

# Winter Management on the Green

## WINTER ISSUES

Over the winter period the following management issues may be required:

- Grass Control
- Moss Control
- Worm Control
- Machinery Check Up
- Sowing Cotula maniototo Bulbils

### 1. Grass Control

The winter period is a good time to control grass in all bowling greens (cotula dioica, maniototo and starweed).

On cotula greens (dioica and maniototo), grass can be controlled with propyzamide (Kerb or Polka). This chemical is **root absorbed**. It is important that the product is applied with sufficient water (100L/green) and washed in afterwards with at least 5mm of rain or irrigation so it can be taken up by the roots. Apply the product when the air temperatures are cool.

Be patient, the grass can take up to 5-6 weeks to show signs of dying (leaf yellowing).

Propyzamide also has some effect (at higher rates than on the label) on starweed.

***This product is not recommended for use on starweed dominant greens.***

On starweed greens, haloxyfop (Gallant or Ignite) herbicide is recommended. This chemical is different to propyzamide in that it is **leaf absorbed** (only requires 50L/green and no water applied afterwards) and is not temperature dependant. However, the grass should be actively growing for best results.

Recently a new stronger formulation of Gallant (Gallant Ultra) has become available. The rates must be adjusted accordingly.

***Always read the label before mixing any chemical. Make sure you know what formulation you have and both the correct rate and procedure is used.***

## 2. Moss Control

If the green is presently covered with moss, then it is likely that no attempt was made to control moss in the autumn.

Treatment at this time of the year will at best “contain the moss problem”, i.e. the cotula and starweed are not growing sufficiently to out grow the moss.

When there is minimal plant growth iron sulphate is a suitable option, especially in the cooler parts of the country. Once cotula/starweed growth occurs in the spring the other moss control products can be used (e.g. Yield, Surrender, Mostox etc).

All the present moss control products have a contact action and hence for best results, the moss must be saturated before treatment. To check the moss is adequately wet, push the moss gently with a thumb or finger to see whether water oozes out. If water is seen, the moss is in a suitable condition for treatment. If no water is seen, delay treatment until moss is adequately wetted up. For more information on moss control, refer to the “Silver Moss Fact Sheet”.

Plan to treat for moss next autumn prior to the end of the season.

## 3. Earthworm Control

Winter is also a time when earthworm activity is on the rise and surface castings can become a problem.

Worm casts can be dealt with in a number of ways:

- Drag a light screed or wire mesh over the surface when the castings are dry. This needs to be carried out frequently so as to avoid both the cotula leaves growing amongst the casts and the casts being smeared when mowing the green.
- Where chemical suppression of the worms is required, two chemicals are available for earthworm suppression:
  - Carbendazim (500gai) and
  - Carbaryl (Sevin Flo)
- Both chemicals require high water rates (100L/green) and should be watered into the green immediately after spraying with at least 5mm of water.
- Follow both the HSNO and chemical safety requirements of your region when using these chemicals.

## 4. Machinery Maintenance

The winter period (off-season) is a good time to give the ‘once over’ to the maintenance equipment and thereby ensure it is in the correct condition for the summer. The summer mower and the boom sprayer are generally the main machines to be checked.

**With the summer mower:**

Have the mower serviced and checked for correct alignment and distance between the bedknife and reel. Also check that the rear/front rollers are functioning correctly.

**With the boom sprayer:**

- Check that the components of the boom sprayer are functioning correctly so that an even spray is produced. Poor application is one of the main reasons why plants are damaged during the season when spraying.
- Specifically check:
  - The pressure at the nozzle is similar to that of the pump. Significantly less pressure at the nozzle compared to the pump indicates that there is a blockage in the line.
  - Individual nozzle output varies by less than +/- 5% from the average nozzle output.
  - The boom is set at the correct height.

**5. Sowing Cotula maniototo Bulbils in Bare Areas**

It is common for bare areas to be re-sown with maniototo bulbils during winter. The following procedure is suggested:

- i. Scratch the bare area(s) in 5-8 different directions to loosen the surface to a depth of 5mm (approx) and expose some soil at the surface. **Don't cultivate too deep or you will damage the levels.**
- ii. Level the surface with some soil (if needed).
- iii. Spread bulbils at 20g/m<sup>2</sup> in 2-3 different directions.
- iv. Apply 2-3mm of soil, so that the bulbils are covered and then push down with flat soled shoes (covered in plastic).
- v. Apply another light soiling and either roll or push down with your feet.
- vi. To reduce wash outs in wet climates, cover with scrims until germination is observed.
- vii. Keep moist for 2 weeks to ensure even germination.

NZSTI SPORTS TURF ADVISORS – CONTACT DETAILS			
Alex Glasgow 09 529 5064 027 496 2486 <a href="mailto:alexg@nzsti.org.nz">alexg@nzsti.org.nz</a>	Everett Darlington 09 529 486 027 232 4545 <a href="mailto:edarlington@nzsti.org.nz">edarlington@nzsti.org.nz</a>	David Ormsby 07 846 7698 027 442 8053 <a href="mailto:davido@nzsti.org.nz">davido@nzsti.org.nz</a>	Megan Cushnahan 06 355 7021 027 220 9957 <a href="mailto:mcushnahan@nzsti.org.nz">mcushnahan@nzsti.org.nz</a>
Andrew Mitchell 06 356 8090 ext 722 027 662 0148 <a href="mailto:amitchell@nzsti.org.nz">amitchell@nzsti.org.nz</a>	Brendan Hannan 06 355 7024 027 442 8046 <a href="mailto:bhannan@nzsti.org.nz">bhannan@nzsti.org.nz</a>	Chris Gribben 06 355 7026 027 552 4488 <a href="mailto:cgribben@nzsti.org.nz">cgribben@nzsti.org.nz</a>	Jaymie Batchelor 03 323 8010 027 446 2874 <a href="mailto:jbatchelor@nzsti.org.nz">jbatchelor@nzsti.org.nz</a>
David Howard 03 477 7333 027 446 2875 <a href="mailto:dhoward@nzsti.org.nz">dhoward@nzsti.org.nz</a>	<b>www.nzsti.org.nz</b>		