

Eco-Shield Air Horticultural Applications



ECO-SHIELD CHEMICAL FREE AIR SANITATION

Eco-Shield is our new concept for building a fortress of safety around your products, farm, processing plant and staff; and our innovative Chemical Free Air Sanitation System is a foundation of this.

Key Diagnostics believes that protecting the health and safety of everyone, including our planet, is paramount.

Our desire isn't just to provide substitutes but to find solutions that are greener and safer whilst providing scalable improvements.

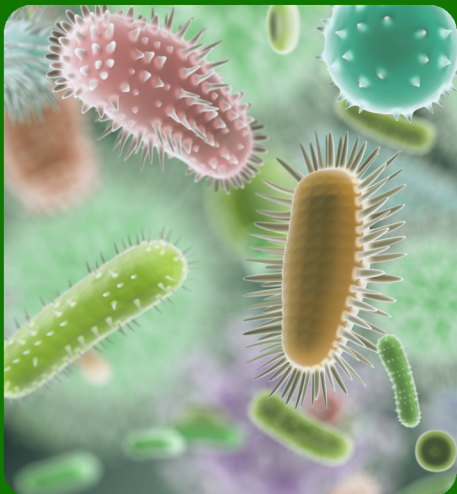
Post Harvest and Horticultural Applications

- Certified for Organic Use and Halal
- Kills airborne microbial pathogens
 - Up to 7 log reduction virus and bacteria
 - 1-2 minutes in air
 - 15-30 minutes on surfaces
- Suitable for
 - Nursery & Propagation Rooms
 - Hydroponic farms
 - Greenhouses
 - Post-Harvest Processing Areas
 - Cool Rooms
 - Packing sheds
 - Ripening rooms
 - Organic Production Facilities
- Safe for staff and reduces sick days
- Extends shelf life of produce
- Destroys ethylene - delays ripening



Horticultural Applications - From the Farm to the Fork.

The use of Reactive Oxygen Species (ROS) in horticultural and post-harvest production provides a safe, effective and sustainable solution for pathogen and spoilage control. Its application throughout the production, from the greenhouse to supermarket-packed produce will provide longer product shelf life while reducing the reliance on harmful chemicals. This results in higher production, lower costs and safer produce for consumers.



Pathogen and Microbial Control

- Up to 7 log reduction of viruses and bacteria in air in 1-2 mins.
- Up to 7 log reduction on surfaces in 15-30 mins.
- Safe for staff to breath for an entire shift.
- Reduces work place infections and reduces sick days.
- Sanitises surfaces from the ceiling to the floor 24/7.
- Safe for plants.
- Suitable for
 - Botrytis cinerea
 - Powdery and Downy mildew
 - Cladosporium spp.
 - Alternaria spp.
 - Viruses
 - Bacteria



Cold Rooms & Cool Chain Storage

- Reduces spoilage organisms.
- Destroys ethylene gas - delays ripening.
- Destroys volatile organic compounds and ammonia.
- Reduces carbon dioxide.
- Extends shelf life and product spoilage.



Post-Harvest Processing Plants

- Chemical free pathogen and microbial control - *Listeria*, *Salmonella*, *E. coli* and yeast and moulds.
- Extends product shelf life through microbial reduction.
- Reduces odours and stains .
- Reduces and controls surface mould.
- Sanitises every surface from the ceiling to the floors.
- Protects staff from infections.
- Reduces hazardous chemicals.



Eco-Friendly and Safe

- Chemical free - reduces hazardous chemicals.
- Certified Organic.
- Certified Halal.
- Small Carbon Footprint
 - Low power usage - largest unit uses 54W.
 - No costly chemical concentrates or transport.
- Safe for Staff - Australian limits for 8hr is 1ppm and our system only produce 30-40ppb.
- Reduces work place infection transmission - fewer sick days.
- Non corrosive and safe.