

Gum Bumelia

By Ricky Linex
Wildlife Biologist, Natural Resources Conservation Service

Gum bumelia, *Sideroxylon lanuginosum*, often just called bumelia or chittamwood, is a rangy root-sprouting native shrub or small tree usually seen 12 to 18 feet in height or less but can grow to 45 feet under ideal conditions. In 2018 I had to cut down a bumelia in our front yard near Weatherford that was close to 30 feet in height. This tree died apparently from having mulch piled too high around the base of the trunk. The trunk will often be straight and true with many zigzagging branches. Bark is dark gray with reddish-brown undertones visible when young or on older trees when the vertical ridges or thickened scales are removed. The short, stout branches have spine-tipped branchlets that resemble thorns and can be 2 to 6 inches in length with attached leaves. Also present on the branches are spur branchlets up to $\frac{3}{8}$ inch in diameter and up to $\frac{1}{2}$ to 1 inch in length.

Leaves are simple, alternate or often clustered on the spur branchlets featuring a rounded tip, $\frac{1}{2}$ to 1 inch in width and 1 to $3\frac{1}{2}$ inches in length. The leaf margins are entire, shiny green and smooth on the upper side and paler green with thin to densely white cobweb-like hairs underneath whose observation may require a hand lens. Flowers are tiny white in clusters from May to July, fragrant, growing from the bases of the leaves. Fruits are round green berries that mature to shiny black on slender, drooping pedicels between October and November. The single seed can be squeezed from the ripe fleshy berry revealing a shiny rounded brown seed $\frac{1}{4}$ to $\frac{1}{2}$ inch in length. The seed may have tan or light-colored speckles or strips and always reminds me of a fat tick that has engorged and fallen off of livestock. Bumelia is subject to severe mistletoe infections that cause abnormal growth deformities to the limbs.

Cattle may browse upon bumelia if grasses are lacking, and sheep, goats and deer will browse the shrub. Crude protein level for new leaf growth is 20 to 25 percent in spring, with re-growth leaves and stem tips at 17 percent, and mature leaves in the fall at 14 percent. It provides good value for browsers, and quail, turkey and dove readily eat the ripe fruits. Another native game bird, the white-wing dove can outcompete other game birds for the seeds since the white-wing can sit in the trees and eat the ripe fruits before the fruits fall to the ground and become available to other game birds. Seeds are also eaten by songbirds. The thicket-forming growth of many bumelia plants offers excellent cover for many species of wildlife. White-tailed bucks seem to search out bumelia samplings to rub their antlers upon the trunks exposing the reddish under bark.

A browse line can often be seen on single trees or in bumelia thickets. This shrub should be monitored to avoid overuse. Rotational grazing in conjunction with proper stocking rates of livestock and maintaining deer and exotic numbers in balance with the habitat is needed to maintain healthy bumelia trees on rangeland. Bumelia is known to grow in all vegetational regions of Texas with the exception of the High Plains and the Trans Pecos. Because of the spiny appearance of the branches these trees should be protected when brush management is planned in a pasture. Thirty to fifty years ago if mechanical brush management was being applied to a pasture to control mesquite, all other thorny plants were often grubbed as well. Now that plants are recognized for wildlife value this collateral damage for other thorny woodies has been reduced. Bumelia comes back vigorously after fire, which stimulates new root sprouts. If you see what you think might be a live oak in your pasture, but it has spines, this is likely bumelia, a good woody that you will want to

keep healthy. The one cut down in our yard is root sprouting from one root but will take decades to replace the tree that died. I sure miss it.

#

Photo Captions:

1 Bumelia can be seen as single trees or in mottes. Note the root sprouting even on this small tree.



2 A motte of bumelia shows a browse line from white-tailed deer and cattle grazing, no history of goats or exotic deer on this ranch.



3 Bumelia flowers appear in clusters opening May to July.



4 Spine-tipped branchlets reveal the zig-zag growth common to bumelia.



4a Even the young branches display the zig-zag growth.



5 *Bumelia* fruits ripening in the fall sunshine.



6 *Bumelia* seeds have a grape-like outer skin containing a single seed. Scale marks are 1/16".

