

# Abstract

**Project Title: Football Fungus**

**Project ID: 530**

## Abstract

A brief explanation of your project. Enables judges to receive a base understanding of your project and work.

*The problem I'm trying to solve is what type of grass, turf or sod, is better for the players health and cleanliness of the fields. My hypothesis is that sod will grow less bacteria because it is natural and turf will grow more because of the ingredients in it. To test this I took petri dishes and went to four fields after a football game, 2 turf and 2 sod, and swabbed the petri dish to get a sample. I also got one more sample at a sod farm to see if the samples were close. After, every two days I measured growth for 2 weeks and took the results to answer my problem of which one is better. I saw that the sod after a game was usually in the mid fifties while the turf was in the mid thirties. The averages of these 47.3 for Debuck's, 50 for Collins 55.3 for Davison High School, 32.3 for lapeer, and 34.5 for Brandon, all in centimeters squared. The average was about 53 centimeters squared, for the two sod fields and for turf it was about 33 centimeters squared. That difference between the two is 21 centimeters squared, which surprised me because if I saw that number before I would have thought they were the opposite and not the turf lower. Finally, I determined that even though sod is natural the turf grew less. However, the sod was much less diverse than the turf, which leads me to believe that sod is better because it had the same bacteria.*

## Items to Include:

**Introduction:** Why did you do this project and why is it important? How will this effect people and why is it needed. Inspire the reader to continue learning more about your research and read your report.

**Problem Statement and Engineering Goal / Hypothesis:** What is the problem you were solving and what was your engineering goal or hypothesis.

**Procedures:** How did you solve the problem and or test your hypothesis. Don't go into details, provide a broad, conceptual view of what you did. For engineering, what was your design criteria.

**Results:** What was the outcome? Use your data and numbers to describe your result.

**Conclusion:** Was your hypothesis supported or the engineering goal met?