

# Injecting Conifers, Palms, and some Hardwoods

Conifers, palms, and some hardwoods may be treated using the Wedgle Direct-Inject unit with Portle or Palm Tips and the Tip Setter. The Tip Setter is used to drive these heavier injection tips deep into the active areas of conifers and palms, or through thick, tough outer bark of some hardwoods.

WedgeCheks are not needed when using Portle or Palm Tips. You will need multiple tips to treat each tree. Portle and Palm Tips and the Tip Setter are sold separately.

**Note: Many conifers contain resin that may clog Portle Tips. Read all instructions before making injections**

- 1. Connect a Portle Tip or Palm Tip to the Tip Setter.** The Tip Setter (#74) uses a QC coupler to hold the injection tips in place. Slide back the coupler, insert the hub end of a tip, then release to secure the tip in the setter.



- 2. Tap the injection tip into the tree** using the sliding action of the Tip Setter. Place the tip against the bark, selecting a location where the bark is firmly adhered to the tree. Grasp the slide. Beginning gently, then with increasing force, tap the tip into the tree until the front of the hub is in tight contact with the bark.



**It is important** to keep the rear handle of the Tip Setter directly behind the tip in order to guide the tip into the tree without bending the tip. When inserting or removing Portle or Palm Tips, it is important to keep the setter perpendicular to the tree. Do not twist or move the setter or injector unit side to side, as this may bend or break the injection tip.

For additional instructions, watch the How-To video segments at [ArborSystems.com](http://ArborSystems.com)

- 3. Disconnect the setter from the injection tip.** Pull back on the QC coupler, remove the setter, and leave the injection tip in the tree.

## **Important note on avoiding resin clogging**

**When treating conifers** it is best to insert one Portle Tip, make the chemical injection (see following instructions), and leave the tip in the tree until the chemical is absorbed. **Many conifers contain resin that may clog Portle Tips if they are left in the tree too long** before making the chemical injection, or if they are left in the tree longer than is necessary to allow the chemical to be absorbed. **To avoid clogging**, make the chemical injection immediately after inserting the tip and remove tip as soon as chemical is absorbed. Read all instructions before making injections.

**When treating palms or hardwoods** you may continue inserting tips around the tree, following the spacing and number of injection sites information on the chemical label. It may be easier to set all the tips first, then go back and make the chemical injections.

- 4. After tips are set in the tree, connect the Wedgle Direct-Inject unit to the tip.** While pulling back on the front QC coupler, slide the injection unit over the tip, then release the QC coupler to lock the injection unit to the tip.
- 5. Squeeze both handles of the injector** at the same time using a smooth, firm motion. This delivers a pre-measured dose of chemical into the tree. Apply equal pressure on both handles—unequal pressure may bend or break the tip. Follow chemical label instructions to determine correct dosage, and number and spacing of injection sites.

- 6. After completing the injection, disconnect the injection unit from the tip.** Leave the tip in the tree. **Do not pull the tip out of the tree while it is connected to the injection unit**, as this may cause unwarranted damage to the injection unit or injection tip.
- 7. Check that absorption is complete.** Tip should not be removed from the tree until the chemical has been absorbed, which may take up to five minutes. Individual trees absorb chemical at different rates and weather conditions affect absorption rate. You may need to leave the Portle Tips in some trees longer than others, depending upon how fast the tree is absorbing the chemical.

Each Portle Tip has a check valve in the hub which keeps chemical from coming out after the injection unit is disconnected from the tip. The check valve is visible only after the injection unit has been removed from the tip.

To test if the chemical has been fully absorbed, slightly depress the check valve in the tip hub. If chemical comes out of the check valve, wait a minute or two and retest. If no chemical comes out, the tip is ready to be removed.

**Palm Tips** Due to the absorbent nature of palms, check valves are not required. Palm Tips can be removed immediately after making injections.
- 8. Remove the injection tips from the tree.** Reconnect the setter to the tip and slowly remove the tip by pulling firmly on the slide with a straight rearward motion. Hold the setter perpendicular to the tree to avoid bending the tip.

If you have injected more than 2 ml of chemical in a single injection site, some chemical may follow the tip out of the tree as you withdraw it, regardless of how long the tip has been in the tree. Withdrawing the tip slowly will minimize chemical loss.

**Wedge Direct-Inject unit is preset to release a 1 ml dose of chemical with each full stroke of the handles.** If you desire to inject a .5 ml dose of chemical, move the dose adjustment ring (#25) to the .5 ml dose adjustment groove (#52). This will limit the handle stroke so the unit will release a .5 ml dose of chemical.

**Avoiding chemical waste.** Any time you remove a chemical pack (after making injections), there is approximately 2.5 ml of chemical retained in the injection unit. To avoid wasting this chemical, remove the chemical pack before making your final injections. You will be able to make two additional 1 ml injections (or four or five .5 ml injections) with the chemical remaining in the injection unit. Be sure and replace the cap on the chemical pack when you remove it from the injection unit.

## How-To Videos

If you have questions about the use or maintenance of your Wedgle Direct-Inject unit, the How-To video segments on our website are often helpful. [View at www.ArborSystems.com](http://www.ArborSystems.com)

**The standard Wedgle Direct-Inject** unit comes with a carrying case and all accessories needed to treat hardwood trees, including six Wedgle Injection Tips.

**Our High-Volume kit** (sold separately) allows you to connect the Wedgle Direct-Inject unit to our 1000 ml chemical packs.

**To treat conifers or palms**, the appropriate injection tips and the Tip Setter must be purchased separately. Available Conifer Kit and Palm Kit include tips, Tip Setter, and backpack.