

BIOLOGICAL SEED TREATMENT



**headsUp**<sup>®</sup>

PLANT PROTECTANTS INC.

## A NEW LINE OF DEFENSE

AGAINST SUDDEN  
DEATH SYNDROME  
AND WHITE MOLD

Our products are proven and registered to activate your plants natural defenses which enables full season disease resistance.

SOYBEANS • DRY BEANS • CORN • WHEAT • PEAS • POTATO • TOMATO





#### 2017 SOYBEAN FIELD TRIAL | SEVERE WHITE MOLD – PERHAM, MN

Left side Untreated; Right side treated with Heads Up®

## THE HEADS UP® ADVANTAGE

**Heads Up® Plant Protectants** is an agricultural company that manufactures biological seed treatments to help farmers prevent fungal and bacterial diseases.

Our signature product **Heads Up® Plant Protectant** (Heads Up®) is commercially available across the United States and is the first EPA registered seed treatment for the prevention of SDS and white mold in soybeans.

Biological control agents, including seed treatments such as Heads Up®, can be an extremely important part of your crop protection plan and can help you achieve your ultimate yield goals. Heads Up® helps fight fungal and bacterial diseases upon germination of your seed, giving your high quality seed the upper hand on disease before yield robbing pathogens strike!

### Did you know?

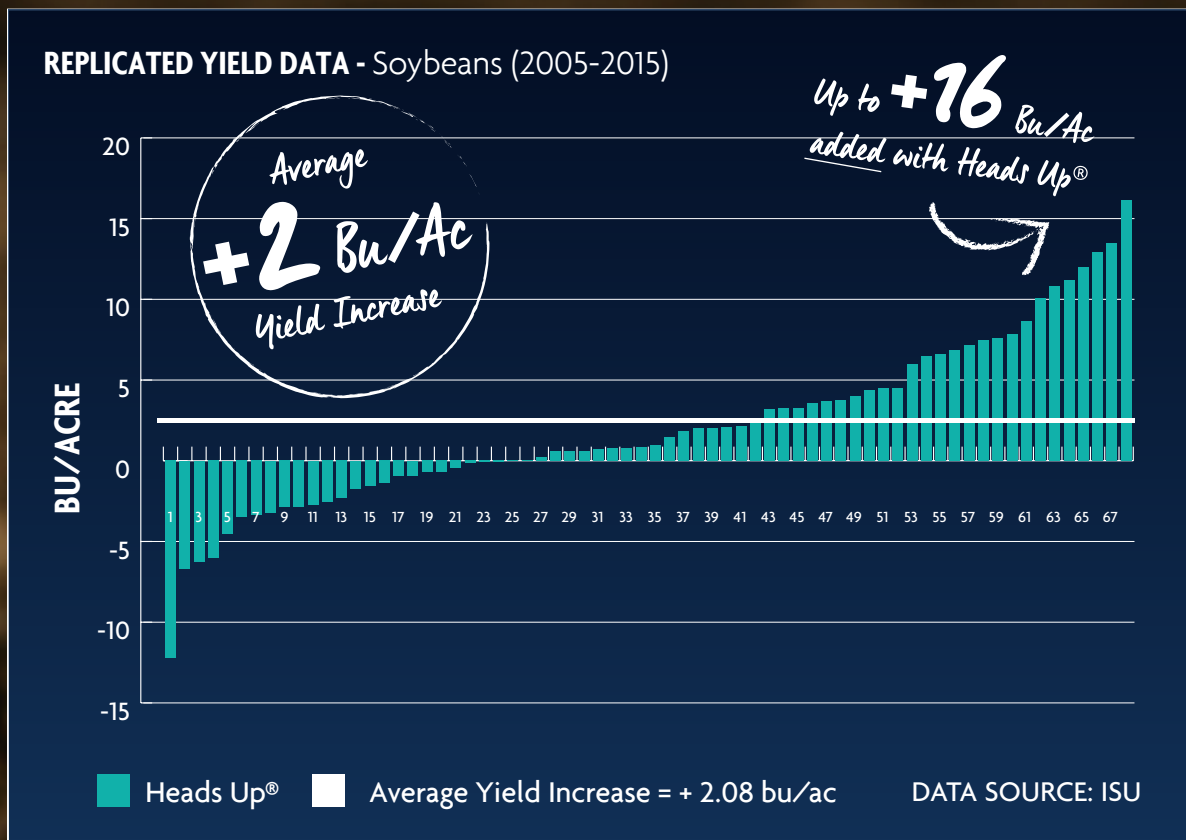
Sudden death syndrome (SDS) and white mold are two of the most important fungal diseases in soybean production in the US, affecting 40 to 50 million acres in the north-central region – Dr. X.B. Yang ISU





## TRIAL AND RESEARCH DATA

In collaboration with state universities across the Midwest, Heads Up® Plant Protectants Inc has gathered 14+ years of data which shows Heads Up® is an excellent control option against some of the biggest yield robbing diseases. Heads Up® Plant Protectant is EPA registered and commercially available in the United States as an additional control option for a wide range of plant diseases, including SDS in soybeans.



**Above:** 11 year study conducted by Dr. X.B. Yang ISU shows Heads Up® added 2.08 bu/ac increase on average over standard commercial seed treatments when tank mixed.

**Locations:** 68 sites, 13 varieties, tested across IA, IL, MN, MI, WI, KY, IN and ON.

**Data Source:**  
Iowa State University (ISU)

To find out more about trials conducted near you, please visit  
**WWW.HEADSUPST.COM**

## PUT YOUR SEED TO WORK... ACHIEVE FULL SEASON RESISTANCE WITH HEADS UP®

Heads Up® is not a traditional fungicide and therefore is not active on the disease (pathogen) itself. Instead, Heads Up® utilizes a unique Mode of Action (M.O.A) called Systemic Acquired Resistance (S.A.R.), which activates the plant's genetic resistance to soil borne diseases by stimulating its natural defense pathways. Working systemically Heads Up® signals your plant's innate genetic defense abilities early on before disease pathogens attack - the unique advantage of Heads Up®.

When Heads Up® is applied as a seed treatment, producers gain with a full season of defense against a broad spectrum of yield robbing pathogens.

## USE HEADS UP® TO ENHANCE YOUR CURRENT SEED TREATMENT PACKAGE

Heads Up® contains no living organisms, and is not restricted by time limitations between treatment and use, making it user safe and environmentally friendly.

Heads Up® is compatible when mixed with other fungicides/insecticides/inoculants and can offer extra assurance to the grower because of its separate, distinct M.O.A.

Heads Up® is OMRI listed, providing organic farmers with a means of protection against fungal and bacterial diseases.

To find out more about S.A.R. and how Heads Up® is right for you – Go to  
**WWW.HEADSUPST.COM**



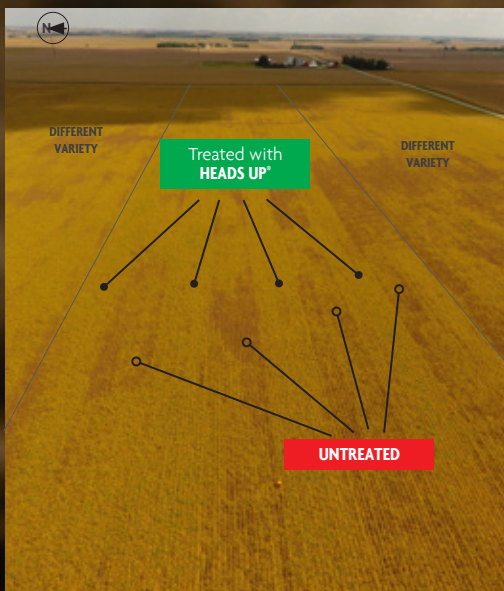
Base Fungicide/Insecticide  
Seed Treatment

Base Fungicide/ Insecticide Seed  
Treatment + HEADS UP®

**DENMARK, WI 2019.  
WHITE MOLD INFECTED FIELD**

**BROWN PATCHES ATTRIBUTED TO WHITE MOLD.**

**HEADS UP® AND CST BLEND = 7.68 BU. PER ACRE  
INCREASE OVER CST BLEND ALONE.**



**CLEAR LAKE, IA 2018, SDS INFECTED FIELD.**

**DARK PATCHES ATTRIBUTED TO EARLY DIE  
DOWN CAUSED BY SOYBEAN SDS.**

**HEADS UP TREATED SEED = 3.9 BU. PER ACRE  
INCREASE OVER UNTREATED SEED.**



# HEADS UP® CAN HELP MAXIMIZE YOUR YIELDS WHILE LOWERING YOUR INPUT COSTS

Heads Up ® is a cost effective seed treatment solution that gives you a full season advantage over the most devastating diseases.

Applying Heads Up® Plant Protectant to high quality seed helps prime those varieties to fight harder against soil borne pathogens all season long.

Whether you grow soybeans, dry beans, corn, wheat, peas, potato or tomatoes, Heads Up® will help you combat yield robbing seedling diseases and achieve higher yields. Heads Up® Seed Treatment is a strong biological control agent leading a new era in plant health!

## Key Diseases Controlled with Heads Up®

Crop	Disease
SOYBEANS	Suppression of <b>Root Rot and Post-Emergence Damping-Off</b> ( <i>Rhizoctonia solani</i> ); <b>White Mold</b> ( <i>Sclerotinia sclerotiorum</i> ) and <b>Sudden Death Syndrome</b> ( <i>Fusarium virguliforme</i> )
DRY BEANS	Suppression of <b>White Mold</b> ( <i>Sclerotinia sclerotiorum</i> )
SEED POTATOES (cut or whole tubers)	Suppression of <b>Rhizoctonia Canker</b> and <b>Black Scurf</b> ( <i>Rhizoctonia solani</i> )

*All crops listed above are labelled and approved for use. EPA Reg #81853-1.*

To view the label or learn more about diseases control with Heads Up® visit **WWW.HEADSUPST.COM**

## BENEFITS OF HEADS UP®

- Safe to user
- Easy to use
- Compatible with other fungicides/insecticides
- Broad spectrum fungal and bacterial disease control
- Systemic, full season prevention
- No restrictions between treatment and use
- Long shelf life
- Competitively priced
- Environmentally friendly
- EPA registered (Reg #81853-1)



## LOCATE A DEALER!

Heads Up® is sold as a water soluble, granular dry powder that has a stable shelf life. The product is competitively priced and is commercially available across the United States. Ask your local seed retailer for Heads Up®!

Need help finding where to buy Heads Up®? Interested in becoming a dealer? Feel free to call us directly.

For more Information, visit us online **[WWW.HEADSUPST.COM](http://WWW.HEADSUPST.COM)**

To contact Heads Up® Plant Protectants directly call toll free: **1-866-368-9306**