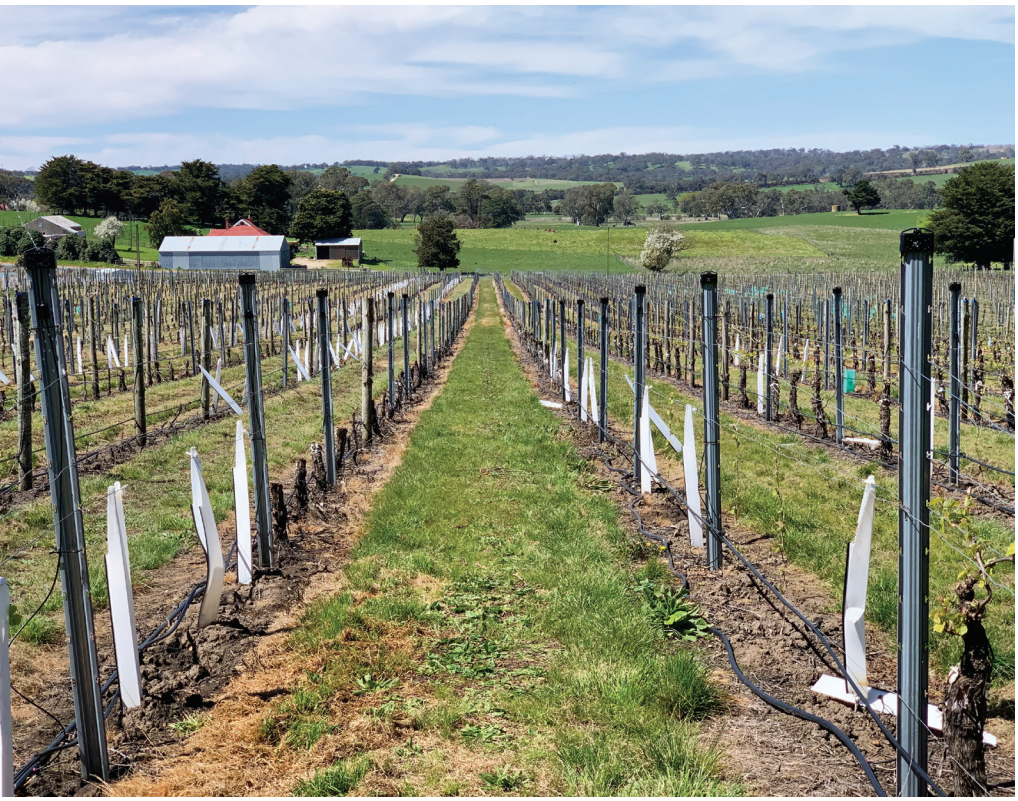
Supplier Update

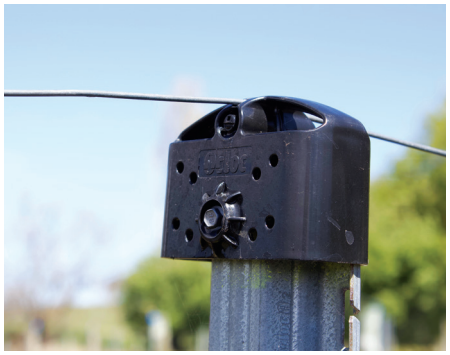
Ocloc netting, spray cap



The team at Ocloc have examined the obvious effects of environmental change and maintenance issues in a number of vineyards across Australia, culminating in a more functional product to help reduce climate effects and high maintenance costs.

Climate change is exacerbating the effects of frost, heat stress and fires, so Ocloc has set about developing, through industry consultation, a multifunctional netting cap that can affect a vineyards micro climate.

Discussions with Kim Anderson, of Almond Cart Vineyard at Woodside in South Australia, about the common procedures for frost control and netting, which he finds frustrating, time consuming & expensive to maintain, have helped develop the Ocloc NSC, reducing costs and stress.



His general procedures are as follows:

1. Attaching the sprinkler, two screws;
2. Attach the sprinkler head;
3. Prior to netting remove the sprinkler head;
4. Place a plastic pot / cup over the sprinkler;
5. Apply the netting;
6. Prior to harvest remove the pot /cup;
7. Clean out the sprinkler tubes using air compressors as ants use the hole to make a nest; and
8. Replace the sprinkler heads.

Time consuming and complicated. By the use of Ocloc NSC Cap, this negates 90% of the yearly issues.

Andi Stevens, of ASIDE Consultants, Industrial Product Design, advised on developing a versatile and multipurpose product to tackle current and perceived issues. The brief was to create a permanent integrated system, incorporated in the Ocloc netting cap that would encompass sprays that can be directed along the specific trellis, despite topography, plus hold up netting. The Ocloc NSC sprays can be used when netting is on to assist in general heat mitigation, preventing fruit and leaf burn or, in the event of a fire, to help reduce overall structural damage.

Ocloc NSC is a multi-functional push on permanent netting cap alleviating the need for seasonal removal as it's robust and protectively houses water micro-jets from machinery. Fitting all current Ocloc trellis posts with pre punched holes for a supplied screw if required.

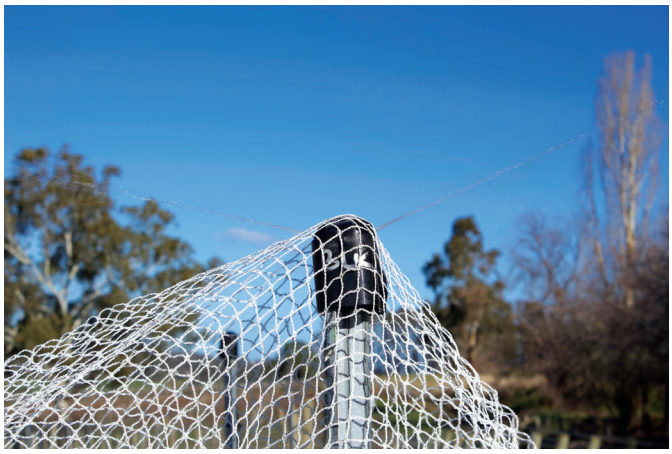
The attached supply line via a bayonet fitting includes a flow reducer and an inline pulsator which comes pre-assembled for easy installation.

Water usage is minimised due to the use of a 'pulsator' together with an in-line flow reducer, specially designed to supply the spray jets, serving to project the trellised vines in both directions and targeting the leaf zones. The use of 0.7mm micro-jets stops the ingress of ants which have shown to be a major problem.

Application of netting is simplified by not having to remove sprays or spray nozzles which are protectively housed inside the Ocloc Netting Cap. The Ocloc NSC contains UV stabilisers made of a food grade HDPE recyclable material, so it will never fade or get brittle in the high UV Australian environment.

The development of the Ocloc netting cap has created versatility in an ability to create area specific change as climate effects is being experienced more readily in the vineyard.

Frosts: Cloudless nights with little or no wind, low humidity and low temperature generates sub zero conditions. Damage occurs when plant cells freeze drawing out the H_2O from the other cells and dehydrating them causing oxidation, clear sunlight later in the day can serve to amplify the damage.



Irrigation via the Ocloc NSC helps prevent frost damage by spraying water in the vineyard via two targeted micro sprinkler sprays, developed with the world leading Antelco™ design engineers, that produce the perfect size droplets, calibrated to spray the correct distance and cover a targeted area along the trellis. The sprays overlap, giving complete coverage through a continuously pulsated wet zone. The water movement serves to create air movement and keep the air temperature above freezing.

Extreme heat: As temperatures rise worldwide, we need to be able to reduce the heat through evapotranspiration with targeted effective water usage. Ocloc NSC allows for anytime usage to reduce temperature and alleviate heat burn, even when the netting is on.

Fires: Although, not tested, we would hope that in a fire situation, if the system is turned on early enough, it may help protect the vines from ember strikes as the caps spray down the rows and protect infrastructure. This is theory only at this stage but wetting down the netting, vines, fruit, ground and foliage can only help to stop the fire spread. Trials are continuing.

Ocvitti and Antelco™ have worked together to develop and manufacture Ocloc NSC to fit the Ocloc range of posts. The HDPE polymer is an inert, food grade product that satisfies Proposition 65 (officially known as the Safe Drinking Water and Toxic Enforcement Act, California, USA) which bans the use of some 900 plus chemicals. The Ocloc NSC is recyclable and includes recycled content from the sprues and runners during the manufacturing process, which is reintroduced so there is no waste during manufacture. The life cycle of the whole product is considerable and 100% of the product is recyclable.

Ocloc NSC can be ordered as a cap only or with sprays installed, or supplied to individual requirements with provision for a top wire if required.

All Ocloc products are designed to be versatile, robust and cost effective to meet the ever-changing procedures and standards of the Australian wine industry

All Ocloc products are supplied 100% carbon offset.

More details can be found online: www.ocloc.com.au or by contacting Nigel Catt – email: nigel@ocloc.com.au or mobile: 0418 832967