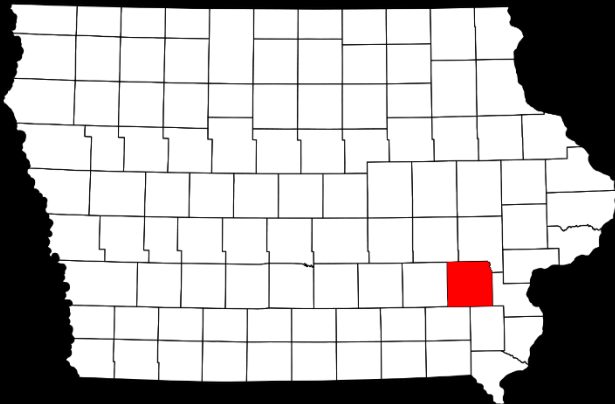


# FOLIAR UREA TO INCREASE NITROGEN USE EFFICIENCY

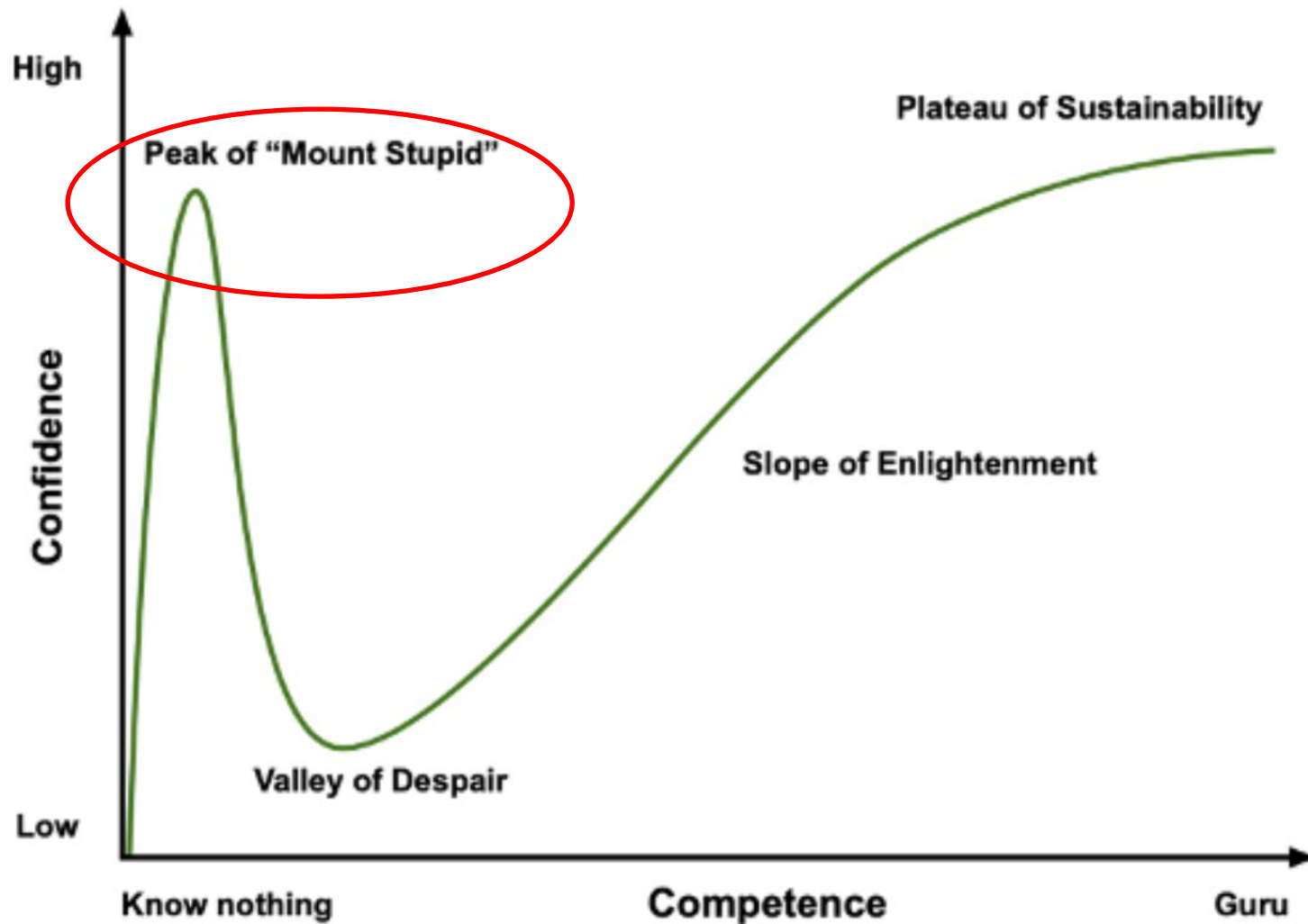
Michael Vittetoe  
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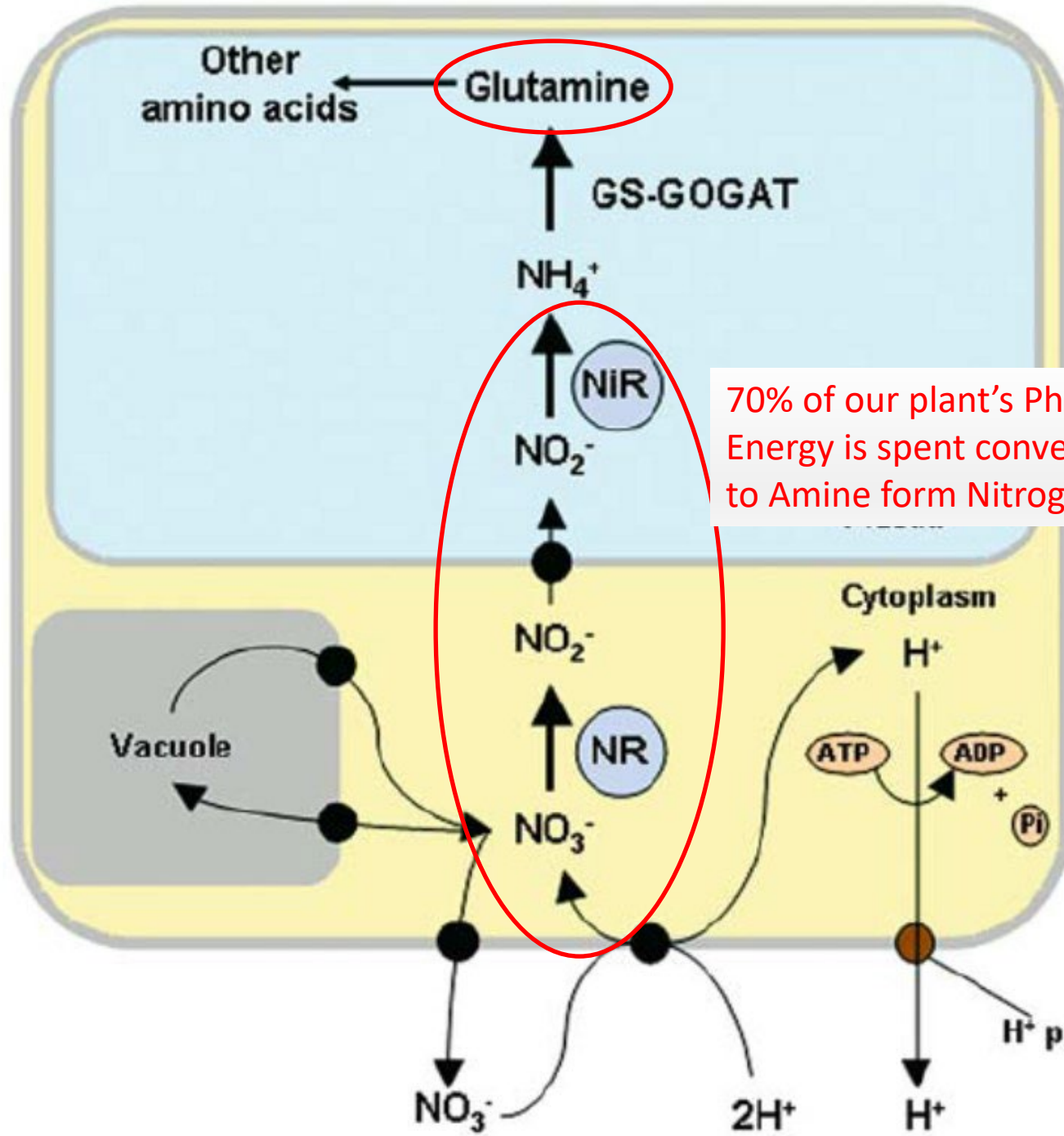
[mvittetoe761@gmail.com](mailto:mvittetoe761@gmail.com)

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## Dunning-Kruger Effect

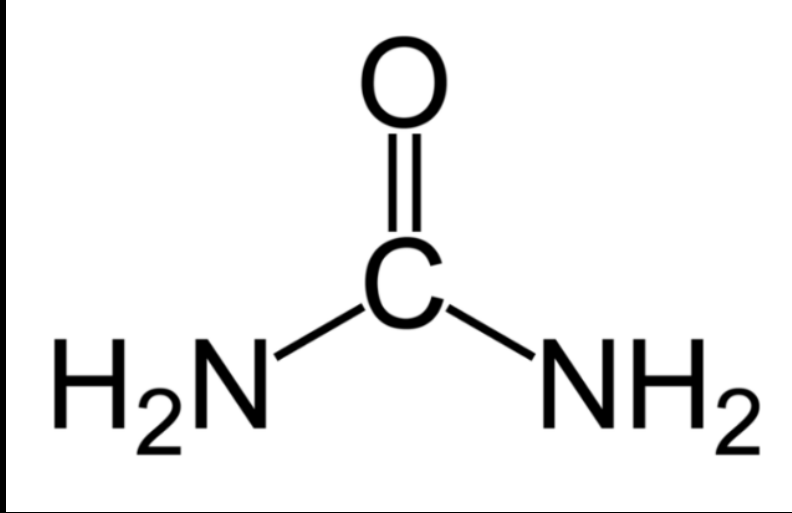




70% of our plant's Photosynthetic Energy is spent converting Nitrates to Amine form Nitrogen.

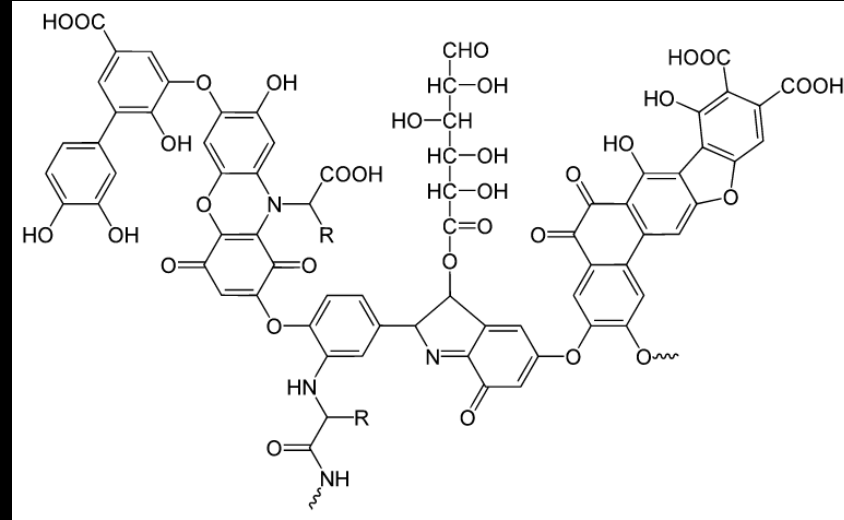
UREA ( $\text{CH}_4\text{N}_2\text{O}$ )

-amine form nitrogen

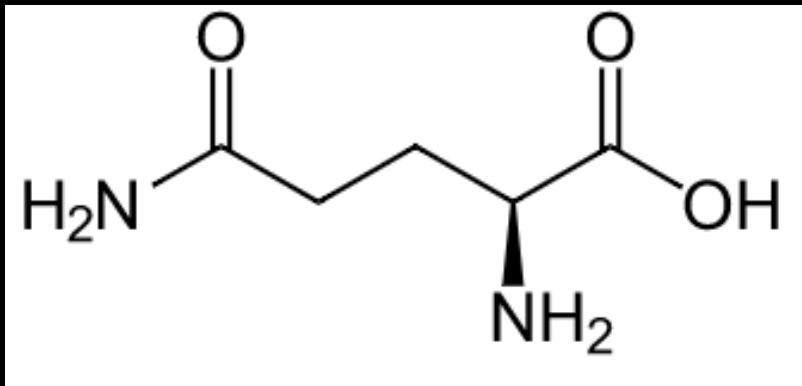


+

Humic Acid ( $\text{C}_9\text{H}_9\text{NO}_6$ ):  
Building Block



Glutamine ( $\text{C}_5\text{H}_{10}\text{N}_2\text{O}_3$ )



→

Other  
Amino Acids,  
And finally,  
Protein

# FOLIAR UREA

- 4-10x more efficient than soil applied nitrogen.
- NOT to be used as the foundation of a N program.
- Always mix w/ Humic Acid for foliar application.
  - 1-part Humic Acid to 20 parts Urea (5%)
- Never exceed 2% Urea in the total spray solution.
- Avoid application during heat of the day. (Burn)









# Foliar Urea Resources

- DO YOUR HOMEWORK!!!!
- Melting Urea: Fabian Seed Farms on YouTube
- Podcast: Graeme Sait's Nutrition Farming Podcast
- In-Depth Course: Joel Williams of Integrated Soils  
— Foliar Nitrogen online course starting February 2.
- YouTube University: Foliar Fert. & Plant Nutrition



# Questions?

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