Pine Nuts for Food and Edible Oil

- A brief commentary



A few words on pine nut oil.

Pine nuts could be considered a super food. Certainly the Russians do. It is the holy grail food for the Anastasia movement people.

All pine nut seeds are edible and good (that I have ever heard about or tried). Some of them are just too tiny and fiddly to rely on as a food source, such as my local Ponderosa pine. Worldwide there are 93 *Pinus* species. "Sturtevant's Edible Plants of the World" lists 17 pine species. Some pine seeds have wings and some do not. Most food pine-nuts do not have wings.

Korean nut pine (*Pinus koraiensis*). A 5-needle pine. Seed 5/8 inch long. Here in the Pacific Northwest it is generally considered a slow growing tree. Donald Wyman, for the Eastern U.S., and W.J. Bean, for Britain, both say it is slow growing. Zone 3.

The Siberian nut pine of Russia, (*Pinus cembra var. siberica*) (the Ringing Cedars of Anastasia) is certainly hardy, Zone 2. An interesting quote in Sturtevant "According to Gmelin the seeds form about the sole winter food of the peasantry in Siberia". *The Forests of the U.S.S.R.* says that the average yield of pine nuts is 50 kilograms per hectare. Which is close to 50 pounds per acre.

The Siberian nut pine is sometimes listed as *Pinus siberica*, but most authorities place it as a subspecies of *Pinus cembra*, the Swiss nut pine of the Alps. *W.J. Bean's Tree and Shrubs Hardy in the British Isles* has this to say about the difference, "The main differences are that in the Siberian tree the leaves are longer, the cones longer and relatively narrower, with thinner scales. Its distribution in Russia is vast from about 55 degrees E. to an eastern limit of around 125 degrees. Its name in Russian is *Kedr* - word of the same parentage as ancient Greek as *kedros* and Latin *cedrus*. In English translations of Russian works this is usually misleadingly rendered as 'cedar'."

The Forests of China mention a forest type which includes mixed stands of Pinus cembra var. siberica along with Pinus koraiensis and larches (Larix). It also says that Pinus cembra var. siberica is the timberline species with larch in Mongolia.

The Forests of China give the following description:

"Pinus cembra var. siberica also seems to prefer moist places. It does not form pure stands of any extent in Mongolia. However, pure forests of *Pinus cembra var. siberica* do occur in Siberia. These are similar to *Pinus cembra* forests in Europe. In Mongolia, *Pinus cembra var. siberica* is generally associated with other conifers, all the way from the lowlands to timberline. Old trees of Pinus cembra var siberica reach great size; they protrude above the general canopy of spruce and fir and give it a ragged appearance which is quite different from the level canopy of ordinary spruce-fir forests."

The vast pine forests of Russian are mainly of two species. P. sylvestris (Scot's Pine) *var. siberica* is common throughout most of Russian forests except for the Siberian northeast So the question arises: what is the range of *Pinus cembra var. siberica* and the extent of *Pinus sylvestris var. siberica*? Do they intermingle in places?

The most common nut pines of commerce are the Italian stone pine (*Pinus pinea*) of the Mediterranean, Zone 6 and the following:

- Pinyon Pine (*Pinus cembroidies var. edulis and var. monophylla*), Zone 6. Seed is 1/2 " long. Some people rank *monophylla* as a separate species and some as a subspecies of P. *cembroidies. Pinus monophylla* is the only one-needle pine.
- The digger pine (*Pinus sabiniana*) of California deserves especial mention because of the large size of its seeds. Perhaps the largest pine nut? As large as an almond.

The seeds of *Pinus coulterii* in California are also very large, large as a bean.

Sugar pine (Pinus lambertiana), Zone 5 has the largest cones of any pine and its seeds are ½ to ¾ " long.

Alas, all the 5-needle pines in my neck of the woods have been, or are, in the process of having their populations ravaged by the non-native white pine blister rust. The Whitebark Pines ($Pinus\ albicaulis$) live at timberline in the North Cascades. Zone 2. Their seeds are ½ "long and beloved of the native peoples, who would climb up there to harvest them. The blister rust is working its way through their populations at this time

Pine nut oil can be pressed out of all pine nuts. The remaining meal is still a very nutritious food substance, so nothing is wasted. Pine-nut oil fetches a very high price, so I doubt anyone would want to burn it as a fuel.

This of course is just a quick sketch. Many books have been written about pine nuts. Consult the usual expert sources.

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