

# Understanding Project Questions

This guide is to help you better understand which questions you should be asking in your PhotosynQ projects before you head out into the field to ensure you get the best data.



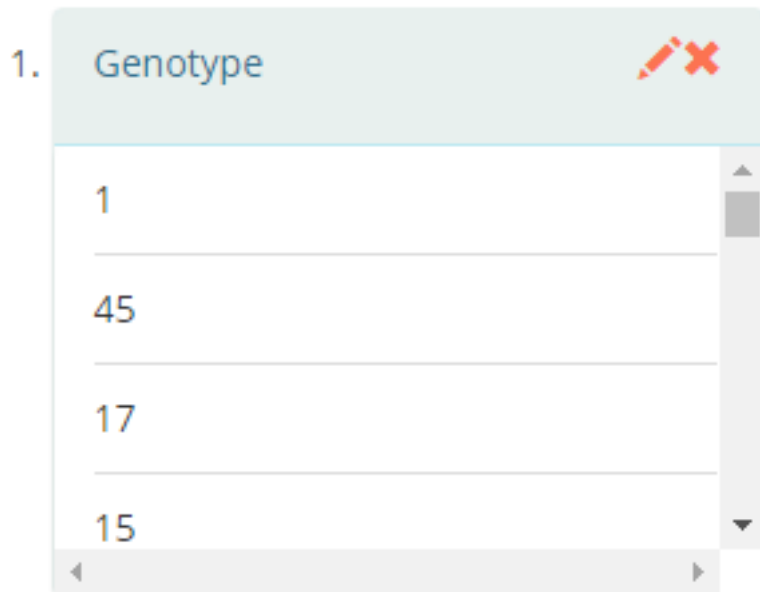
# What is a Project Question?

These are questions that are answered before every measurement. They help you to document, categorize, and analyze the data collected for your project

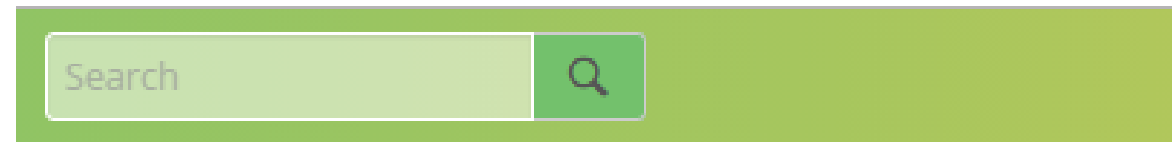


# They appear all throughout the PhotosynQ Platform

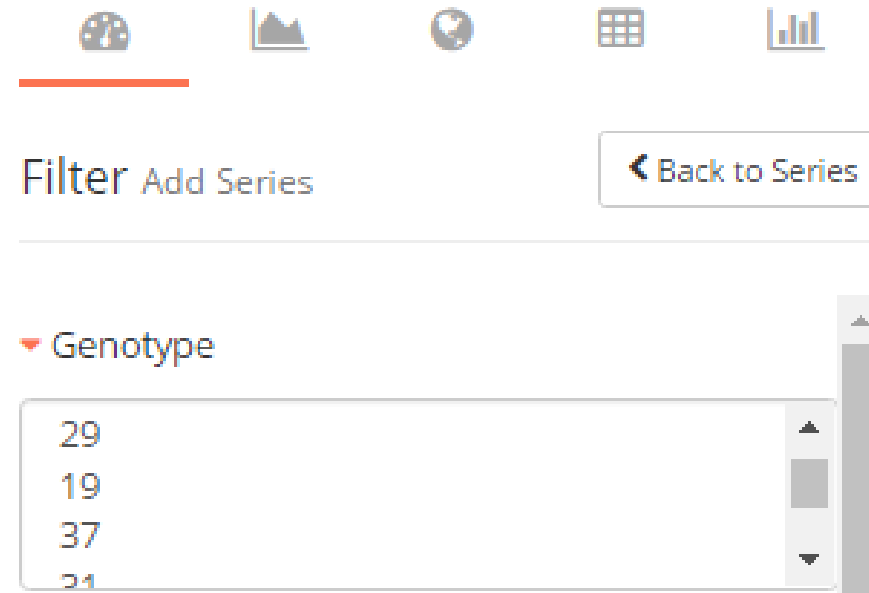
When you create a project



... view data in the data explorer

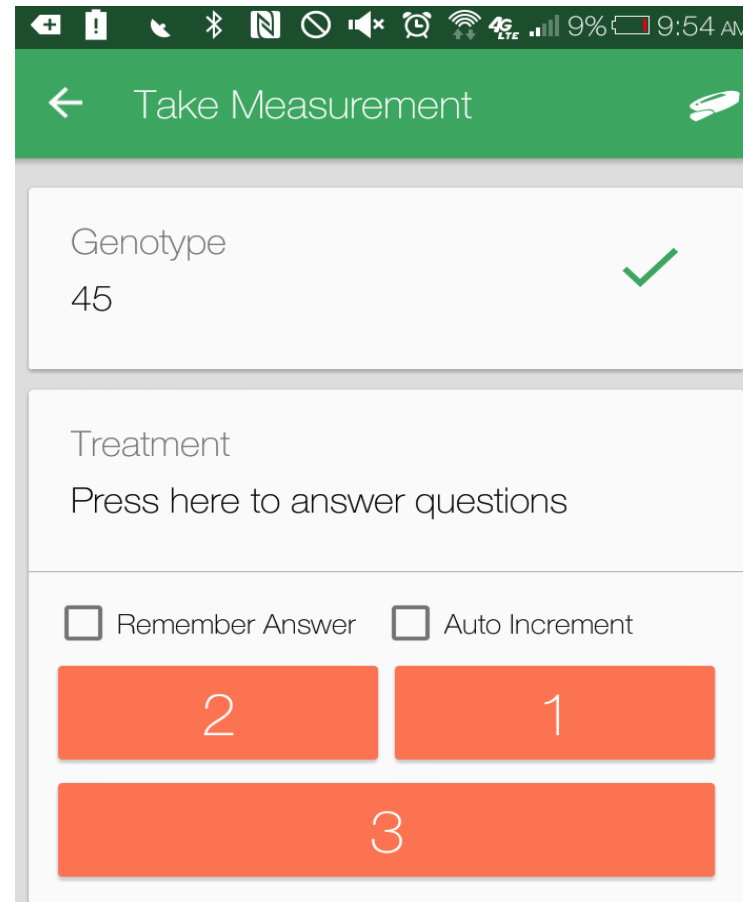


## Dry Beans Root Rot Resistance



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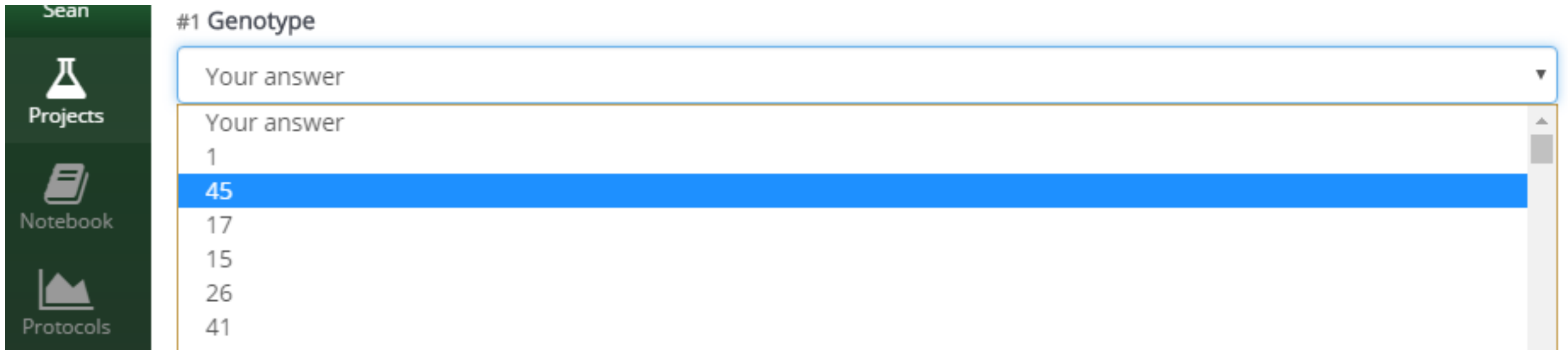
When you collect measurements with your phone...



The screenshot shows the 'Take Measurement' screen of the PhotosynQ mobile application. At the top, there is a green header bar with a back arrow, the text 'Take Measurement', and a leaf icon. Below the header, the 'Genotype' field is filled with '45' and has a green checkmark to its right. The 'Treatment' field is empty and contains the text 'Press here to answer questions'. Below the treatment field, there are two checkboxes: 'Remember Answer' and 'Auto Increment', both of which are unchecked. At the bottom of the screen, there are three large orange buttons with the numbers '2', '1', and '3' on them, arranged in two rows (2 and 1 on top, 3 on the bottom).

# They appear all throughout the PhotosynQ Platform

... or you use the application on your desktop computer



The screenshot displays the PhotosynQ desktop application interface. On the left is a dark green sidebar with the name 'Sean' at the top. Below the name are four icons with corresponding labels: a flask for 'Projects', a notebook for 'Notebook', and a line graph for 'Protocols'. The main content area is titled '#1 Genotype' and features a search input field at the top containing the text 'Your answer'. Below the input field is a list of search results, also starting with 'Your answer'. The first result is '1', the second is '45' (highlighted in blue), the third is '17', the fourth is '15', the fifth is '26', and the sixth is '41'. A vertical scrollbar is visible on the right side of the results list.

Search Results
Your answer
1
45
17
15
26
41



Without asking the right project questions, we would not be able to compare how different treatments (right side bar) vary in different locations (x-axis)

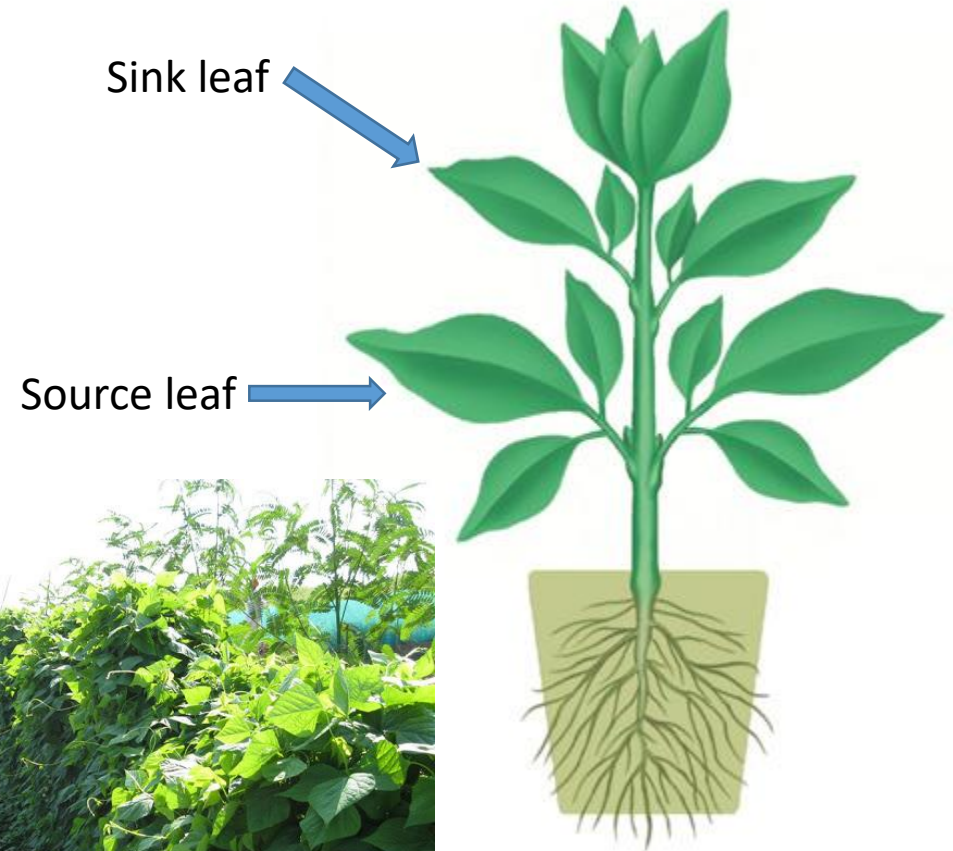
# What project questions matter?

- What do we want to know about each plant we measure?
  - Are all the plants the same variety or different?
  - How are the plants being managed?
  - How many times will I measure the plants?



# What project questions matter?

- Are you measuring multiple leaves on your plants?
  - Source leaves will behave differently from sink leaves
  - Leaves in the upper canopy are likely to get more light than leaves lower in the canopy
- Identifying the leaf age or canopy position can help you account for these differences





# What project questions matter?

Are you measuring leaves at different growth stages?

A leaf that was a sink leaf at one growth stage may be a source leaf at a later growth stage.



# What project questions matter?

The PhotosynQ apps automatically collect data that can be very useful for your project. Including:

- Date and time
- Device ID
- Who collected the data

# Additional Information

- Asking the right project questions can determine the success of your project.
- Questions like “Is the plant healthy?” can be very subjective and the answer can vary person to person, or day to day.
- At first you might ask too many questions, or too little, but after a few projects you will learn exactly what you need!
- You can add notes and photo’s to individual measurements directly from the PhotosynQ apps, so don’t worry if you forget something!