

# PLANT GENETICIST

Plant geneticists conduct research to understand, improve or create new varieties of plants or crops. Looking at a plant's DNA they can examine ways to improve shape, size, production level, pesticide and disease tolerance.



## WHAT RESPONSIBILITIES WILL I HAVE?

- Write research plans and objectives
- Create budgets for research projects and seek funding (typically in a university setting)
- Cross breed plants to breed new subjects for trials and to build up a seed bank
- Record data on plants in trials
- Identify genes that are responsible for certain plant features and functions
- Stay up to date on research being done elsewhere through journals and periodicals
- Tend to trials grown both in greenhouses and fields
- Maintain thorough records of research conducted
- Look for ways to genetically engineer crops that are higher yielding, healthier, disease and pest resistant or a number of other characteristics
- In a college or university setting may be asked to teach graduate and undergraduate courses related to plant genetics, plant breeding etc.
- Serve as a liaison and spokesperson for government and industry as needed
- Supervise the work of field and laboratory workers
- Prepare and publish reports on research conducted

## WHAT EDUCATION & TRAINING IS REQUIRED?

Bachelor's degree in biology, botany, or biochemistry; if in research or teaching, a Master's or doctorate may be required

## THE FOLLOWING HIGH SCHOOL COURSES ARE RECOMMENDED...

Agricultural education, chemistry, biology, mathematics

## TYPICAL EMPLOYERS

Agricultural seed and chemical companies, universities/colleges

## FUTURE JOB MARKET/OUTLOOK



## SUGGESTED PROFESSIONAL ORGANIZATIONS & ASSOCIATIONS

- American Society of Plant Biologists
- Global Plant Council
- American Society of Agronomy
- Bio-tech Industry Association

## AVERAGE ANNUAL FULL-TIME SALARY

\$100,000