



Impact Statement

Vincent Yao, Grade 6

Borlaug's Innovation, 2026

Watercolor and marker on paper, 11 x 14.5 inches

Jessie Art Studio, San Diego, CA

Unsung Hero: Norman Borlaug

Norman Borlaug, called “Father of the Green Revolution,” by many, is one of the most transformative figures in modern agricultural history. His work reshaped global food production and helped prevent mass famine at a time when many nations faced severe shortages of food. Through scientific innovation, persistence, and a deep humanitarian drive, Borlaug developed wheat varieties that dramatically increased yields and strengthened food security for millions. My artwork is a tribute to his legacy—an attempt to visually capture both the scientific breakthroughs he achieved and the compassion that fueled his mission.

I chose Norman Borlaug as the subject of my artwork because his story is a reminder that while many historical figures are remembered for political or military achievements, science and innovation can be powerful too. Borlaug’s influence came from fields of wheat, research stations, and long hours spent improving crops. His work in Mexico, India, and Pakistan helped these nations on the brink of famine become self-sufficient in wheat production. In 1970, he received the Nobel Peace Prize, a recognition that underscored how essential food security is to global stability. In 1977 and 2007, Borlaug received the Presidential Medal of Freedom and Congressional Gold Medal, respectively. These awards solidify his position as a quiet hero, even though he is often overlooked by many.

My artistic vision centers on portraying Borlaug as both focused and serious, yet gentle. In the artwork, his expression reflects the amount of responsibility he carried—knowing that his research could determine whether millions would have enough to eat. At the same time, his gentleness symbolizes the compassion that drove him to dedicate his life to fighting hunger.

To highlight Borlaug’s scientific achievements, I visually represented three major ways he improved wheat. First, I depicted the idea of crossbreeding wheat from high mountain regions with wheat from low, dry deserts. He did this in Mexico, where the climate varies from place to place. This symbolizes Borlaug’s innovative approach to combining traits from different environments to create stronger, more adaptable wheat varieties. This crossbreeding was essential to developing plants that could thrive in even the most harsh and demanding conditions and produce higher yields than any variety that came before.

Second, I illustrated Borlaug’s work on strengthening wheat stems. Before his improvements, wheat plants often grew tall and weak, causing them to bend or collapse under the weight of their own grain—a problem known as lodging. Borlaug bred shorter, sturdier stems that could

support heavier heads of wheat. In the artwork, this is shown through upright, powerful stalks that stand firm, representing resilience and stability.

Finally, I depicted his breakthrough in making wheat resistant to stem rust, a devastating fungal disease that historically wiped-out entire harvests, causing years of planting and care to go to waste. To symbolize this, I drew the wheat surrounded by a protective forcefield, with the rust fungus outside it—unable to get inside. This captures the idea of scientific protection, showing how Borlaug's work shielded crops from destruction and safeguarded food supplies.

The impact of this artwork lies in its ability to make Borlaug's contributions visible and emotionally resonant. Many people today benefit from his innovations without knowing his name. By combining his portrait with symbolic elements, the artwork invites viewers to learn about his achievements and reflect on the ongoing importance of agricultural research. Even though unpopular, his scientific contributions to agriculture and society will continue to inspire people for generations to come.