

## PLANTING TIPS

By Sue Haffner

Ouch! A stab from a sharp cactus spine hurts, but the pain usually is temporary. Botanically, cactus spines are modified leaves, adapted to shade the plant from the desert sun. Look closely at a barrel cactus to see how its tightly laced spines create a nice lattice of shade for the tissue below. (They also insulate the plant's epidermis and collect condensed water vapor so that droplets run down the plant to the soil at the base.) The more "naked" the plant is—that is, that its spines are few and far between—the more protection you need to give it from the direct sun.

Cactus glochids can produce longer---lasting discomfort; these fine, barbed bristles grow in tufts and often surround prickly pear or cholla spines. Some glochids aren't noticeable. Others provide attractive polka dots of color, such as the reddish---brown glochids covering the deceptively named "Cinnamon Bear" or chenille prickly pear cactus (*Opuntia aciculata*). All it takes is a gentle brush against the plant for a clump of glochids to stick to skin or clothing. They break off easily, leaving minute fragments in the skin that cause irritation and pain. The common "Bunny Ears" (*O. microdasys*) is also a prime offender, as it looks so soft but leaves a lethal deposit of golden or red glochids as a calling card. The duration of a victim's discomfort depends on the number of glochids and skin sensitivity.

How do you remove glochids?

- Use tweezers (and a magnifying glass). Glochids are easier to grasp if you can see the affected area horizontally (i.e., hold your hand up to your eye and look across) rather than straight down.
- Spread household glue over the area, let it dry and peel off.
- Spread glue, press gauze on top, wait for it to dry, and remove.
- Press a piece of tape on the area and pull it off.
- If all else fails, shave the spines off. Yes, you'll leave the remnants under the skin but at least you won't have the spines sticking up and irritating you.

Avoid wearing regular gardening gloves when working with cacti, as they will not shield hands from spines or glochids, both of which poke through fabric or stick into leather. Once the gloves have picked up opuntia spines you'll just have to throw them away. Instead, choose heavy---duty rubber gloves that provide a reasonable barrier against glochids. Garden gloves made with puncture---resistant hardened resin are another option. Originally designed to safeguard health care workers against needle sticks, or industrial workers against chemical spills, these turn out to good protection against other pointy things. They are probably too stiff for general gardening purposes, but they can be a good investment if you do a lot of work around cacti. You can find them in hardware stores. (Look for Nitrile™ coated gloves.)

Cacti are deceptively heavy. If you need to transport an unpotted barrel or columnar cactus, place it on a sturdy tarp or piece of fabric and enlist an extra set of hands to help, carrying the plant in a sling. If you have to do it yourself, though, you can usually drag the plant from one place to another. Some growers have constructed ingenious means to help support and carry cacti.

Back when Mark Muradian used to bring his big “gut---buster” cacti to our shows, he welded a two-man carrying device that was very efficient in getting those big plants in and out of the show venue. (Now he probably has to use it to transport his big “gut-buster” sale pots all over the state!)

Columnar cacti cuttings: if you’ve taken cuttings of columnar cacti, don’t leave them lying around for very long. If you do, you might find the growing end of the cutting is turning upwards, pretty much ruining the cutting. It would make more sense to stand the cuttings upright in a location out of the direct sun.

Although some cacti can grow to massive proportions, even a little old lady with a pruning saw can bring one down. The plants may look tough, but they’re generally pretty soft.

Opuntia, maybe to make up for the annoying glochids, are quite easy to propagate. (Too easy, some may say.) Any pad or cholla joint will root; even the fruits will root. The pads don’t even have to be propped upright. Just lying on the ground, the pad can put out roots from any areole. In fact, Opuntia in habitat are so efficient at vegetative propagation—dropping pads and joints everywhere, latching onto passing animals for transport—that many appear to have given up sexual reproduction altogether. Why go through all the bother of producing seeds when you can just detach a few pieces of yourself and get the same result. Jon Rebman, in his studies of Opuntia in the Southwest, has uncovered the many shenanigans these plants are resorting to: changing genders—male flowers one year, female the next; producing neuter flowers, sometimes showing all three types on the same plant at the same time! It may be that the neuter blossoms are easier, less effortful for the plant to produce, as they possess no reproductive parts. (But, then, why bother blooming at all...? Questions, questions ...)

We may study our plants, claim that we know why they do what they do, and we can usually be right. But, then, the plant throws us a curve and we realize that we didn’t know as much as we thought we did.