

February 26, 2021
Apple Origin

I really like history even though sometimes it is a different kind of history. I enjoy learning about where in the world plants and animals originate. Knowing this will help us understand how to better grow them. It may also explain why we can't grow a polar bear in Texas.

The apple is a plant that is integral to our culinary life. In 2020 each consumer in the United States ate an average of 17.5 pounds of apples. This was the second most eaten fruit, coming in behind bananas. Which again, we cannot grow in our climate.

All of us were brought up on the stories of John Chapman also known as Johnny Appleseed. This early pioneer, who eventually crossed into Northern Indiana, was in many ways a forerunner of the environmental movement. He did not spread seeds but actually planted trees into nurseries prior to the pioneers entering into areas. Indiana did not have apple trees. In fact, the only native apple trees in America were some crabapple species and they, like all modern apples, can trace their origin back to the Tian Shan Mountains in Kazakhstan. Fossil records show apple growing 11 million years ago in Asia but their actual domestication seems to have started around those mountains. One town, Almaty that loosely translates into Father of Apple, claims to be just that. The mountain valley area sees summer high Fahrenheit temperatures averaging 75 degrees. Januarys have an average low of 17. Rainfall averages about 10 inches less than us at 25 inches and one-third of that falls in April and May.

Apple trees grow better in dryer soils, like in Kazakhstan. One tree is noted to be 300 years old. There are root rot problems that can easily kill apple trees in our area if they are planted in low areas. Our rainfall amounts also keep the fruit and leaves wetter for long periods of time enhancing fungus disease that necessitates a chemical spray program. To better solve some of these disease problems we can breed apples to be resistant.

That 300-year-old apple tree is reported to be inedible. But just maybe it or another tree close by has in its gene pool something that will help prevent the disease we find troublesome here. Going back to the area where plants originate is how scientists find the genetics to develop resistance. They do it in all the major crops like soybeans from China, wheat from the middle east and potatoes from South America where you can find them in red, yellow, back and purple colors. These native populations are important.

Like in many plant native areas, man has caused major destruction of the environment. Apples used to be commonplace in the lower Tian Shan Mountain range but during Soviet times many of the trees were cut down for their wood. Up to 80 percent of the wild apple forests were destroyed. You will never know if we lost the genetics to solve some of our pest problems. In New York State the United States Department of Agriculture has a lab that preserves the genetics of many gathered plants when they travel to Asia. By preserving the plants they have continued what a nomadic Johnny Appleseed started in the late 1700s and continued for the next 50 years. The story of the apple is very interesting. Johnny planted apples from seeds. Seeds have the genetics of their mom and the pollen from some other tree that the bees went to gather pollen. So, some apples would be tasty and others not so good. But they all could be made into cider and cider could be fermented into hard cider. According to a November, 2014, Smithsonian magazine article, Johnnies gift to the pioneers was alcohol. That article stated, "Apple cider provided those on the frontier with a safe, stable source of drink, and in a time and place where water could be full of dangerous bacteria, cider could be imbibed without worry." Hard cider was a staple of the pioneer. Even Indiana's former governor William Henry Harrison during his 1840 presidential campaign, used the "log cabin and hard cider" platform to convince voters he was just a common man. The same theme that had gotten Andrew Jackson elected.

Today eating newer genetically tasty varieties is the way most apples are consumed.

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