

*bright horizon*

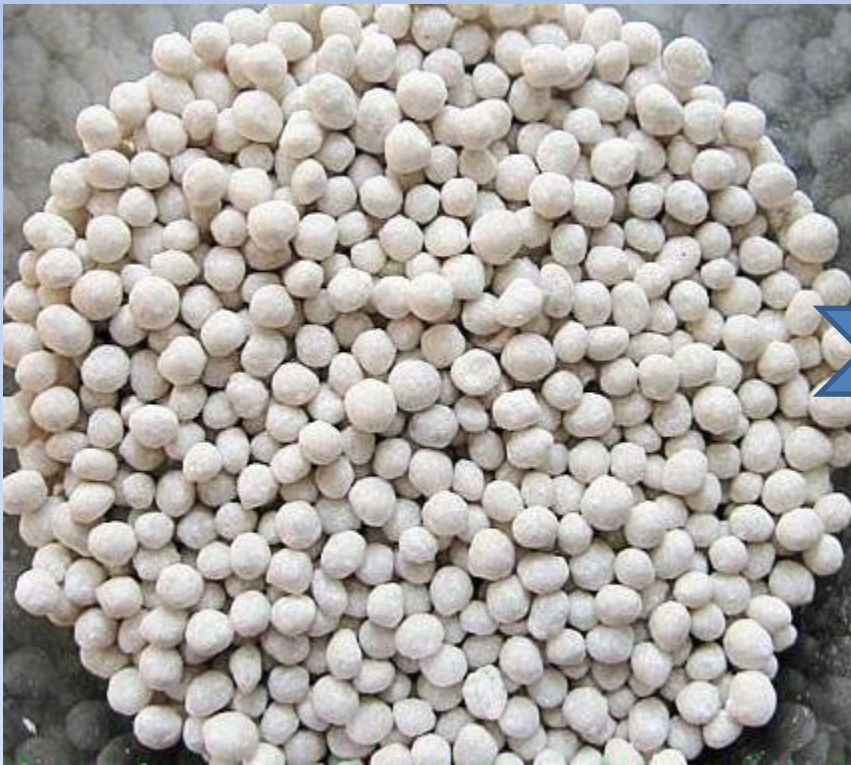
deep roots

## **How to increase Delivery Efficiency of Nutrients using an unused valuable space in fertilizers**

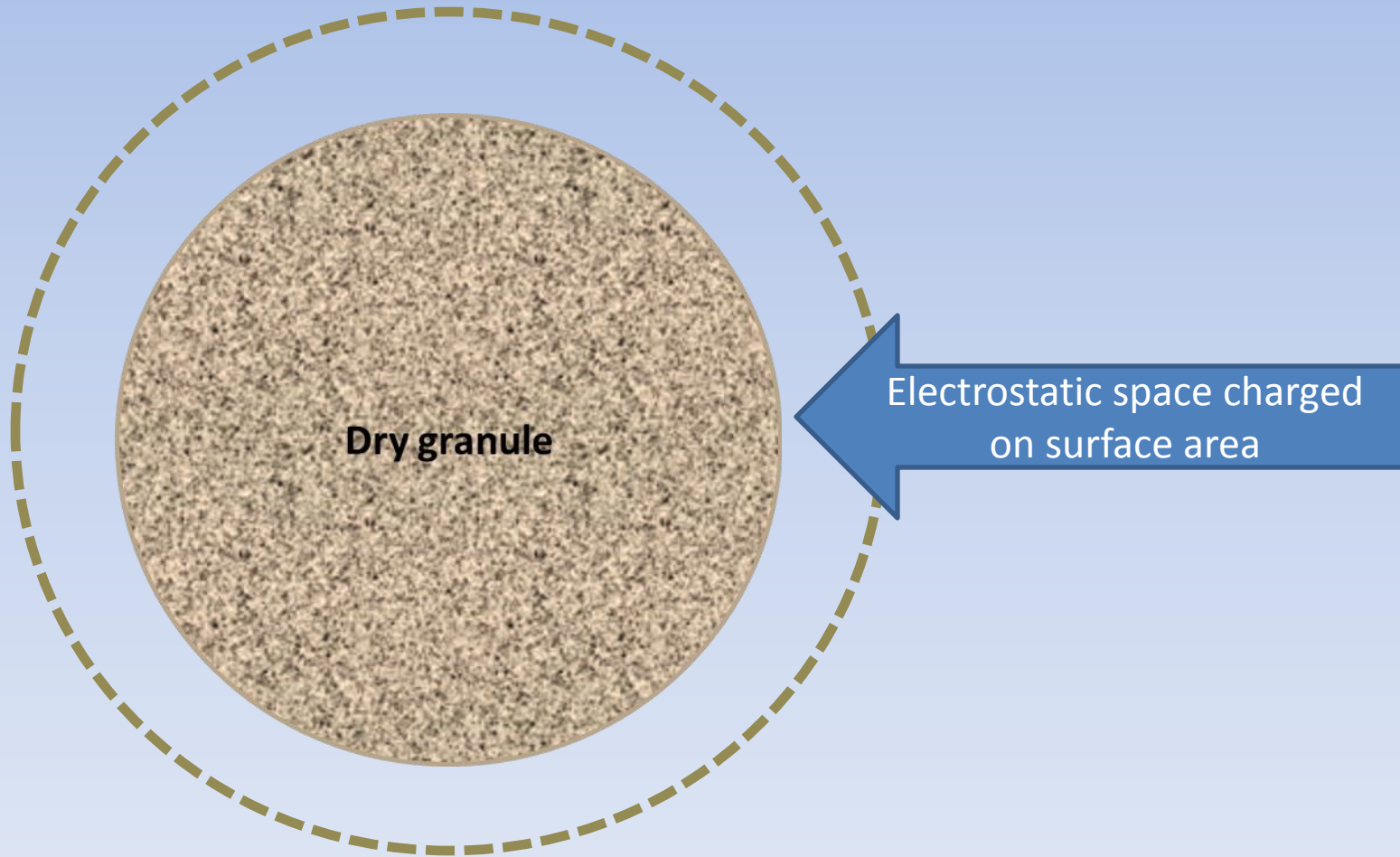
David Hernandez

Denver, August 7<sup>th</sup>, 2015

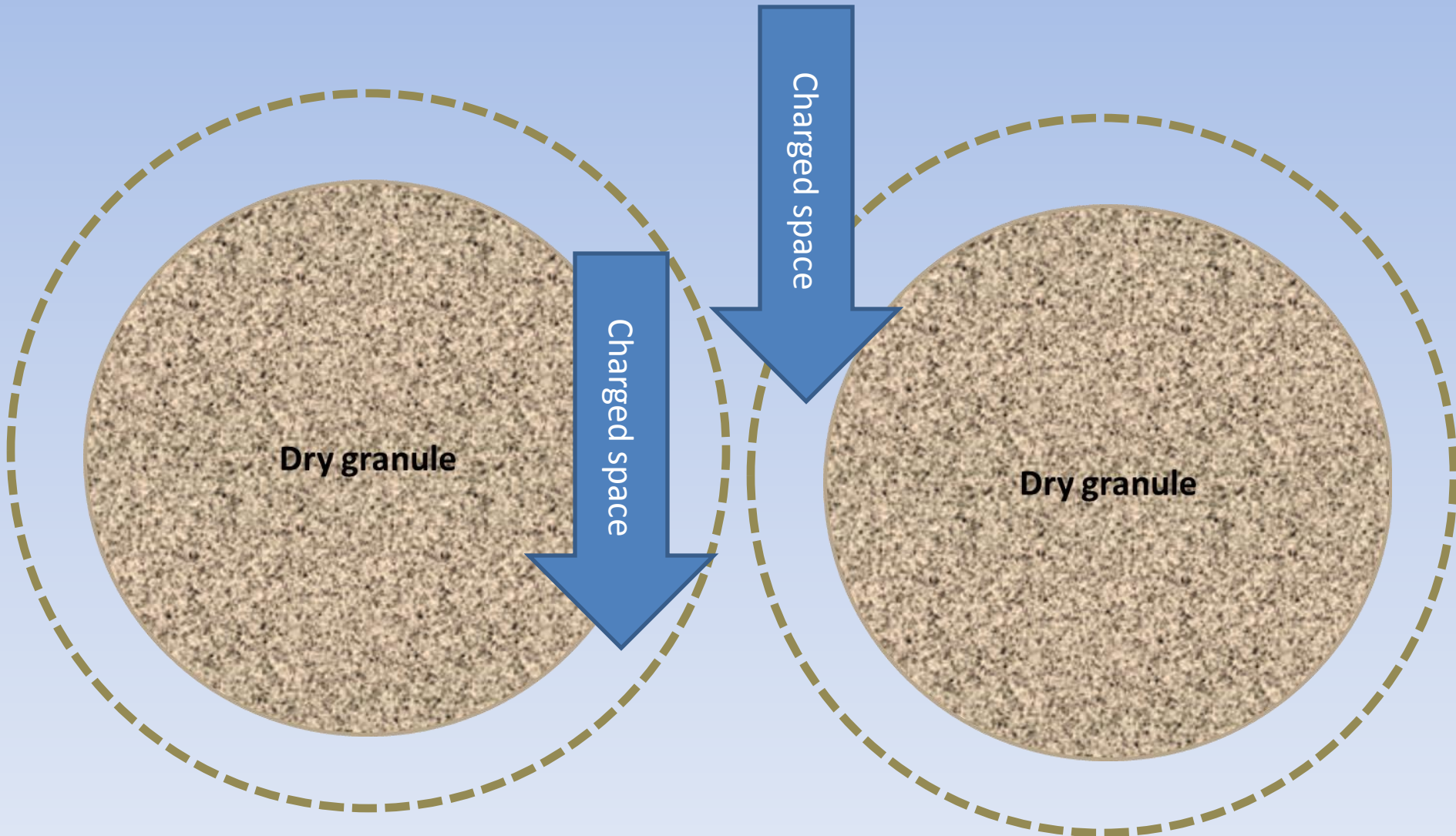
# What is the space I am talking about?



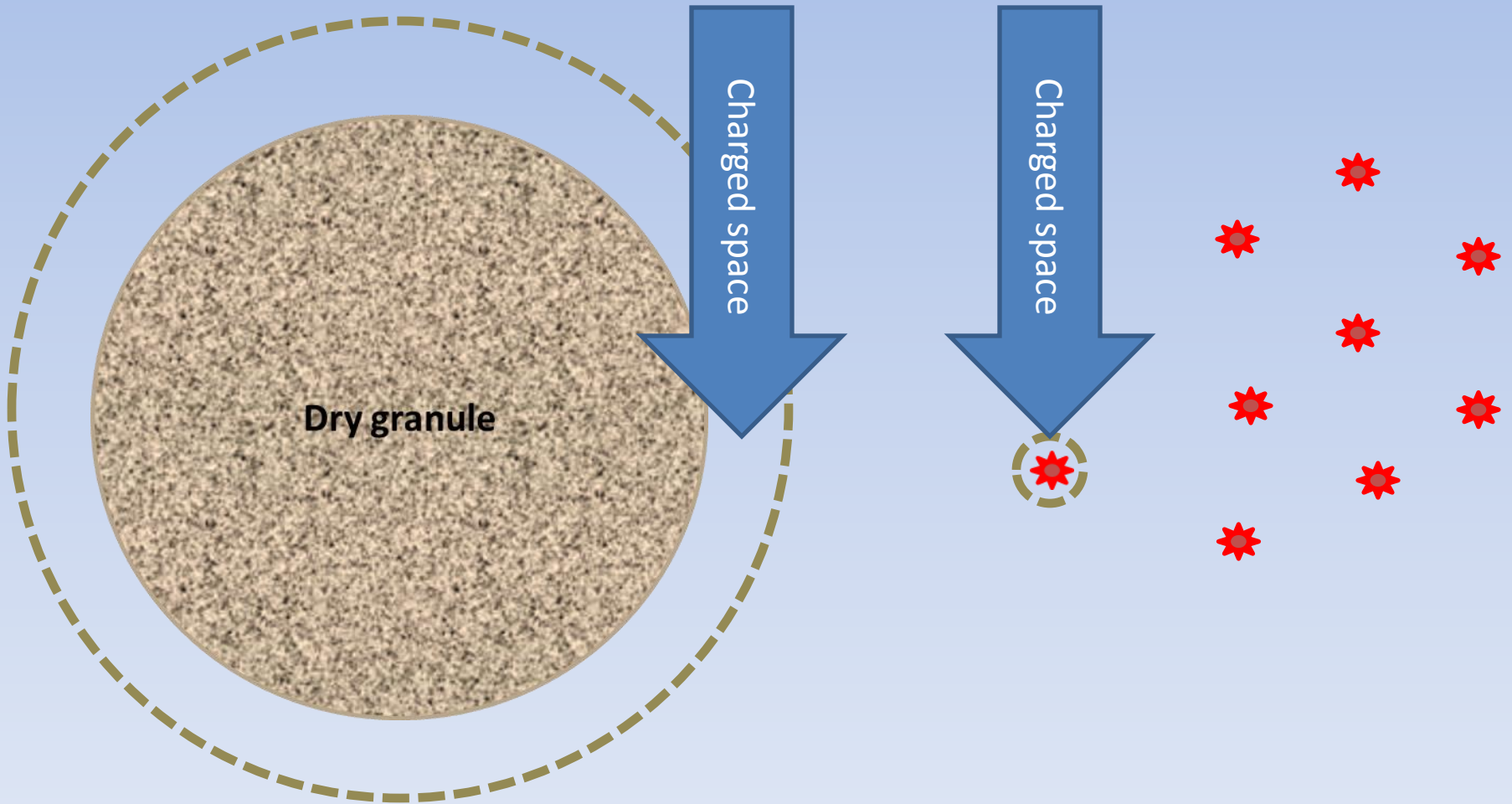
# One granule with unused space



# Friction by blending creates charges



The charged space provides a great match for electrostatic attraction



# Main Actors

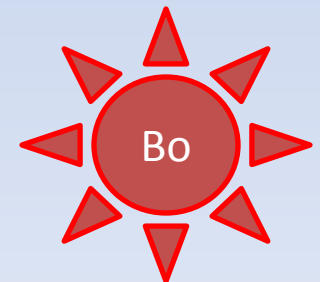
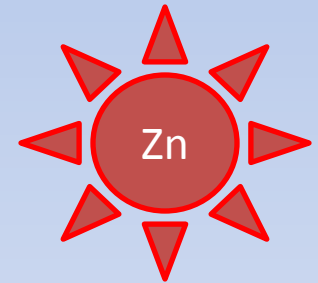
- Friction among large granule particles
- Activate surfaces of small powder size formulated particles
- Electrostatic forces of re arrangement
- Stability of the interaction

# Simple concept but powerful



# Coated material

- Formulated compound that reduces soil tie up
- Ready available that increases plant nutrient uptake
- Micro pulverized
- Allows blanket like field application
- Even distribution of the desired nutrient



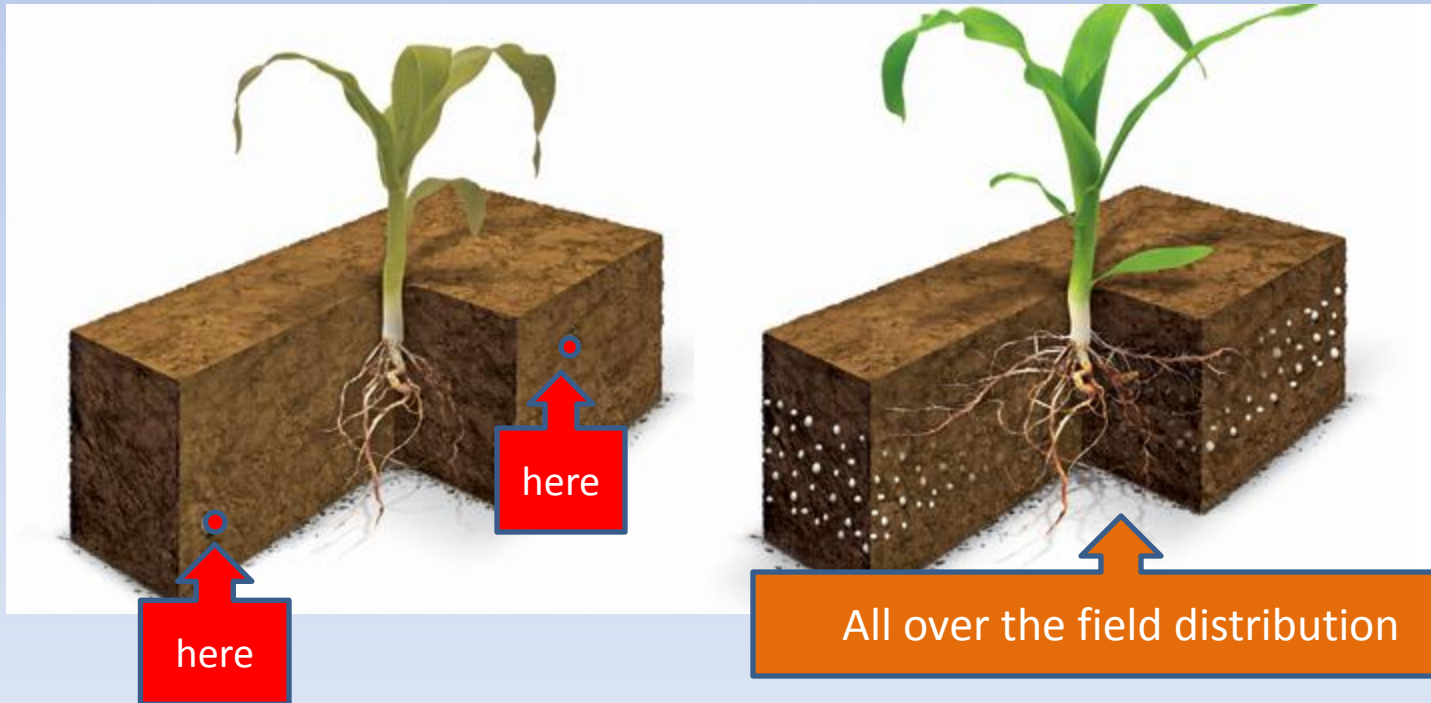


# Space now is coated with valuable nutrients

- Conventional versus Coated granules.... So what?



It is a higher delivery efficiency system  
by distributing better and providing  
the best plant available nutrient form  
close to the roots



# How much more efficient is this system?

- Equal to superior total plant uptake of nutrient with application
- Quantities applied are a fraction in comparison to conventional granule fertilizers
  - Zn up to 8X less
  - Mn up to 6x less
  - Fe up to 5x less
- Crop performance is superior than conventional systems