

American Filbert (*Corylus americana*)

By Gary Micsky

1) Reasons for consideration

The American filbert is a productive and long-lived species which shows promise as an agroforestry crop in the northeast region. Wild growing filberts have been observed to live well over forty years in northwest Pennsylvania. Although smaller than the European hazelnuts available in the supermarket, the nut is nevertheless quite tasty and attractive as is the plant itself. In general, height does not exceed 15 feet and the plant exhibits a bush or shrub-like growth habit when allowed to sucker freely and can double as an effective and decorative hedge when planted closely together. Autumn foliage is an attractive yellow. *C. americana* was once very common throughout fencerows and forest edges before modern agricultural practices limited suitable growing sites. Native filberts or hazelnuts are fairly easy to propagate, maintain, and harvest. An added benefit is that plants started from seed can often bear nuts early, three to four years is not uncommon.

2) Site requirements

Based on observations of where wild filberts exist and flourish, along with performance of plantings in various conditions, filberts appear to prefer moderate to well drained sites. Shrubs with a northern exposure to sunlight have been noted to be more vigorous in growth and production. Although survival in wetter sites and other aspects is possible, growth rate and yields are compromised.

3) Propagation and Germplasm Sources

In Northwest Pennsylvania, the chief obstacle to successful production appears to be competing with squirrels and chipmunks in harvesting nuts for seed or food use. In short, squirrels are likely to cut the nuts prior to maturity while still enclosed in the still green involucre or "husk". This is particularly troublesome when filberts are grown near established woodlots. Adequate protection of seedbeds is encouraged as they will likely become targets of foraging wildlife. Success can be increased by planting nuts in clay pots buried at ground level and covered with fine mesh wire which needs to be removed prior to spring emergence. This technique has the added benefit of making eventual transplanting much easier and increasing survivability.

Try to locate the transplant in its permanent growing location prior to the second full year of growth to minimize transplant shock. What you see above ground is a poor indicator of how rapidly root systems develop.

Another option is to store seed in damp humus under refrigeration similar to chestnut culture in order to decrease the amount of predation to wildlife. Layering is yet another method of propagation to be considered.

Direct seedlings and transplants respond well to good weed control – particularly in the first two growing seasons where the filberts can be expected to attain 5 – 12 inches of growth respectively. Grasses can become extremely competitive and significantly lower growth and survivability. Ideally, grasses should be controlled prior to planting.

Germplasm is readily available and should be acquired from a source in the same hardiness zone if possible. Local seed sources include wild filberts growing in the area, as well as one to two year old seedlings from a reputable nursery.

4) Cultivation and harvest methods

Filbert yields are often deceptive in that the developing nuts contained in the husks blend in extremely well with the shrubs foliage. It is not uncommon to go back after leaf drop and discover nearly as many nuts as were harvested previously. Furthermore, a quick check of the ground beneath the shrub will likely reveal numerous nuts previously dropped from the husk.

Harvesting is best done by hand, gently popping off the husks containing the nuts when they yield to a gentle tug. Commercial growers are known to rake fallen nuts/husks into windrows for collection, separation and cleaning; however, in agroforestry applications, losses to wildlife are likely to be excessive with this method.