Volutaria (Volutaria tubuliflora) is a recently introduced and highly invasive species in North America. It was discovered in Borrego Springs in 2011 and has spread across large portions of the town. It is a winter annual and produces small flowers in the spring at the same time as many of our beautiful wildflowers. Volutaria appears to outcompete many native desert wildflowers and like Sahara mustard threatens to overtake these displays.

This guide will help you identify Volutaria and eradicate it before it becomes a permanent and unwanted winter weed in Borrego Springs.

Do not let this plant go to seed. Report an infestation to the property owner. If you have this plant on your property remove it immediately before it produces flowers. If it does produce flowers securely place it in two trash bags to prevent its seeds from spreading.

Monitor infestations on your property for several years. Seeds will remain dormant in the soil and germinate in later years.

Volutaria plants can appear quite thick and round (far left); other individuals can be skinny and sparse (left).

Volutaria is in the sunflower family; however, the flowers do not look like daisies or sunflowers (below). The top of the flower will have short white flower parts and only occasionally will long white petals be visible (see back page). It blooms from February to June.

Volutaria can produce several thousand highly mobile seeds per plant. While there is still time to eradicate this species from North America, without additional effort this may become a pest that reduces wildflowers, infests backyards, and could become a problem for tourism, growers and homeowners.

Volutaria plants are variable in size. They can grow to a mature plant that is 6 in. to over 5 ft. tall. Plants are usually 1-4 ft. tall.

Seedlings of this species are very small.
Volutaria leaves have deep rounded divisions and the leaf size decreases as they grow higher on the stem. Relatively few other species have this leaf shape, but they do include some native wildflowers.

How to Identify Volutaria

Volutaria flowers are about 1/2 inch wide and tall. The modified leaves on the flower bud have light brown pointed spines and the flower head has many fuzzy hairs on it. Very few other plants have these features, and all of them are weeds.

For several weeks during the winter Volutaria plants grow as a rosette from 4 - 24 in. wide along the ground. Later in the season plants produce a flower stalk that grows from 6 in. up to 5 ft. tall. The plants produce seed in the spring and die before summer.

Often flowers will appear to be lacking petals. Occasionally, Volutaria has 1/2 to 1 in. long thin, white petals. The petals may be open only for a short time.

The lower part of the flowering stem of Volutaria has a long leaf like wing that runs up the stem. Very few plants have this feature, and all of them are weeds.

The flowers of each Volutaria plant are much smaller than the leaves.

Photo credits Frank Harris and Ron Vanderhoff