

## agridx® product information sheet



**Agridx® is a mild organic disinfectant specifically formulated for application in the agricultural industry and to ensure fresh produce integrity.**

### advantages

- Concentrated
- No rinse required in certain applications
- Can be used cold
- Low-toxicity and non-mutagenic
- Non-corrosive to metals
- Non-corrosive to surfaces at the prescribed dosage
- Cost-effective
- Reduces effluent
- Readily biodegradable
- Supports environmental sustainability
- Opportunities for goodwill and publicity
- Conforms to food grade specifications [SABS]
- Reduces mold and yeasts microbial levels
- Contains no chlorine, ethanol or aldehydes
- Disrupts biofilm
- Meets MRL specifications
- Specialised targeted microbial control

### site of application examples

- Pre-harvest
  - Direct application on produce
- Post-harvest
  - Apply into wash/flume baths
- Water treatment
  - Process/waste water
- Hard surface disinfection
  - Cold rooms and tunnels
  - Foot decontamination baths
  - Packaging, tables & bins
  - Vehicles (load bodies)
  - Tools, equipment & crates
  - Conveyors, sorting tables, & trays

### certifications

- SANS 636:2013: 10509/16606
- SANS 1853:2009: 10509/16608
- NRCS Act5GNR 529/263515/040/0828



### Pre-Harvest Laboratory Trial

Laboratory trials were carried out to determine the biological activity against bacterial and fungal pathogens coupled with determining optimal concentration levels and contact times to achieve inhibition and/or elimination of the latter.

Focus was placed on, amongst others *Streptomyces scabies* (Figure 1), with the emphasis on potato tubers and tap root crops, and *Xanthomonas gardneri* (Figure 2), with the emphasis on leaves, stems and fruits on a wide variety of plant species.

The results on laboratory trials are shown below. [Please note that these are graphic representations of the agar plates, and bacterial and fungal pathogens]:



Figure 1. Growth of *Streptomyces scabies* on agar plates with different concentrations [ppm] of Agridx™. The colony on the 10 ppm plate is a contaminant.

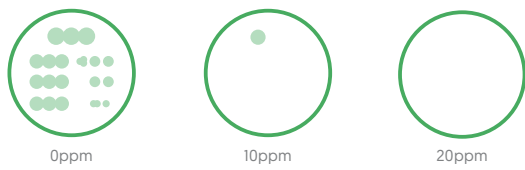
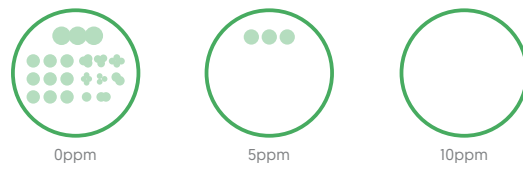


Figure 2. Growth of *Xanthomonas gardneri* on agar plates with different concentrations [ppm] of Agridx™.



### The results on bacterial trials are shown below:

Figure 3. Growth of *Verticillium dahliae* on agar plates with different concentrations [ppm] of Agridx®.

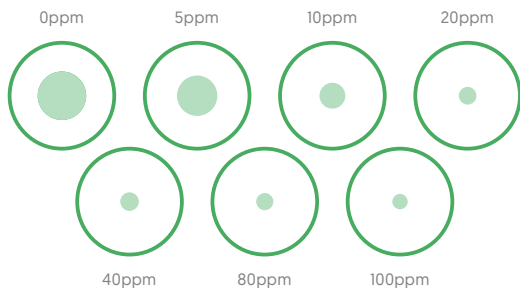
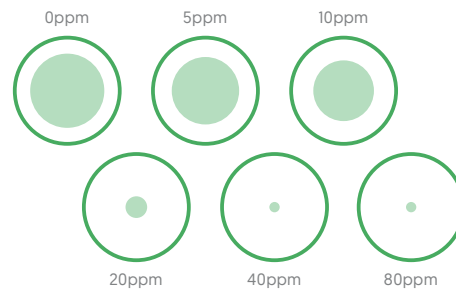


Figure 4. Growth of *Phytophthora infestans* on agar plates with different concentrations [ppm] of Agridx®.



### Post-Harvest Laboratory Trial

Laboratory trials were carried out to determine the control of *Penicillium* and *Aspergillus* on tomatoes and oranges. The purpose was to determine the degree of food spoilage due to black molds commonly found on fresh produce. Various concentrations and contact times were tested.

Figure 5. Colonies of *Penicillium digitatum* and *Aspergillus niger* per petri dish after 10 minutes of exposure.

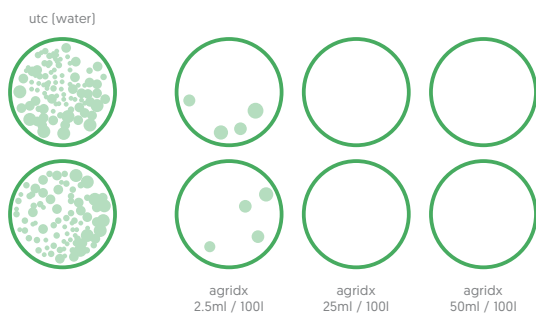
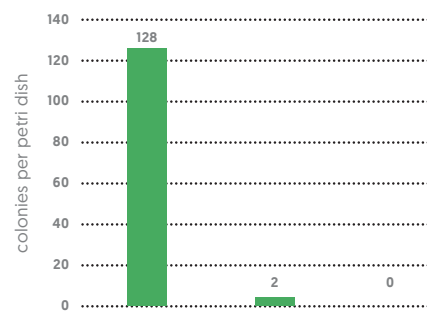


Figure 6. *P. digitatum* colonies per petri dish after 10 minutes of exposure



\*Field trial results: please contact Biodx directly for further information.