



### **WHO WE ARE**

For growers that want to optimize their fungal pesticide use. Spornado is the first of its kind early alert system for crop disease using highly sensitive DNA analysis. Our inexpensive and easy to use wind powdered air sampler provides the data you need to spray precisely. Saving time, money, and increasing yields.

From our start in potatoes, we expanded into a variety of crop and disease combinations. We are building a network of partner agricultural laboratories to conduct sample analysis. Spornado is helping growers make data-driven fungicide spray decisions.



The Spornado is a windpowered air sampler for fungal disease. Sample results help growers time their sprays precisely.

#### **CONTACT US**

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in spornado-sampler

spornadosampler.com

# Early Alert System for Crop Disease

Detect Late blight in the air, long before its seen on the crop. Enabling potato growers to use fungicide more effectively.

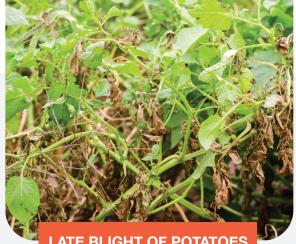
### **HOW DOES THE SPORNADO WORK?**

## Results available within 24 hours of the cassette processed in the lab.

- 1. The Spornado is placed into the field in an open area away from windbreaks, trees, or buildings. It can also be placed in the field where there have been disease issues in the past.
- 2. A cassette is inserted in the Spornado and left in the field. The cassette catches Late Blight spores as wind passes through the Spornado unit.
- 3. The cassette is removed after a period of time and dropped off at the lab, or shipped by overnight courier to the lab.
- 4. Results are available within 24 hours from the time the cassette is received in the lab.
- 5. The test will determine if Late Blight spores are Detected or Not Detected in the field.
- 6. Test results, in conjunction with weather conditions, provides support for fungicide decision making.

"Late Blight was detected by the Spornado two weeks before any physical symptoms were found."





ATE BLIGHT OF POTATOES

Phytophthora infestans causes late blight in potatoes and also infects tomato. eggplant, pepper, and other plants in the nightshade family. The disease is more severe in humid conditions and if left untreated, has the potential to wipe out an entire crop.

The disease symptoms include lesions on the stems, leaves, and tubers. The infected tubers are also susceptible to secondary infections from other microbes. Infected leaves develop dark spots that spread and eventually become brittle, and white mildew will grow on the underside of the leaf in high humidity.

There are many subspecies of *P. infestans* and no potato varieties are resistant to all of them. Removal of infected seed tubers and foliar fungicide are key to controlling this disease.

### TIMING OF LATE BLIGHT PATHOGEN TEST

Test cassette 2 times per week from crop emergence to top kill, or until the end of the fungicide application window.

Minimum of 1 Spornado unit per field (or 100 ac.) is recommended.

