

THE UNIVERSITY OF ARIZONA • COLLEGE OF AGRICULTURE AND LIFE SCIENCES

## KINGMAN IS GROWING! COLUMN

## **Those Tumblin' Tumbleweeds**

by *Marjorie Martinovic*, Kingman Area Master Gardener

Did the title of this article cause you to think of the wild west, cowboy movies, and a tumbleweed rolling down the only main street of a prairie town? We think of the tumbleweed as American as apple pie. Guess what! It isn't. The tumbleweed is not a native American plant. It's a Russian invader that was first discovered in Australia.

The tumbleweed came to America from the steppes of Mongolia. It is thought to have arrived with a shipment of grain.

Tumbleweed is a round, bushy, much-branched plant growing 1 to 3 1/2 feet high. The branches are slender and soft when young, and woody when mature. The leaves are alternate. The first leaves are dark green, soft, slender, and about 1 to 2 1/2 inches long. These drop off and the next set of leaves are short, stiff, spiny, and not over 2 inch long. The flowers are small, green-white, or pink in color. Seeds are about 1/16 inch in diameter and shaped like a cone.

Tumbleweeds grow on dry plains, in cultivated fields, roadsides, and waste places. You will find it mainly in grain-growing areas. It has a special way of broadcasting its seeds. It does not depend on birds. It does not hitchhike on the fur of animals. When the tumbleweed matures, it breaks off at the base. Because it is shaped like a ball, it tumbles before the wind, scattering seeds wherever it goes. Once tumbleweed seeds are ripe, a layer of cells in the stem of the plant weaken, and it breaks cleanly away. At this stage, the tumbleweed is almost a perfect ball with about 250,000 seeds stored inside. When the wind causes the tumbleweed to travel, it bounces but it is designed so it won't lose all its valuable seeds in a single bounce.

Around Odessa, in southern Russia, the tumbleweed was called "Tartar Thistle". Other names for it are saltwort, Russian cactus, wind witch, buckbush, soft roly-poly and prickly roly-poly. The tumbleweed seeds perhaps had been accidentally mixed in with some imported flax seed. Within twenty years it had covered more than a dozen states.

Tumbleweeds were soon worse than a nuisance. Tumbleweed drove many farmers from their homes. It was so frightening that a legislator from North Dakota suggested that a wire fence be built around the entire state to stop the advance of the tumbleweed.

It seemed nothing could stop the tumbleweed. Even fire could not kill the tumbleweed. Because it is so light, the wind carried it over fire breaks to set fire to crops and houses.

Tumbleweeds have very pointy leaves that penetrate heavy leather gloves. While blowing every which way, tumbleweeds lacerated horses' legs. Anything that affected the horse was serious. In the American west, the horse was not just transport but it was also the basic source of power. Tumbleweeds became an environmental disaster.

The main reason the tumbleweed survived is agriculture. In the American mid-west, the tall prairie grasses would have made it impossible for the tumbleweed to roll any distance. As time passed, the grasses were replaced by ploughed fields. Tumbleweed has followed farmers as they migrated around the world.

Tumbleweed thrives in disturbed soil, especially if it is sandy. Archaeologists have found tumbleweed seeds in some of the oldest agricultural sites in the world. Without agriculture, tumbleweed would have been a minor plant, living in areas that were naturally bare and denuded.

The tumbleweed is a hardy plant that is resistant to salt and drought. This plant is able to procreate so well that its seeds have not developed the protective coating or food stores seen in most other plants. The tumbleweed's taproot, which remains behind when the shrub breaks off to tumble, is nearly impossible to destroy and grows a new plant every year.

Tumbleweed, needless to say, is considered a pest and an invasive species. It has little, if any,

practical uses. But it does have a few good points. The young shoots can serve as food for

horses and cattle, but they will eat it only if nothing else is available. Scientists at Utah State

University have found that tumbleweeds improve the soil. Tumbleweed trickles chemicals into

the soil. These chemicals then make the nutrients in the soil more available to other plants.

Once a tumbleweed has grown in the soil, other plants grow better the next season.

The United States Department of Agriculture, however, classifies the tumbleweed as a noxious

weed. It is controlled with herbicides.

One thing you can say about the tumbleweed is that it is a survivor. In southern Nevada, where

many nuclear weapons were tested above ground, the tumbleweed was always the first plant

to start growing.

I guess we'll be singing about those tumblin' tumbleweeds for a long time!

Saturday, March 7 the University of Arizona Mohave County Cooperative Extension

Master Gardeners' will be presenting a "SPRING VEGETABLES" workshop at 101 E.

Beale Street, Kingman, from 9:00 – 12:00 PM. Seating is limited so please call 753-3788

for your reservation.

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