

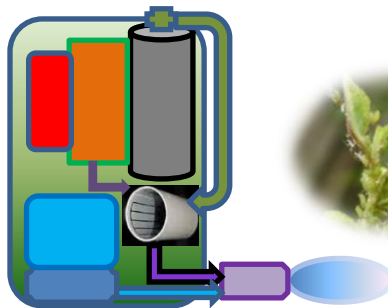
Portable Ozone-mist Sterilization Spray for Chemical Free Agriculture



Ozone-mist sterilization spray is an environmentally friendly system intended for using in a chemical free agricultural management. The portable backpack system consisting of an ozone generator, a water mist spray and a specific nozzle is used to kill harmful insects, bacteria and viruses on surface of plants.

Characteristics

1. Realizes high sterilization rate by ozone-mist chemical free spray in agricultural management.
2. Kills living small insects, worms, bacteria, viruses in short operation period.
3. Backpack type system consisting of various functional units.
4. Oxygen gas and water produce an ozone-mist mixture creating pesticide radicals which kill microorganism.
5. Leaves no harmful residue on the produce.
6. Secures farmer health from ozone exposure.



PecoShower (Pest Control Sanwa Hi-tech Ozonized Water)

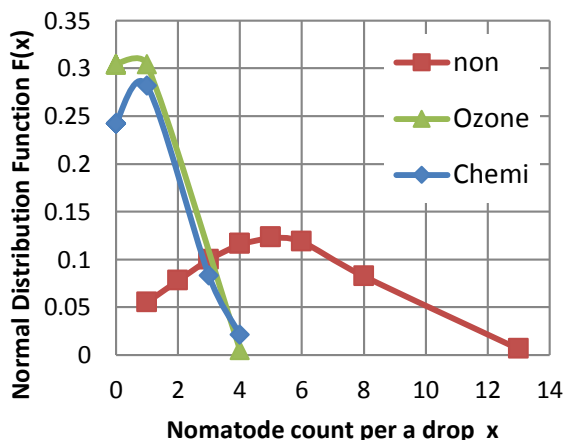
Sanwa hi-tech Co.,Ltd





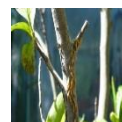
205-4 Yoshidomi, Shisui-machi, Kikuchi City, Kumamoto 861-1201, Japan

Specifications	Ozone generator	Dielectric barrier discharge :Oxygen gas 0.5~4 liter /min ,Oxygen output Max.7g/h(4liter/min) ,Max.80g/m ³ Power supply :DC14.4V Li-ion battery, 3.0Ah, 44Wh 2sets, 150W ;Air cooling
	Water mist	Spray nozzle (optional) :Flow 200~500 ml/min ,Pump 0.3Mpa Power supply : DC14.4V Li-ion battery, 3.0Ah, 44Wh ; Water tank 5~10 liter (Optional)
	Dimensions	Height 620mm ,Width 360mm ,Depth 180mm ,Weight 15kg

Applications	Agriculture	Sterilization(Harmful insects, Worms, Bacteria, Viruses)
	Soil	Sterilization (Nematodes, Fungi, Bacteria ,Viruses), Soil remediation
	Stock farming	Disinfection, Fumigation, Deodorization, waste water purification
	Food	Surface disinfection
	Water	Hydroponics, Drinking water treatment, Waste water recycle
	Medical practice	Disinfection, Ozone therapy
	House	Air purification, Fumigation
	Research and Development	Ozone-mist generation, hydroxide ion[OH ⁻], Biological effect, Environmental friendly system

Soil sterilization by ozone



Insects	Plant	Sterilization rate
Tobacco Myzus persicae		80~90% O ₃ :86g/m ³ ,1liter/minO ₂ Ozone solubility:5ppm Spraying time: 10sec
Tobacco green caterpillar		50% O ₃ :86g/m ³ ,1liter/minO ₂ Ozone solubility:5ppm Spraying time: 20sec
Solidago Canadensis		95~100% O ₃ :86g/m ³ ,1liter/minO ₂ Ozone solubility:5ppm Spraying time: 10sec
Orange Toxoptera citricidus		100% O ₃ :86g/m ³ ,1liter/minO ₂ Ozone solubility:5ppm Spraying time: 10sec
Camellia Simensis (Green tea leaf)		100% by ozone gas O ₃ :86g/m ³ ,1liter/minO ₂ Spraying time: 20sec 90% by ozone-mist

International R&D , Intellectual proper rights and Grants

International and Internal collaboration
Kumamoto University, Oita University, Miyazaki University, Kyushu University, Sojo University, Tokai University(Japan), Lublin University of Technology(Poland), Lunghwa University of Science and Technology(Taiwan)

Intellectual property rights (Patents)
(1) Utility model registration in Japan :3183645(2013.5.1)
(2) International patent application under Patent Cooperation Treaty: PCT/JP2013/056936 (2013.3.13)

Project Supporting Global Technical Cooperation by The ministry of Economy, Trade and Industry of Japan
Environmentally friendly chemical –free treatment systems using gaseous ozone
(Term:2012~2014)

Contact us

Sanwa hi-tech Co.,Ltd
(Production and Marketing)

205-4 Yoshidomi, Shisui-machi, Kikuchi City, Kumamoto 861-1201, Japan
FAX:+81-968-38-2969
suv.project@sanwa-hitech.com
<http://www.sanwa-hitech.com/>

Environment and Energy Laboratory
(Technological information)

Ohtemon 1-4-15-404, Chuou-ku, Fukuoka City, Fukuoka 810-0074, Japan
TEL&FAX: +81-92-711-5022
ebihara@environment-lab.com
<http://environment-lab.com>