

ChemJet

AUSTRALIAN MADE

TREE INJECTOR



- Easy to see new **RED** handle
- Simple assembly system
- New nylon body
- Volume measurement markings of 5, 10, 15 & 20ml
- New 20mm tapered tip
- Re-useable cost efficient tool for injections of Phosphonates, Pesticides, Fungicides, Fertilizers & Trace Elements



www.grangettos.com/chemjet

CONTACT US TO LEARN MORE TODAY!

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Chemjet tree injector



Easy to see **NEW** red handle
PIC 1

Simpler assembly system
PIC 2

Volume measurements markings of 5ml, 10ml, 15ml & 20ml
PIC 3

New 20mm tapered tip
PIC 4



PIC 1
Bright red plunger and handle (easy to see).



PIC 2
Simpler locking system (top & bottom).



PIC 3
Volume measurement markings of 5, 10, 15 and 20ml



PIC 4
20mm extended nozzle tip requiring only a 4.2mm hole (wood dependent).

The injector can be ordered with light spring (105 newtons) or heavy spring (155 newtons). The spring difference is only a matter of take up time.

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INSTRUCTIONS FOR USE

1. The Trunk and Limbs from 50mm and thicker can be used for injections.
2. Drill appropriate number of holes into tree. (4.2mm drill bit) 30 & 50mm deep.
3. Draw chemical into injector by pulling the handle to the required dosage with a stretched arm and lock handle with a 1/4 turn. (Fig. 1).



4. Insert injector nozzle into pre-drilled hole. Release handle.

Note: Where the injector nozzle needs to be screwed into the tree, a 1/4" or 6.4mm hole 30-50mm deep is required. It is not necessary to screw injector fully into the tree. To obtain a complete seal, screw in until firm pressure is felt. A further half turn might be required if weeping occurs.

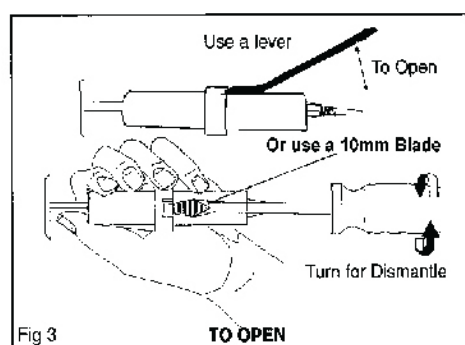
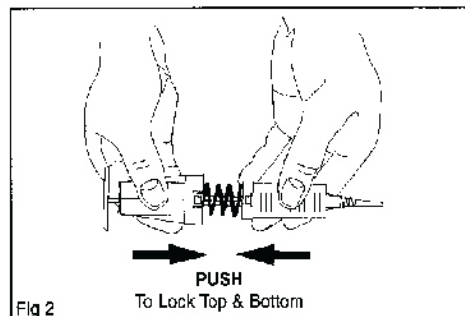
5. Completed injection time approximately 5-25 minutes, varying in weather conditions and sap viscosity.

When injection is slowing down, leave the injector to the following day.

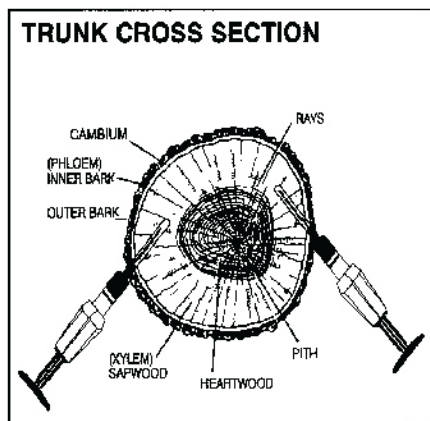
6. CARE & MAINTENANCE - (See Fig. 2 & 3) Wash regularly with clean water. Apply smear of silicon grease/spray to barrel.

To determine the correct number of injections, quantity and concentration of chemical to be given, follow manufacturer's recommendations.

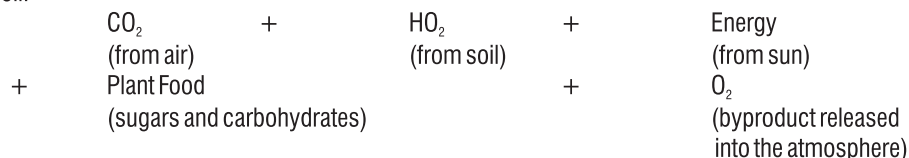
By Rule of Thumb: One injector per 1 metre of canopy diameter.



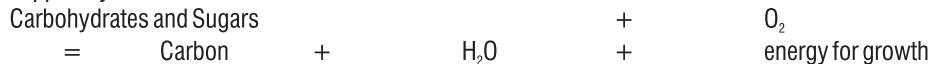
HOW IT WORKS



Food for the tree (mainly carbohydrates and sugars) is formed in the green chlorophyll containing tissues of the tree's leaves by a process called photosynthesis. During photosynthesis, a chemical process requiring the presence of sunlight, carbon dioxide from the air is combined with water and elements from the soil.



Respiration is a metabolic process by which the tree uses a portion of the food manufactured through photosynthesis. The food is oxidised in the living cells of the tree releasing the energy for the tree's life support systems.



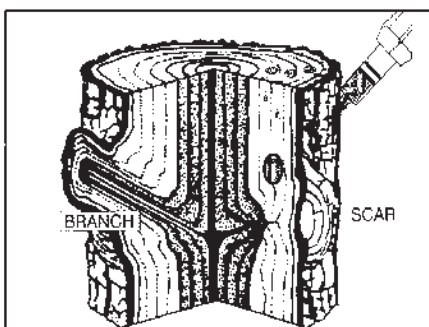
A tree normally photosynthesis by daylight hours and respire at night. The raw materials move upwards from the roots through the sapwood to the leaves. The tree makes up Carbon Dioxide and energy from the sun through the leaves where it photosynthesis its food. The food (sugars and carbohydrates) then dissolve in the sap and are carried downward through the inner bark. The food is then distributed to every living cell in the tree including the root system.

This sap can be likened to the human circulatory system.

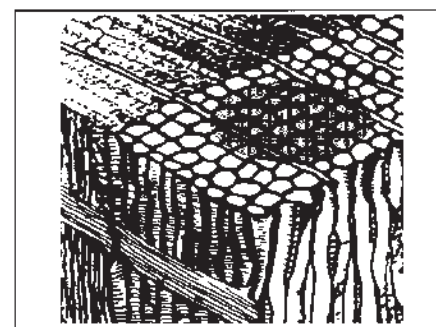
The aim of tree injection is to use the tree's natural transport system to distribute pesticides, fungicides and fertilizers to the areas where they are most effective. For example; in order to effectively fight root rot in avocado trees, the phosphonate fungicide used needs to reach the roots.

The Chemjet tree injector allows the tree to take up the fluid in the natural sap flow and carry it to the affected areas. This is done under gentle pressure through a spring.

Injection under too great a pressure can lead to cell damage which may impair the sap flow thus preventing the chemical from reaching the affected areas. High pressure injection may also be counter productive as the chemical can be forced into the tree when the tree is not ready to absorb it. The tree will only take up fluid during the respiration stage of its metabolic process.



Inject above scars and branches



High pressure injection can damage the thin cell walls in the sapwood