



WALNUT NOTES

Choosing a Good Walnut Site

One of the black walnut grower's most important decisions is where to plant this valuable, but sensitive hardwood. Black walnut has specific soil-site requirements that must be considered when locating a planting site. It grows well only on land of good quality. Briefly, black walnuts grow best in soil that is:

- medium textured
- deep, well-drained
- not stony
- on lower north- or east-facing slopes (avoid planting on rolling, hilly ground) not compacted.

Landform

Natural stands of black walnut are located most frequently on bottomlands, coves, and lower slopes. In selecting your planting site, consider floodplain sites carefully—you'll need to avoid the many clayey and heavy textured soils that often occupy such sites. On the uplands, the better planting areas are commonly located on the lower uplands, lower north- and east-facing slopes, and stream terraces. Soil moisture and depth may limit growth on upland sites. Avoid: steep or south-facing slopes and narrow ridgetops.

Soil Texture

Soils in the better black walnut sites are deep and medium textured over loose, well-drained subsoils. The best soils for walnut plantings are composed of topsoils of sandy loam, loam, or silt loam over similar subsoil textures, or sandy clay loam or clay loam. Also good are limestone soils with silt loam over clayey subsoils.

Select with caution: soils with gravel layers or bedrock within 3 feet of the surface. Avoid: coarse or heavy-textured soils that are eroded or shallow to a mottled subsoil or bedrock.

Drainage

Black walnut needs an ample supply of moisture but cannot tolerate long periods of high water. The soil must be well aerated to allow air movement in the rooting zone. Soil color is usually a good indicator of soil drainage. Well-drained soils have uniform shades of brown or reddish-brown from the surface to 3 feet deep or more. Avoid soils with streaks of gray, red, or yellow, or an unpleasant odor—they're poorly drained.

Nutrients and pH

Planting in naturally fertile soil is a more reliable way to get black walnut growth than fertilizing poor soils. Nutrients needed by black walnut in the largest amount are available at pH 5 to 8. Avoid soils with acid clayey subsoils.

Other Things to Consider

When choosing a planting site, remember that walnuts grow better when protected from high wind and frost.

Check out the vegetation on a prospective site before planting-it can give you clues to the site's productivity. For example, a sparse cover of weeds and grasses generally indicates low fertility, erosion, or droughty conditions. The composition of the cover can also tell you about the site; sedges, for example, indicate a wet soil.

For other help in selecting suitable black walnut planting sites, consult a soil scientist or State forester who is familiar with the soils in your area.

Reference

Ponder, Felix, Jr. 1982. Some guidelines for selecting planting sites. Northern Nut Growers Association Annual Report 72: 112-117.

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