogs and swamps from Manitoba to Newfoundland, with its range extending south into the mid-western and eastern U.S. It is now grown commercially in many other areas.

- /4 3. What are its traditional uses?

It can prevent or cure scurvy. Some First Nations also used it for bladder and kidney problems.

- /3 4. Is it currently grown and harvested commercially? If so, what is the value of the crop (you may not be able to find this information, if this information cannot be found then state that it cannot be found)?

It is an important cultivated crop in Canada. Almost all cranberries on the market are farm-grown. The major production areas are the lower Fraser River Valley in British Columbia, near Drummondville, Quebec, and in parts of Nova Scotia. Worldwide production of cranberries has a value of approximately \$790 million.

1. Name of the plant I need to research: **Devil's-club**
/3 2. Where did/does it grow?

It grows in the rain forests of the Pacific Coast, the interior of British Columbia, and the Rocky Mountains, as well as in mountainous regions in the northwestern U.S. There are also a few isolated patches north of Lake Superior.

- /4 3. What are its traditional uses?

Treatment of infections (including tuberculosis), arthritis, and gastrointestinal complaints.

/3 4. Is it currently grown and harvested commercially? If so, what is the value of the crop (you may not be able to find this information, if this information cannot be found then state that it cannot be found)?
It is gathered exclusively from the wild. As demand for the plant increases, so does concern that the plant is being over-harvested. Could not find the value – it seems like the commercialization of Devil’s-club is pretty recent.

1. Name of the plant I need to research: **Eastern White Pine**
/3 2. Where did/does it grow?

It grows across eastern Canada from Newfoundland to Manitoba.

/4 3. What are its traditional uses?

The resin has some antiseptic properties and was smeared on wounds as a healing ointment, and was boiled up to make a tonic drink. The needles made a tea that helped prevent and treat scurvy. Pine was a popular ingredient in many mixtures of patent medicines. The strong scent penetrated blocked sinuses. First Nations people also used the resin to seal the seams in canoes. Later, pine resins became the source of industrial products such as pitch and turpentine.

/3 4. Is it currently grown and harvested commercially? If so, what is the value of the crop (you may not be able to find this information, if this information cannot be found then state that it cannot be found)?

The eastern white pine is harvested primarily for its pulp and lumber. The oils for medical uses are a by-product. The value of the pine-derived chemicals market is approximately \$7 Billion USD.

1. Name of the plant I need to research: **Evening-primrose**
/3 2. Where did/does it grow?

It can be found in every province. It tends to appear on disturbed or waste land where there is sun, thin soil, and good drainage. It is also found across the central and eastern U.S. and some areas in the west.

/4 3. What are its traditional uses?

Treating wounds and bruises with a poultice of leaves. A tea or infusion of the plant was drunk to soothe coughs and digestive complaints.

/3 4. Is it currently grown and harvested commercially? If so, what is the value of the crop (you may not be able to find this information, if this information cannot be found then state that it cannot be found)?

It is mainly cultivated instead of being wild harvested. The major areas of production are Nova Scotia and Ontario. Even though evening-primrose grows wild across much of southern Canada, attempts to establish it as a profitable crop have met with mixed success. The value of the crop, worldwide, is approximately \$10 Million Canadian.

- /3 1. Name of the plant I need to research: **Fireweed**
2. Where did/does it grow?
It can be found in every Canadian province and territory – although sometimes only in isolated pockets – and across the northern United States.
- /4 3. What are its traditional uses?
First Nations used it externally for burns and other skin conditions. They also drank it as a tea for gastrointestinal and bronchial problems.
- /3 4. Is it currently grown and harvested commercially? If so, what is the value of the crop (you may not be able to find this information, if this information cannot be found then state that it cannot be found)?
It is almost entirely harvested from the wild. At present, there are no serious conservation concerns. There are a few commercial growers, but they raise fireweed plants primarily for use in land reclamation and stabilization projects, rather than for medicinal purposes. The value of the crop could not be found.

- /3 1. Name of the plant I need to research: **Goldenseal**
2. Where did/does it grow?
Its range is limited to forests of south-western Ontario and the eastern United States.
- /4 3. What are its traditional uses?
Skin, eye, and digestive problems.
- /3 4. Is it currently grown and harvested commercially? If so, what is the value of the crop (you may not be able to find this information, if this information cannot be found then state that it cannot be found)?
It is becoming rare in the wild, so commercial production is increasing. Some commercial growers of American ginseng, which requires similar growing conditions, are now adding goldenseal or rotating the two crops.

One hectare of goldenseal will result in approximately 7276 kg of dried products and a total sales revenue of around \$634 900.

1. Name of the plant I need to research: **May-apple**
- /3 2. Where did/does it grow?
It is native to damp woodlands in southern Ontario and Quebec, as well as most of the eastern United States.
- /4 3. What are its traditional uses?
A laxative and tonic, to expel worms, and to treat warts and growths. It became a popular ingredient in patent medicines of the late 1800s, especially those aimed at liver problems. Some First Nations steeped the poisonous leaves and roots in water to make a liquid insecticide for their crops.
- /3 4. Is it currently grown and harvested commercially? If so, what is the value of the crop (you may not be able to find this information, if this information cannot be found then state that it cannot be found)?
May-apple for medicinal use is gathered almost entirely from the wild. Researchers now seek ways to harvest may-apple in a more sustainable fashion and to grow it commercially, perhaps in combination with other forest medicinals, such as ginseng and goldenseal, that enjoy similar conditions. The value of the crop could not be found.

1. Name of the plant I need to research: **Pacific Yew**
- /3 2. Where did/does it grow?
It is native to the coast range of B.C. and the northwest coast of the United States. It is also found in a few areas further inland.
- /4 3. What are its traditional uses?
Making teas from the needles and bark, applying crushed needles to wounds.
- /3 4. Is it currently grown and harvested commercially? If so, what is the value of the crop? (you may not be able to find this information, if this information cannot be found then state that it cannot be found)
For years, it was considered to be a “weed tree” of no commercial value. When paclitaxel (a chemical compound in Pacific yew that was discovered in 1971, it is approved for use against ovarian and certain types of breast cancer as well as an AIDS-related cancer, it is sold under the trade name

Taxol®) was first discovered, the demand for Pacific yew suddenly became overwhelming. The paclitaxel market is worth about \$1.6 Billion, but researchers have also developed new methods of semi-synthesizing the drug from other species of yew, such as the much more common and faster-growing English yew.

1. Name of the plant I need to research: **Seneca-snakeroot**
- /3 2. Where did/does it grow?
It is native to prairies and dry open woodland across southern Canada, from New Brunswick to Alberta. Its range extends south throughout much of the eastern and central United States.
- /4 3. What are its traditional uses?
As a treatment for snakebite, for respiratory problems, for headache, and for stomach ache. In the first half of the 1900s, it was an ingredient in many patent medicines and over-the-counter remedies, especially for bronchitis.
- /3 4. Is it currently grown and harvested commercially? If so, what is the value of the crop (you may not be able to find this information, if this information cannot be found then state that it cannot be found)?
Most of what comes from Canada is gathered from its natural habitat primarily in Manitoba and eastern Saskatchewan. There is increasing concern that seneca-snakeroot is becoming rarer in parts of its range. Since the plant has been raised successfully as a crop in other parts of the world, notably Japan, the possibility of growing seneca-snakeroot as a cultivated crop in Canada is being explored. Seneca is not currently under cultivation in North America. In 1957, Canadian export of seneca-snakeroot had a value of \$361,915.

1. Name of the plant I need to research: **Witch-hazel**
- /3 2. Where did/does it grow?
It grows in dry woods from Nova Scotia to Ontario and south through the eastern United States.
- /4 3. What are its traditional uses?
As a treatment for wounds, bleeding, and dry, itchy, or irritated skin. In the 1800s, it became a popular ingredient in commercial toiletries and patent medicines. It has also been used to treat inflamed eyes and it has been taken internally for gastrointestinal problems.



/3 4. Is it currently grown and harvested commercially? If so, what is the value of the crop (you may not be able to find this information, if this information cannot be found then state that it cannot be found)?

The witch-hazel processed in North America is wild crafted or gathered from managed wood-lots, primarily in the New England region of the United States. The value of the crop could not be found.