



# Nematode Biocontrol Agent

Technology No. z00030

**IP Status:** Issued US Patent; **Application #:** 09/754,097

## Fungal Biological Control Agent

A fungal biological control agent has been identified that is effective against multiple nematode species and is an alternative to nematicides. The endoparasitic fungus *Hirsutella minnesotensis* was discovered to be a parasite of the soybean cyst nematode (SCN). The fungal biocontrol not only works on SCN, but studies on root knot nematode (RKN) populations have demonstrated a 61-98% level of suppression of these damaging nematodes. This biocontrol has the potential for use where pesticides are undesirable or strictly regulated.

### MN-IP Try and Buy

#### Try

- \$5000/6 Months
- No US patent costs during Try period
- Fee waived if MN-based company or if sponsoring \$50,000+ research with the University

#### Buy

- \$25,000 conversion fee (TRY to BUY)
- Royalty rate of 3% (2% for MN company)
- Royalty free for first \$1M in sales

## Nematode Biocontrol Alternative to Nematicides

SCN and RKN are extremely serious soil-borne pests causing huge losses on US vegetable crops each year. The SCN is known to damage on the order of billions of dollars annually

worldwide. Not only do these pests impact the quantity and quality of marketable yields, but they also interact with other plant pathogens to increase the damage caused by other diseases. Because no single control mechanism to manage these pests exists, farmers are forced to employ multiple complex control mechanisms with limited effectiveness.

#### **BENEFITS OF NEMATODE BIOLOGICAL CONTROL AGENT:**

- Broad host range; is effective against many nematode pest species.
- Eliminates need for farmers to use nematicides or genetically modified strains. Is a safe alternative to methyl bromide treatment.
- Can be used on multiple vegetable species, including tomatoes, cucumber, celery, and soybean.
- Treatment is effective after only one application at planting.
- Has flexibility in delivery mode; can be delivered as a liquid or solid.

**Researchers:** Senyu Chen, PhD Professor, Department of Plant Pathology

<https://license.umn.edu/product/nematode-biocontrol-agent>