

# ***ABIOTIC STRESS***

---

**Can we reduce yield drag caused by  
abiotic stress?**

# TYPES OF CROP *STRESS*

---

- 1. TOO WET
- 2. TOO DRY
- 3. TOO COLD
- 4. TOO HOT
- 5. CROP DISEASE
- 6. HERBICIDES
- 7. FUNGICIDES
- 8. INSECTICIDES
- 9. ??????? YOU NAME IT



# STRESS CAUSES A CASCADE OF CROP PROBLEMS

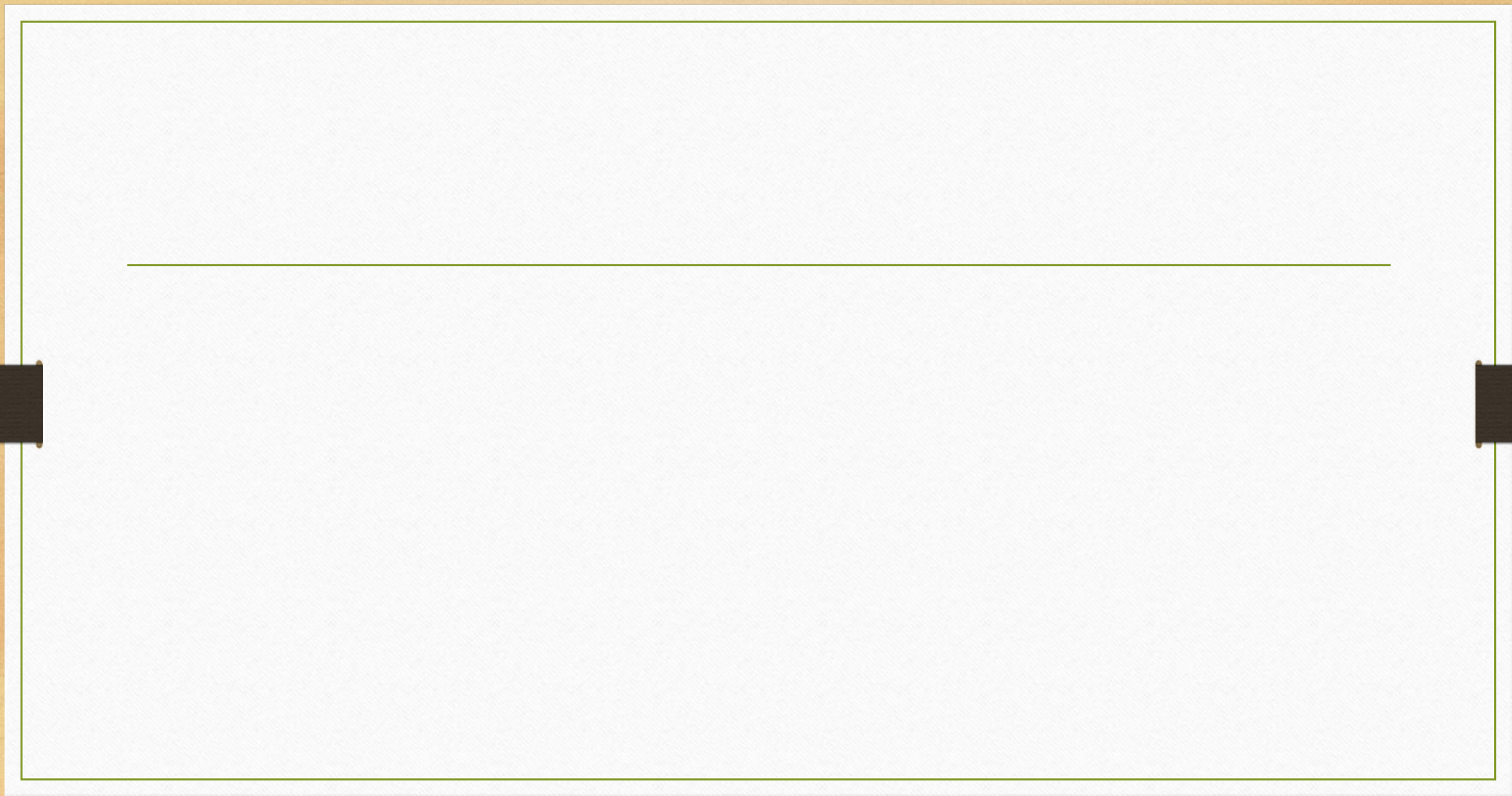
---

- 1. LIMITES ROOT GROWTH.
- 2. REDUCES SKELETAL STRUCTURE.
- 3. CAUSES FRUIT ABORTION.
- 4. ATTRACTS INSECTS.
- 5. SETS UP DISEASE
- Abiotic stress limits the production of normal plant growth through the destruction of new cells.

# ROOT OF THE PROBLEM

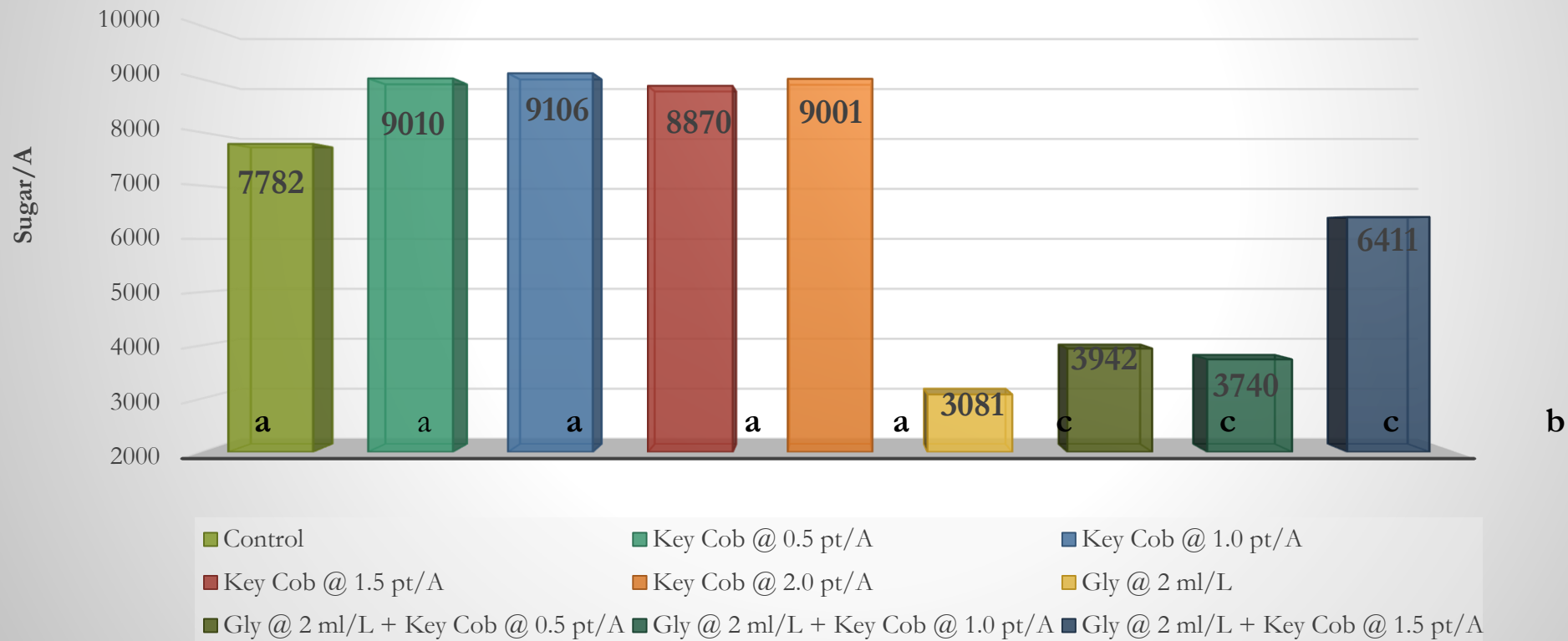
---

- **WHEN A PLANT IS UNDER STRESS IT WILL PRODUCE Destructive ENZYMES THEREFORE WE SHOULD INTERRUPT THE PRODUCTION OF THESE ENZYMES.**
- **High blood pressure in a person is controlled with blood pressure pills. Plants have similar problems and we can help the plant with these problems. We have blood pressure pills for plants.**
- **THANK YOU**

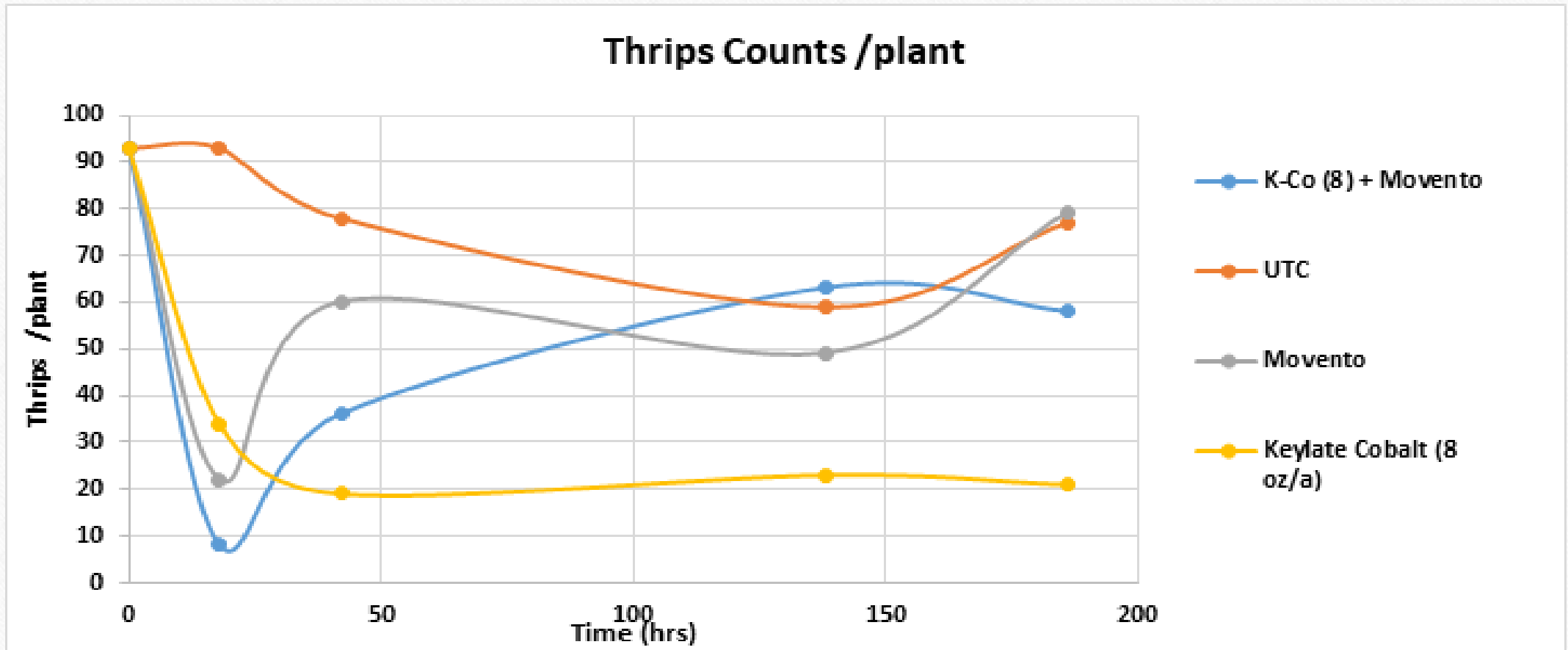




## Cobalt & Glyphosate Sugar Cane Test USDA, HOUMA, LA



# Penn State University GH Thrip Study



# BASF Soybean rust study

---

<b>CONTROL:</b>	<b>1439 Kg/Ha</b>	<b>21.4 bu/A</b>
<b>HEADLINE:</b>	<b>1782 Kg/Ha</b>	<b>26.5 bu/A</b>
<b>Keylate Cobalt:</b>	<b>1760 Kg/Ha</b>	<b>26.1 bu/A</b>
<b>Headline + K. Cobalt</b>	<b>2490 Kg/Ha</b>	<b>37 bu/A</b>