

# Plant guard trials

(December 2021-December 2022)

## INTRODUCTION

With many farmers, community groups and schools undertaking native plantings in the Clutha District the topic of which is the best plant guard to use has been raised. In order to answer this question, Otago South River Care has tried a few different types out and our findings and comments are included in this report.

- Plant guards are designed to protect plants from wind, foraging pests and sprays.
- Plant guards can also help create a micro-climate to help plants survive and enhance growth.
- Weed mats (mulch mat) will suppress weed growth and helps to retain moisture.

## PLANT GUARD TRIAL



*Lawrence Gymkhana Grounds riparian planting: December 2021*

A range of plant guards were installed during a community planting day at the Lawrence Gymkhana Grounds on the 22<sup>nd</sup> of December 2021. One year on, we have revisited the site and inspected the guards. In the last year the planting site has been sprayed to control weed and grass growth.

## Things to consider:

- We generally use bamboo stakes and woollen mats as these break down naturally in the environment.
- In riparian areas where flooding is a possibility, we recommend biodegradable guards in case they wash away.
- Height of guards vary, with 300mm protecting against most pests, but if protecting against hares, manufacturers recommend using 450mm guards.
- We also suggest a taller guard will help protect better against spray drift.
- Mulch mats come in different sizes. In areas of high growth, a larger mat might be desirable to suppress weed growth around the plant.
- We are aware of some people using woollen dags instead of weed mats with success.

Ask us if you would like any further information or recommendations on plant guards and weed mats for South Otago conditions.

# Results and comments from the trials:



## FibreGuard

- Made from recycled natural pulp fibre with a moisture barrier coating
- \$3.16 per unit (including stakes and woollen mat) for 450mm. Shorter 300mm is also available
- Our findings and comments:
  - Time consuming to construct and install
  - Align with consideration of prevailing wind direction
  - Preferred option for riparian areas subject to flooding as they are biodegradable if washed away
  - Starting to deteriorate but still effective after one year. Unlikely to be reusable



## Combiguard

- Made from plastic recycable sleeve and bamboo stakes
- \$1.78 per unit including stakes and woollen mat
- Our findings and comments:
  - Easy to install but feel flimsy
  - Shorter height at 300mm. Not suitable to protect against hares
  - Durable and still effective after one year. These will be reusable
  - Recyclable but not biodegradable



## Eco Coir

- Made from coconut husk
- \$1.78 per unit (includes coir weed mat and bamboo stakes)
- Our findings and comments:
  - Natural and biodegradable
  - Fairly easy to install
  - Shorter height at 300mm. Not suitable to protect against hares
  - Significant deterioration after one year and no longer effective



## TriGuard

- Made from translucent twin walled polypropylene with a welded seam
- \$3.31 per unit including woollen mat and wooden stake for 450mm. Available in other sizes
- Our findings and comments:
  - Very easy to install- angle into the prevailing wind direction
  - Can be reused
  - Good condition and effective after one year
  - Non biodegradable
  - Good for harsh conditions such as high winds



## Tough Plastic Tree Guard Tubes

- Made from a plastic sleeve
- \$0.49 per unit including bamboo stake (no mat)
- Our findings: and comments:
  - Two sizes to choose from
  - Difficult to fit over some plant species and larger grade plants
  - Good condition after one year
  - May not need a weed mat due to small circumference