



# Extension FactSheet

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## Growing American Ginseng in Ohio: Harvesting, Washing, and Drying

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Harvesting your crop of American ginseng will undoubtedly be the most labor-intensive and time-consuming part of your ginseng enterprise. Fortunately, it will also be the most financially rewarding and can also be the most fun. If your planned harvest is large, you will need to prepare ahead and solicit help or begin harvesting earlier in the year in order to ensure enough time to get your crop out of the ground before the tops die back for the year. In Ohio, this is usually in September and October. If you wait until later in the season, finding your plants to harvest is a difficult challenge at best.

Before harvesting, it is always a good idea to check state and federal laws affecting ginseng harvests to make sure there are no recent changes that could affect the harvest. Also, if you are planning to sell your harvested ginseng, research your marketing options

prior to the harvest, and develop a plan to maximize your profits. Finally, consider leaving a portion of your crop in the ground to further mature and to produce seed. This can result in increased value and provide added enjoyment. In addition to the financial rewards, harvesting can be an excellent opportunity to spend time in the woods with friends and family.

### Laws

State and federal laws are constantly evolving to reflect trends in ginseng production and to protect wild ginseng from overharvesting. A June 2006 finding by the U.S. Fish and Wildlife Service supports the legal export of wild and wild-simulated American ginseng roots harvested in the 2006–2008 growing seasons that are at least 5 years old (i.e., a minimum of 4 bud scale scars on the root). Again, it is crucial that you check the current state and federal laws regarding ginseng harvest and exportation before you perform a harvest of your own.

Currently, Ohio's legal harvest season runs from September 1 through December 31. Federal and state laws do not distinguish wild-simulated ginseng from truly wild ginseng. The rules and regulations that govern ginseng in Ohio can be found at <http://www.dnr.state.oh.us/wildlife/Resources/Ginseng/ginsenglaws.htm> or in the Ohio Revised Code sections 1533.86-1533.99. The federal regulations that pertain to ginseng can be found at <http://international.fws.gov/animals/ginindx.html> (Note: federal regulations are updated each year. Check regularly to ensure you are in compliance).



Figure 1. Freshly harvested, large ginseng root. (Photo courtesy of Bob Beyfuss, Cornell Cooperative Extension).

## Harvesting

Typically, growers allow ginseng to reach a minimum age of 9 to 10 years before harvesting. Assuming that the market price does not decrease significantly, the value of ginseng should increase significantly each year it is allowed to mature. However, the threat of loss to disease, theft, and a variety of other problems must be considered when determining the optimum time to harvest.

Harvesting will likely be the most rewarding aspect of working with American ginseng. Harvesting ginseng can be compared to a treasure hunt, since each root you dig is worth about \$1. Individual roots or “prize roots” with specific characteristics can be worth far more if you successfully locate niche markets for them.

There are a variety of tools that can be used to harvest ginseng roots including hand trowels, picks, mattocks, and soil knives. Many growers fashion their own digging tools out of hoes, picks, or even screwdrivers. The only limitation to personal preference is that the harvesting tool must allow the roots to be removed from the soil intact.

If you’re growing ginseng in the wild-simulated fashion, harvesting the crop will be much like hunting and digging wild ginseng. It is likely that between the time you planted seed and the time you harvest roots, your plants will have produced offspring from seed. Therefore, you will likely find yourself working in an environment that has many mixed-aged plants, and you will need to select only the mature plants for harvest, allowing the younger ones to continue to grow.

Wild-simulated plantings most often allow you room to move among plants, since the plantings tend

to be much thinner than more intensive methods of producing ginseng in the forest. In essence, harvesting involves working through the planted area, digging the mature roots one at a time. Some growers also save the “tops” or the vegetative, leafy portion of the plant to dry and market as well. It takes approximately 300 fresh wild-simulated roots to equal one pound of dried ginseng, and it takes several hours to harvest each pound.

## Washing

Once the roots are harvested, the next step is to wash them. Since ginseng roots should always be washed when they are fresh, it is preferable to wash roots as soon as possible after harvest. There are as many ways to wash ginseng roots as there are tools to dig them. The most important thing to keep in mind is not to overwash the roots. Too vigorous washing will damage the fragile “skin” of the root.

The simplest root washing method is to fill a 5-gallon bucket with water and wash the roots by hand, swishing them in the bucket and gently rubbing (not scrubbing) to remove any loose soil. A little dirt in the grooves of the roots is preferable to a completely clean, white root, which can be far less valuable, particularly if it is damaged.

While many people simply hand wash their roots, others spread them on a screen and spray them with a hose. There are commercially available pieces of equipment specifically designed to wash ginseng roots, which typically consist of a barrel that is mechanically rotated as water jets spray the roots. Some mechanically inclined growers have even modified old wringer washers for washing roots.

After you have washed the roots, it is a good idea to lay them out on a screen to air dry for a couple of hours. Do not expose the roots to direct sunlight for a prolonged period of time at any point during the washing and drying process.

## Drying

Numerous successful drying techniques have been employed to dry ginseng roots, ranging from dehumidifiers and heaters to wood stoves and fans. Drying in an oven, microwave, or in a car window is definitely not advisable. No matter what drying method is used, it is critical that the roots not be dried too quickly, as that will lower the overall quality of the finished product.



Figure 2. Typical “sang hoe” tool used for digging ginseng.

It is important to maintain a consistent air temperature and adequate air-flow around the roots while they are drying. Most growers construct racks with screens to dry their roots, thereby ensuring that the entire root is exposed to adequate airflow. Roots should be spread out so they are not in contact with each other, and should be rotated oc-



Figure 3. Homemade ginseng drying rack.

asionally to make certain that air and heat is getting to all sides of the root. Variables such as temperature, weather, humidity, and type of heat will all affect how long roots take to dry. Safe temperature ranges for drying ginseng are between 70°F and 100°F. Depending on conditions and technique, it may take from 1 to 2 weeks for roots to completely dry with an air temperature around 70°F.

It is important to regularly inspect roots throughout the drying process. Any discoloration or mold on the roots indicates a problem, suggesting the need for adjustments in the temperature, humidity, or airflow. As ginseng roots dry, they will begin to shrink, but often will remain spongy at least partway through the drying process. To determine if roots are completely dried, sample a few roots by breaking them. Properly dried roots snap easily into two pieces. Carefully inspect the inside of the root for any discoloration; a properly dried root should be entirely white inside. Drying too quickly will often create a brown ring inside the root, while drying too slowly will create moldy sections.

There are a variety of commercially available herb dryers on the market, which are adequate for drying small quantities of ginseng. However, dryers capable of handling large quantities of ginseng can be quite expensive. Depending on the size of the anticipated annu-

al harvest, you may need to consider modifying a room, shed, or other space into a drying facility. Before initiating such a project, visit other growers to determine what size and design will best satisfy your needs.

## Summary

Wild-simulated ginseng production can be an enjoyable and financially rewarding experience. Harvesting, washing, and drying are critical steps in the process. When properly employed, these steps can help to ensure a considerable return on the investment of time and money required to produce this unique and valuable crop.

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