

# Pest&Crop newsletter

**Purdue Cooperative Extension Service and USDA-NIFA Extension IPM Grant**

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## Don't Get In A Rush – Evaluate Forage Species And Varieties Before Purchase

(Keith Johnson)

This year's forage growing season is coming to an end. As the season transitions into late fall and winter, it is a good time to deliberate what should be done to improve your forage-livestock business.

To reach full potential of the forage part of the business, Mother Nature must comply with provision of excellent growing conditions, but the manager (you) must be part of a successful team with Mother Nature and professionals, too. Employing a proper soil fertility program, seeding at a proper time, using a correct seeding rate, and harvesting/grazing at the right growth stage are part of the decisions that need to be made. Crop scouting and following through with management decisions during the growing season are critical to success. But before all of the above can be done, deliberating what forage species and varieties within a forage species will be used to renovate an existing stand or establish a new hay or pasture field need to be done, too. The things I ultimately consider when seeding perennial forages are yield, quality and persistence. Summer-annual forages can't survive winter temperatures, but potential yield and quality are critical to most success.

Regarding proper forage species selection, it is important to determine what the intended use of the forage will be and whether is best adapted to the soil type and soil drainage where the forage is to be sown. After the forage species are selected, it is time to select the varieties within the species. *The most important thing I can convey today about forage species/variety selection is to seek the help and advice of a seed company employee, consultant, or educator that has a passion for forages and has an understanding of forage agriculture.* I would be uncomfortable selecting a "VNS" variety. "VNS" stands for "Variety Not Stated". With these words there is no understanding of the genetic potential of the seed in the bag. Cost of seed purchased is an important decision, but don't let that drive the final decision without full consideration of potential yield, crop quality, and persistence of stand.

The other day I was at the Purdue Crop Diagnostic Training and Research Center looking at orchardgrass varieties that were seeded several years ago. The importance of variety selection was very evident. One variety had as much brown tissue as it did green. Leaf

disease was abundant. Another variety was greener and more photosynthetically active. Yield and quality were obviously superior in the greener variety. Both were orchardgrass, but the difference in response to disease pressure was huge. Which would you rather be growing? Taking the time to learn about the differences in yield, quality and persistence among varieties is worth the effort! Start making forage species/variety selection and purchase decisions now; not on the day that seeding occurs!



Forage variety selection is an important consideration. The orchardgrass variety on top has better leaf health than the variety on the bottom. Yield and quality is less with the more leaf diseased variety.



# Call For Hemp Russet Mites – Are You Willing To Share?

(Laura Ingwell) & (Eze Pojmann-Ezeonyilo)

Hello! My name is Eze Pojmann-Ezeonyilo and I am graduate student at Purdue interested in studying the hemp russet mite (*Aculops cannabicola*). Despite being one of the worst pests of *Cannabis sp.*, little is known about the hemp russet mite. To learn more about this pest, I hope to start a colony of hemp russet mites to observe and research. I plan to investigate whether manipulating greenhouse light quality with LEDs can be an effective strategy for managing the hemp russet mite. Learning more about this mite will lead to better strategies for avoiding and controlling infestations. Contact me if you have hemp russet mites that you would be willing to share in order to advance our understanding of this important pest.

## What Are Hemp Russet Mites?

The hemp russet mite (*Aculops cannabicola*) is a microscopic mite that can destroy a hemp or cannabis crop. It feeds exclusively on *Cannabis sp.* Viewed under a microscope, the mite has a light brown to white, tubular body with four short legs at its head. Large numbers of mites on a plant can appear as a light brown powder.



Image source: John M. McPartland & Karl W. Hillig (2003) The Hemp Russet Mite, Journal of Industrial Hemp, 8:2, 109, DOI: 10.1300/J237v08n02\_10

## Why It's Important

Even though hemp russet mite is one of the most serious pests of hemp, little is known about it. This lack of knowledge can make controlling the mite difficult. By providing hemp russet mites, you will give researchers the opportunity to learn more about this pest and how to manage it. If you suspect you have hemp russet mites, please reach out to one of the contacts listed below.

## Symptoms

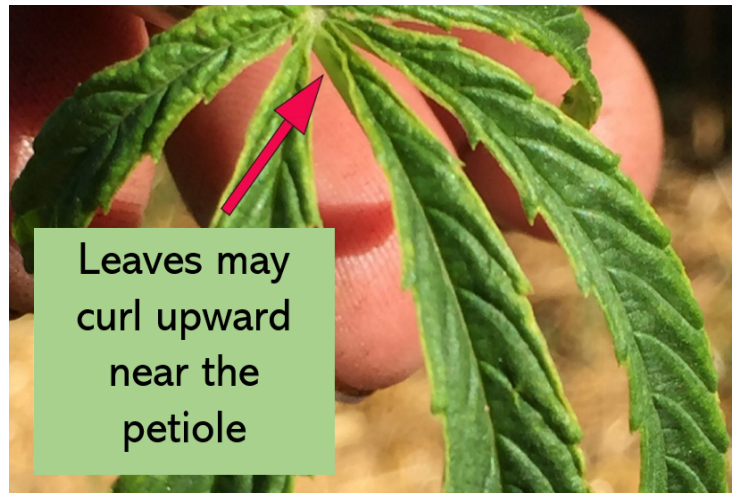
While the hemp russet mite can't be seen with the naked eye, the damage it inflicts on hemp is visible.

Symptoms of an infestation include:

- Yellowing on leaf edges and between veins
- Stunted, dry or wrinkled leaves
- Leaves curling upward at the base
- Flower pistols that dry up prematurely
- A light brown powder on the plant



Image source: Certified Kind (2017) Hemp Russet Mite: How to Recognize Damage and Strategies for Prevention and Control



Leaves may  
curl upward  
near the  
petiole

Image source: Certified Kind (2017) Hemp Russet Mite: How to Recognize Damage and Strategies for Prevention and Control

## Contact

Eze Pojmann-Ezeonyilo, Graduate Student, Purdue University, [epojmann@purdue.edu](mailto:epojmann@purdue.edu), 573-489-5331 or Dr. Laura Ingwell, Assistant Professor, Purdue University, [lingwell@purdue.edu](mailto:lingwell@purdue.edu), 765-494-6167

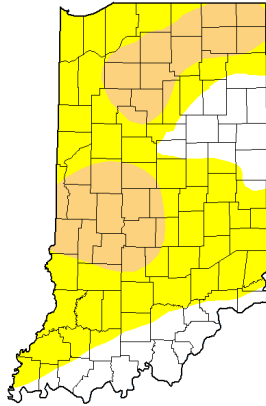
## Recent Temperatures And Moisture For Indiana

(Beth Hall)

Abnormally dry/drought conditions continue across most of Indiana. The climate outlooks throughout this month are showing significant probabilities for warmer than normal temperatures and drier than normal conditions. Therefore, we're anticipating drought to continue, and possibly intensify.

**U.S. Drought Monitor**  
**Indiana**

**September 29, 2020**  
(Released Thursday, Oct. 1, 2020)  
Valid 8 a.m. EDT



**Intensity:**

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

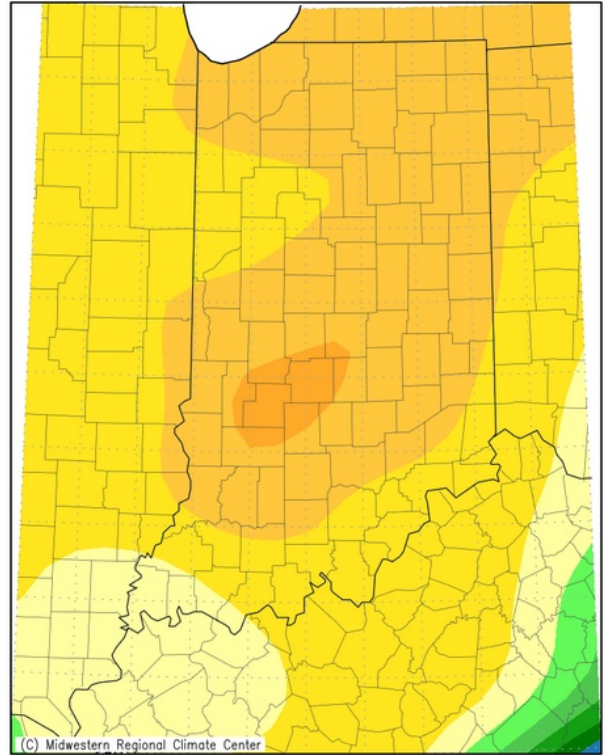
**Author:**

Brad Rippey  
U.S. Department of Agriculture



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

**Accumulated Precipitation (in): Departure from Mean**  
**September 24, 2020 to September 30, 2020**



(C) Midwestern Regional Climate Center

Mean period is 1981–2010.

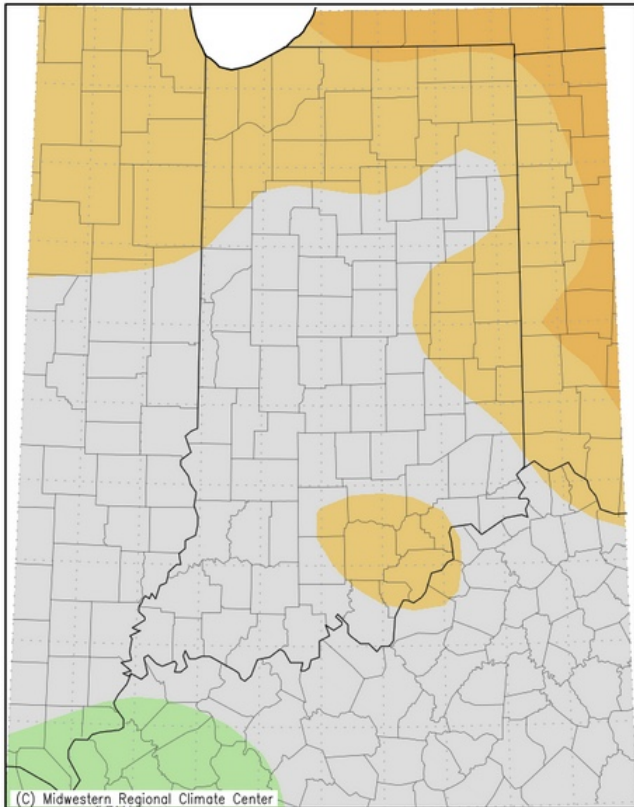


Indiana State Climate Office [www.iclimate.org](http://www.iclimate.org)

Purdue University, West Lafayette, Indiana

email: [iclimate@purdue.edu](mailto:iclimate@purdue.edu)

**Average Temperature (°F): Departure from Mean**  
**September 24, 2020 to September 30, 2020**



(C) Midwestern Regional Climate Center

Mean period is 1981–2010.



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