



# WALNUT NOTES

---

## Finding Suitable Seed

One reason black walnut plantations may grow poorly or not at all is the use of seed from the wrong places. Planting success and genetic gains in growth depend partially on locating planting stock that both withstands the winter and grows rapidly, traits strongly influenced by geographic origin of the seed. Choice of seed sources can, therefore, affect the economic return from black walnut plantations. Research has shown that 10- to 20-percent gains in height and diameter growth are possible in most locations by using more appropriate sources of seed.

## Guidelines for Locating Suitable Seeds

Here are some guidelines for locating suitable seed sources:

1. Collect seed from areas 100 to 200 miles south of your planting site. Trees of southern origin tend to grow faster than local or northern trees.
2. In the northern part of the walnut range where winter hardiness may be a problem, use only seed that originated within 100 miles of your planting site or mix non-local seed with local seed. To avoid loss of potential growth, never plant seed from more northerly sources.
3. Use only seed from western sources in the western part of the black walnut range. In general, seeds of eastern origin have not grown well in the west.
4. In other parts of the range, there seems to be little advantage to using seed from east or west of the planting site. To be safe, plant only seed from within 200 miles east or west of the intended site.

if you do your own collecting in a specific geographic area, be sure to collect seed from several trees in as many stands as possible. If you plan to purchase seed from a specific area, specify that the seed must have been collected from many trees. This will ensure genetic diversity and provide greater opportunities to select and favor fast-growing, high-quality trees and to remove poorly formed, slow-growing trees as the plantation develops.

Whether you collect your own seed or purchase it, keep detailed records on the origin of the seed. You should record latitude, longitude, elevation, legal description, and exact geographic location of the collection area as well as the number of trees included in each collection. This information will be helpful if you should ever want to collect in the same area again or to avoid it because trees from the area have not grown as well as those from other locations.

*Knud E.*