



## Release Method for Bindweed Gall Mites

The best success with bindweed mites has occurred on non irrigated sites, although sites with limited irrigation have been successfully colonized. In general, the greater the amount of irrigation applied, the less the success rate. Sprinkler irrigated sites have a lower success rate than furrow or drip irrigated sites. The mites you receive are intended to start a colony on a piece of property. Choose a non irrigated area with a dense stand of bindweed for the initial release. You can use this site as a source of mites for future releases, and they will also spread naturally from here. Choose a site that is upwind from the area you want infested, if possible.

It is best to release the bindweed gall mites in the cooler part of the day. The infested leaves/galls will be folded in half, crescent shaped, or often twisted or crumpled. The infested leaves/galls should be placed in direct contact with the bindweed you wish to infest. One method of infestation that has been consistently successful is to take a small stem of galled bindweed along with three or four healthy growing tips from the patch and place them next to each other. (The growing tip is the end of the stem farthest away from the root.) The tip should touch the stem of the galled material. Twist these together and secure them in place by taking another stem from the patch and wrapping it multiple times around infested material. Galls should stay in close proximity to the new stems so that the transfer can occur. Continue to roll this up like a paper towel roll and then tuck under the plant. Once the galled stems have dried the mites have moved to the new stem.

Newly infested galls should be visible in a few days, but this can vary considerably. Leave these alone for a few weeks. After healthy populations have been established mow the bindweed patch and leave the cuttings to spread the galls to other parts of the patch. Occasional mowing will spread mites and stimulate new bindweed growth, which allows the mite population to increase. Over time, the wind will spread the mites to new locations so watch for new galls in other areas. It is also possible to transfer new galls to other areas in the same manner as the initial transfer was done. Take stems and galls and wrap them in to new plants.

Flowering and seed reduction are the first measures of control using this mite. By fall, the mites will migrate to the crown of the plant and overwinter on the root buds continuing to cause damage to the plant. The most severe damage to bindweed occurs on growth from mite infested buds. Heavily infested plants utilize more stored nutrients than they produce from photosynthesis, and eventually die.