

Day 3 Soil:

Review: Where do plants get the majority of their nutrients?

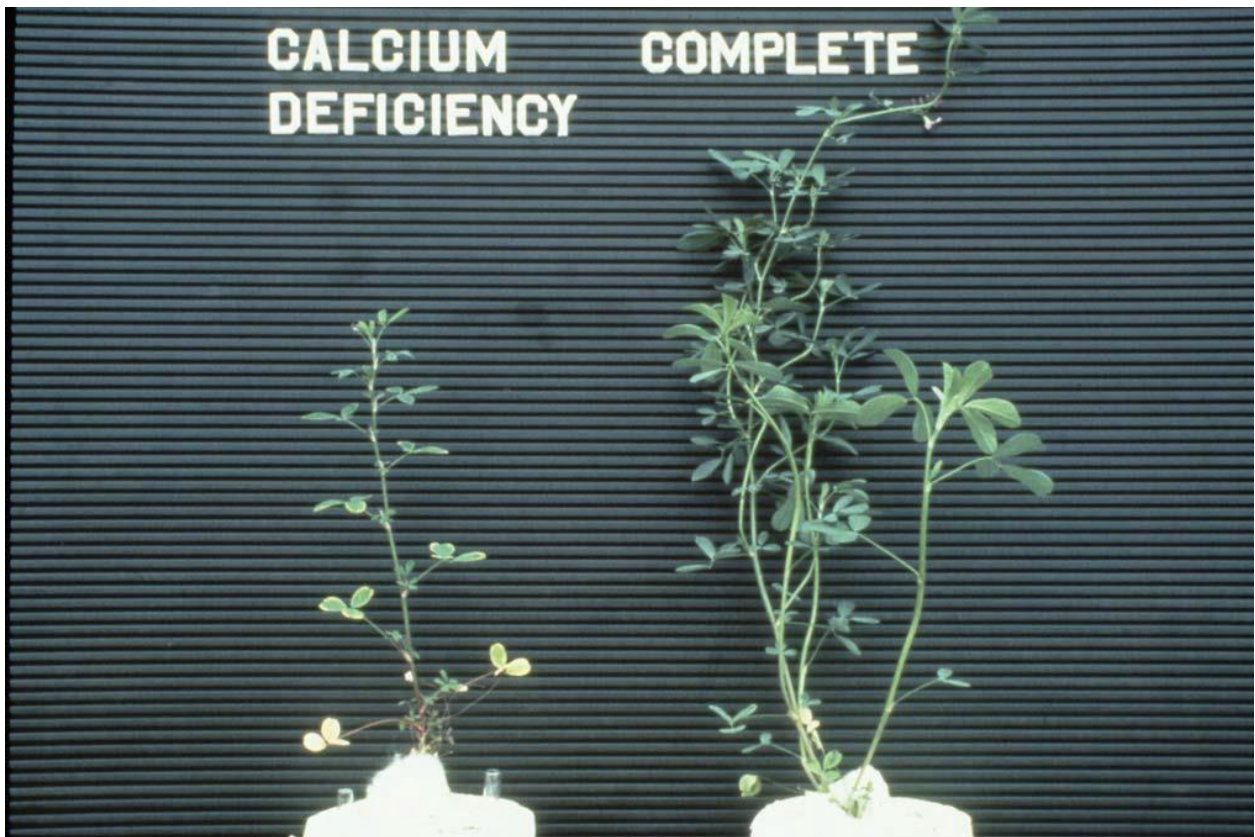
What is fertilizer?

Why do plants need to get
additional food through
fertilizer?

If a farmer has healthy, fertile soil why would they need to use fertilizers?

What would happen to a human if we do not get an essential nutrient? I.e. Calcium

Plants also need calcium. This is a photograph of a plants growing in soil lacking calcium.



You have been selected to join Humanity Against Hunger, an international effort dedicated to fighting hunger around the world.

Your first assignment is to travel to Africa and help farmers from a small village. Let's first hear about what problems Africa faces.

<https://www.nutrientsforlife.org/games/humanity/>

Your task is to help the local farmers diagnose nutrient deficiencies among their crops. Then you will make recommendations on how to restore nutrient balance to the soil and improve crop yields.

Each group will now receive three case studies to evaluate.

Each student in the group is responsible for one of the case studies- right now pick case study 1 ,2 or 3.(**You can unstaple the papers but please do not write on them! You will be turning these papers back into me to be used with other classes)**

Right now read the primary information provided to you about your corn. Now on your plant doctor evaluation form write down what you consider to be the most important information about your crop. Now using your reference manual write down what your initial diagnoses is. Remember right now we are only looking at the primary information.



Case Study #1



Case Study #2

Case Study #3



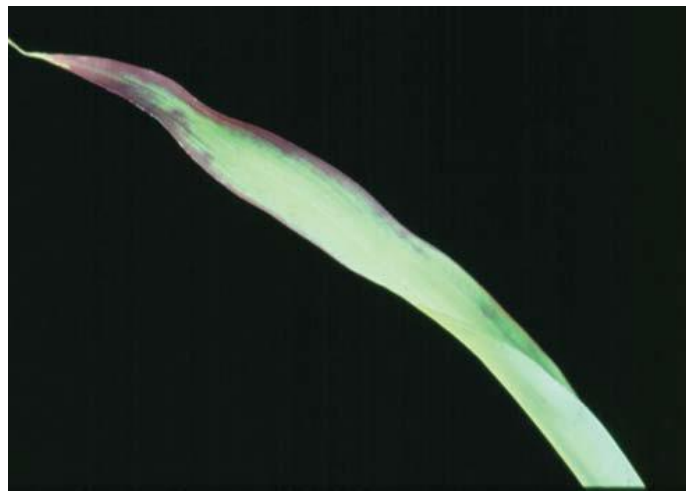
Now do the same thing but include your secondary information about your crop.



Case Study #1



Case Study #2



Case Study #3

Now we will come back together as a group and discuss our diagnoses.

Primary Information

Important Symptoms	
Initial Diagnosis	
Symptoms that Match Nutrient Deficiency	

Secondary Information

Important Symptoms	
Is your initial diagnosis confirmed?	
If not what is your new diagnosis?	
If not what caused you to change your diagnosis?	

How can we correct these nutrient deficiencies?

Next Lesson: We will explore the advantages and disadvantages of fertilizer!

