

# Big-root Cymopterus

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Big-root cymopterus, *Cymopterus macrorhizus*, is an unusual perennial forb in the carrot family endemic to Texas and Oklahoma. Some reference books show the common name as bigroot hedgeparsley and wavewing. Don't bother looking for this plant in most of the more common wildflower books of Texas because it won't be there, although it is covered in *Wildflowers of the Texas Hill Country* by Marshall Enquist. Whatever name you wish to pin it with, it has unique traits that we will describe here.

It can reach a reported height up to 12 inches but the ones I have seen in late winter are more in line with 6-8 inches tall and being usually wider than tall. Emerging from a rounded taproot in January this plant has just a few leaves right at ground level that radiate outward. The somewhat fleshy leaves are smooth and bipinnately divided near the base but pinnately divided near the leaf tips. The leaves of this plant have a distinctive grayish or grayish-green appearance. This is the normal color, but you might think this is just a plant whose leaves were damaged by a late winter freeze, however hold that thought. Each leaf can be up to five inches in length and up to three inches in width. The flower heads are compound umbel clusters of tiny five-petaled flowers that can range from white to pink with prominent purple anthers. Fruits are winged, usually with five wings per flower with the wings up to ¼ inch in width and length. Flowering period is March to May with plants in the southern Hill Country maturing a bit earlier than those in the Rolling Plains region. This species in Texas can be found westward from the Blackland Prairies to the Trans Pecos.

The root of Big-root cymopterus is most impressive for a small broadleaf forb. It begins at ground level tapering like a cone for a couple of inches. It then mates to a soft-woody rounded potato-like root. The species name of *macrorhizus* describes the plant meaning "large-rooted". Ones that I have dug come up without large lateral roots or tap roots, though you can see remnants of micro roots that were broken off. The large root can store water and apparently sits underground like an old cistern connected to the gutters of an old farm or ranch house. Though in this case the water comes from the soil via the micro roots. Taking out my pocket knife I sliced a thin wafer of the root and it was difficult to cut through, requiring the knife to saw through the root. I then dug a piece of the root with the knife tip and gave it a taste. The taste was not impressive, like chewing on a piece of green wood. It had a slight bitter taste and one bite was enough for me as at the time I did not know much about the plant. There are 43 species of Cymopterus found from Texas west across the Rocky Mountains and north to Canada. It is reported that Native Americans in the Navaho and Hopi tribes ate the roots raw in the spring, which was when I was doing the taste tests. I guess you eat what you have to in order to survive. One interesting tidbit I read was that the water from boiling old roots was used as an insecticide, which makes you wonder about the safety of eating these roots.

Back on February 9<sup>th</sup> of 2012 I dug a couple of these plants just north of Abilene. The plants had leaves about three to four inches in length. I put the roots in a red plastic coffee can with as much intact soil as I could keep around the root. Arriving at home that day I put the two pots on a rock wall near the back door. During the late night of February 12<sup>th</sup>, we had a sleet fall that put about an inch of sleet pellets in each of the pots. Since it had gotten down to freezing, I figured the two plants would have been frozen under an inch of ice pellets. That evening I looked at the plants in both pots and after the pellets had melted, the leaves were still fleshy, still had the grayish-green color and

appeared none the worse for the freezing weather. Be on the lookout the next few months and see if you can locate big-root cymoptera on your land, unusual plants are always interesting.

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Photo Captions:

1 Typical late-winter look of Bigroot cymopterus.





2 The large soft-woody root stores water for the plant.



3 Remnants of old roots can be seen within the core of the root.



4 Close-up of slice of root reveals the texture of the old lateral roots



5 Umbrella-shaped flower heads provide nectar and pollen for early pollinators.



6 Each fruit has 5 small white wings surrounding the seed.

