This study researches the impact of Plant Growth-Promoting Bacteria (PGPB) and nutrient-infused biochar on plant growth in New England soil. New England’s soil is notorious for its lack of certain nutrients, rocky structure, and other problems. When carried out, the experiment will soak biochar in water and infuse it with nutrient rich substances and PGPB. Then, it will be mixed in soil to grow plants, compared against a control group grown in regular soil. Over five months, growth metrics—height, stem diameter, root length, and leaf count— are expected to be significantly better in plants grown in the biochar-amended soil. The results will highlight biochar and PGPB’s potential in improving agricultural productivity through enhanced nutrient availability; furthermore, results will suggest BioChars potential as a sustainable and non-toxic alternative to fertilizer.