

# A DYNAMIC WATERING SOLUTION FOR A BRIGHTER & GREENER FUTURE

The Intergovernmental Panel on Climate Change (IPCC) have advocated the need for more native trees and diverse ecosystems in the face of the current climate crisis. As a result, research was conducted into the native plant production process within Australian native nurseries.

After seedlings begin to sprout they must be transferred into individual nursery tubes. During the transfer, seedlings are very fragile, and as a result when they are watered with conventional watering methods such as a hose or watering can, they fall over. When seedlings fall over, it has a negative impact on the survival and growth rates of the plants.

This presented a unique design opportunity to not only effectively water the plants but also meet the ergonomic needs of the often elderly nursery volunteers.

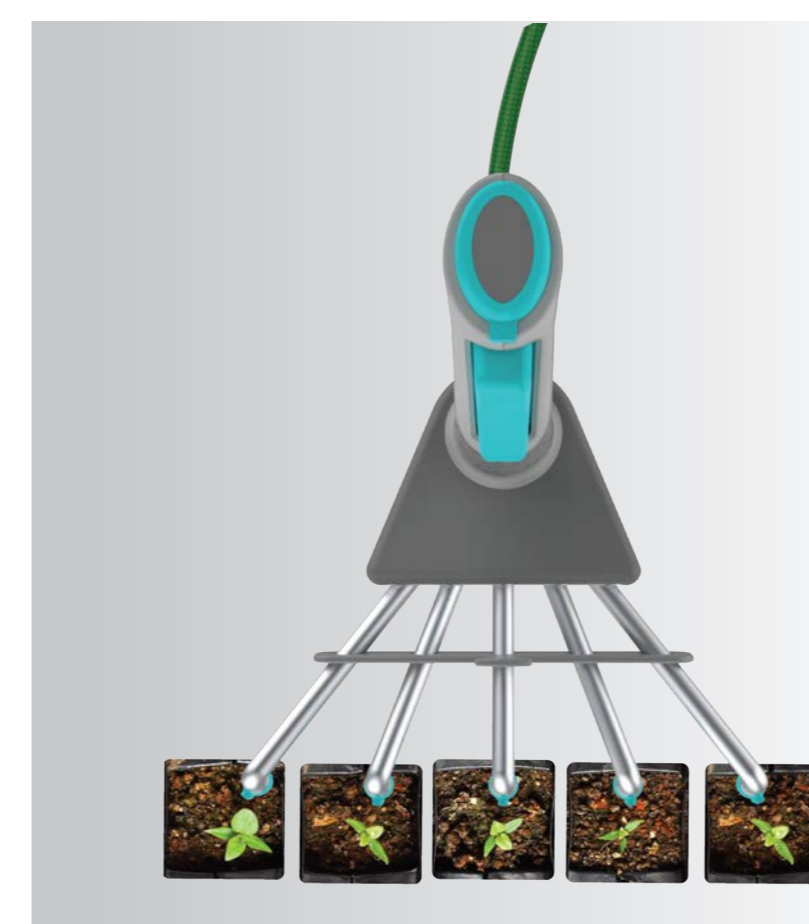
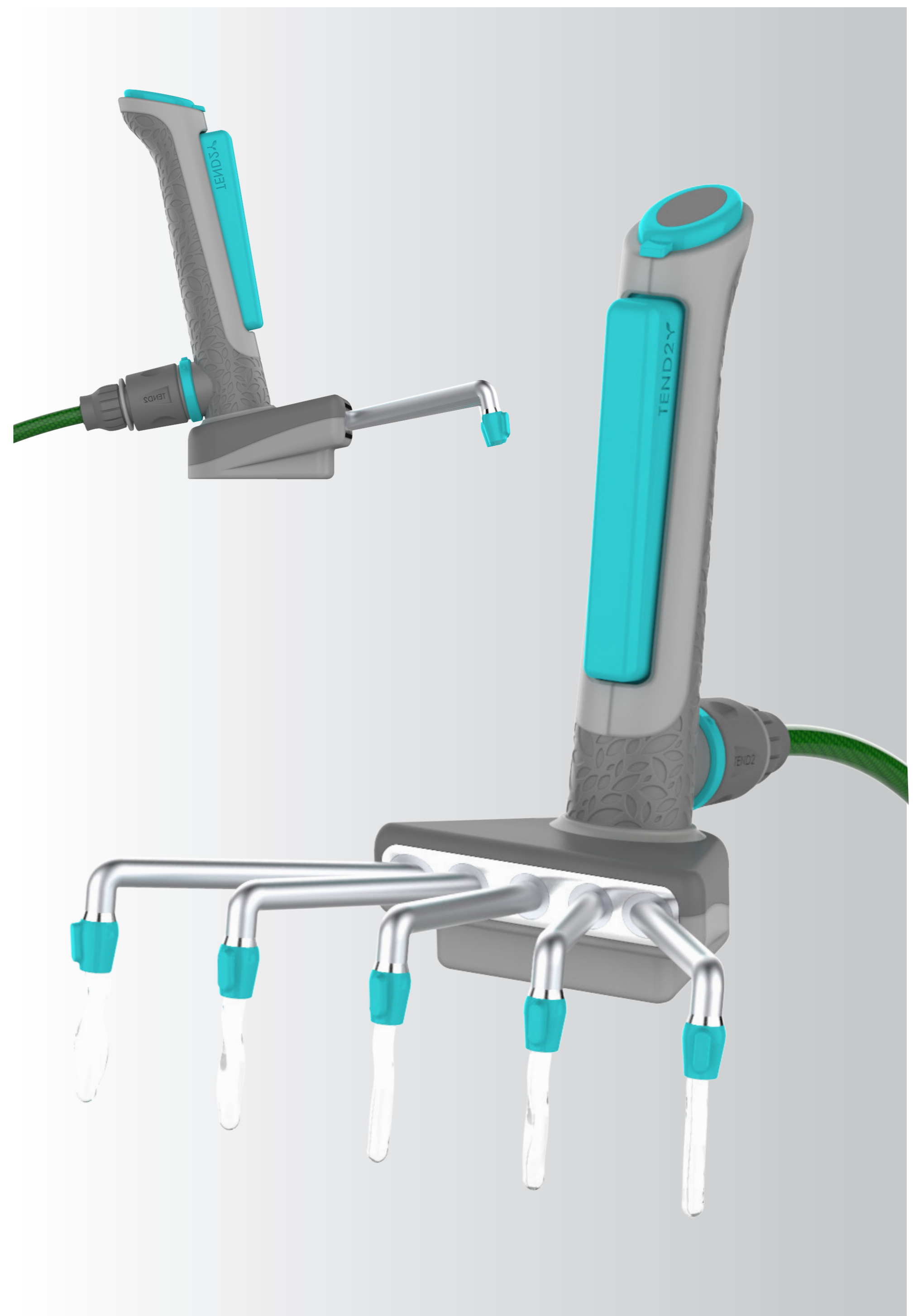
The *Spray & Sprout* is a dynamic watering solution which accurately supplies water to the base of a row of seedlings - thoroughly soaking the seedling without causing it to fall over. The spray and pressure can be adjusted to appease the needs of a large variety of species. Additionally there is a flexible intermediary hose that connects between the device and a standard hose. It is thinner and more flexible allowing for more mobility and a controlled flow of water.

An extensive amount of user testing and iteration was undertaken to design a handle and trigger that was comfortable for elderly users and did not cause them to strain their wrist or hand. The final design has a full length button to aid elderly users with grip strength difficulties.

**An appreciation for nature is reflected in both the aesthetic and functionality of the product.**

The grip was designed with a leaf mosaic, drawing on the geometric beauty of nature. This grip is removable allowing the user to replace it and extend the product's life or disassemble it for end of life recycling.

The handle can be connected to a variety of different watering attachments to appeal to different markets and users.



Each prong and nozzle head perfectly line up with a standard nursery tube tray in order to effectively and accurately water the seedlings.

There is an additional attachment which can be added when watering non-standard trays. This separator can either pull the prongs closer together or space them further apart.



The flexible hose and weight distribution mean that the device is not pulled off surfaces by the pressure of the hose.



Each part is detachable to ensure that it can be thoroughly cleaned and replaced if necessary.

**TEND2** 