



CEDARS, JUNIPERS, ARBORVITAE: What is the Difference?

The following article was prepared by Gerhard Weber of Valatie, NY, one of the Master Gardener Volunteers for Cornell Cooperative Extension of Columbia County. It was written in response to the many questions we receive from homeowners who are interested in the various evergreens we commonly find in throughout Columbia County. Some of which are landscape plants and others which actually grow wild. For further study, you might consult tree and shrub books or the internet for color photos of the three different genus Jerry has described below. Of course, we at Cornell Cooperative Extension are also willing to help identify which ones you have if you'd like to bring in a sample. JOEL W. Allen, Cooperative Extension Educator

The Common Juniper (*Juniperus communis*) is native to North America and Europe. It can be a small tree that can grow to 24 feet, but is usually found as a shrub. It always has prickly type needles arranged in whorls of three. The fruit is a dark blue berry from which gin is made. The French call this tree "genevrier" from which the English word gin is derived. There are numerous species of Juniperus that can be and are used in the home landscape.

Red Cedar (*Juniperus virginiana*). This is our common juniper. This tree is sometimes broad or squat and sometimes tall and narrow. The more common shape in our area is the tall, narrow spire-like compact tree that looks like an Italian cypress. If the two different shapes of the tree is not enough to confuse you, it also has two types of leaves or needles, sometimes found on the same tree. One is scale-like, the other is prickly and sharp. Red Cedar can have an orange gall form on its needles if the tree grows near apple or crabapple trees. This gall is a part of the disease complex called Cedar-Apple Rust. Red cedar is a co-host of the disease and is necessary for the disease complex to be complete. This disease is why we normally recommend the tree be removed. Red Cedars have scale-like leaves always four-sided which can be seen or felt. The fruit is a green berry at first then turning to light blue. The tree can grow to 40 to 50 feet tall and likes to grow in soil with plenty of limestone. The hardwood of Red Cedar was used extensively to make pencils in the last century. It is grows wild in our area, being nearly a weed tree.

The White Cedar or Atlantic White Cedar (*Chamaecyparis thyoides*) is found in swamp areas. Other names for the tree are Southern White Cedar, Swamp Cedar and Post Cedar. It likes wet roots. The needles look like the scale-like needles of the Red Cedar but are much flatter and not as prickly. Remember Red Cedar needles are four sided when seen under a magnifying glass. The bark on the tree is distinctly red.

The fruit of the White Cedar is a ball-like cone. Many hybrids of this tree are sold by nurseries under the name of Cypress. Remember also, that the needles of the native White Cedar are green both on top and below. Native White cedars can grow up to 80 feet. To the lumberman, arborvitae, Atlantic white cedar, juniper and red cedar all go by the simple name of cedar. To quote Donald Culcross Peattie, the colorful author of *A Natural History of Trees* "the lumberman has no use for botanical distinctions." There is a lovely stand of these trees near the Marconi Station in Wellfleet, Cape Cod.

This brings us to Arborvitae (*Thuja occidentalis*) a.k.a. Northern White Cedar. Its life expectancy can be 200 to 300 years thus the name Arborvitae which means the tree-of-life (arbor-tree and vitae-life). The needles of Arborvitae are very flat (Fig. 3). Their fruits are very distinct and quite different from the White Cedar. They look like little brown, tulip-like flowers. The bark is thin, light red-brown, tough and stringy. The wood is durable and aromatic and very light. Arborvitae likes to grow in watery, swampy areas often near rivers in company with the majestic hemlock. The so-called 'cedar shingles' were often made with Arborvitae since the wood seems to resist decay forever.

Arborvitae, juniper, and cypress do make good landscape plants in the right locations under the correct conditions.

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Visit a local nursery or garden center this spring to see what they have available. Most of these require little maintenance and pest management. However, before buying any plant material, be sure to ask for the correct botanical or Latin name in genus and species. That is the only way one can determine what the plant really is. As in the case of juniper and arborvitae, if you are seeking an arborvitae, don't let anyone sell you a red cedar. Happy Gardening!

And don't forget to sign up for Cooperative Extension's SPRING GARDENING DAY to be held Saturday, March 31st on the campus of Columbia-Greene Community College. Consult our web site under "What's New" for a complete description of the program, class offerings, and registration form. Class registrations are due at Cooperative Extension by March 16.

For more information on selecting the right evergreen for the right spot, contact your Master Gardener volunteers at Cornell Cooperative Extension, 479 Route 66, Hudson, NY 12534 by phone at (518) 828-3346 or via email at columbia@cornell.edu. Visit our web site at www.cce.cornell.edu/cornell/ under "Need Help with Gardening Questions" for submitting a question via email. ###