

Soil and Plant Scientists

19-1013.00



Description: Conduct research in breeding, physiology, production, yield, and management of crops and agricultural plants or trees, shrubs, and nursery stock, their growth in soils, and control of pests; or study the chemical, physical.

Other Resources:

[ONET Link](#)

[MyNextMove Link](#)

Sample of Reported Job Titles: Agronomist, Arboriculture Researcher, Crop Nutrition Scientist

Job Zone

Title: 5 - Extensive Preparation Needed

Education: Require graduate school.

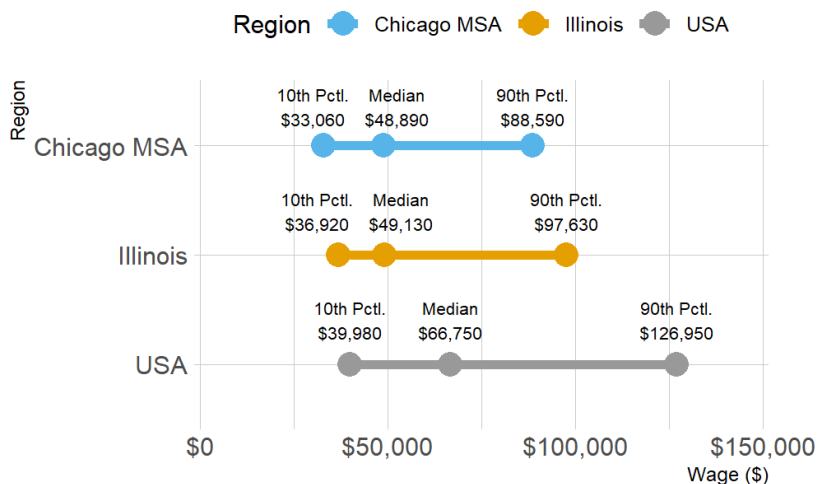
Experience: Extensive skill, knowledge, and experience are needed for these occupations. Many require more than five years of experience.

Training: May need some on-the-job training, but most of these occupations assume that the person will already have the required skills, knowledge, work-related experience, and/or training.

Core Certifications: Certified Professional Agronomist, Certified Crop Advisor, Board Certified Entomologist, Certified Crop Adviser - Resistance Management Specialty

Hot Technologies: Autodesk AutoCAD, ESRI ArcGIS software, Geographic information system GIS software, IBM SPSS Statistics, Microsoft Access

Region	Employment	Location Quotient	Median Wage
Chicago MSA	690	1.48	\$48,890
Illinois	960	1.53	\$49,130
USA	15,610	—	\$66,750



Top 5 Core Tasks According to Current Job Holders

Importance
Frequency (out of 100)

Communicate research or project results to other professionals or the public or teach related courses, seminars, or workshops.

More than weekly

85

Provide information or recommendations to farmers or other landowners regarding ways in which they can best use land, promote plant growth, or avoid or correct problems such as erosion.

More than monthly

81

Develop methods of conserving or managing soil that can be applied by farmers or forestry companies.

More than monthly

81

Conduct experiments to develop new or improved varieties of field crops, focusing on characteristics such as yield, quality, disease resistance, nutritional value, or adaptation to specific soils or climates.

Daily

80

Investigate soil problems or poor water quality to determine sources and effects.

More than yearly

77

Sources: US Department of Labor O*NET 26.3 Database (May 2022 Release); Bureau of Labor Statistics Occupational Employment and Wage Estimates - National, State, and Metropolitan (May 2021 Release)



Nathalie P. Voorhees Center for Neighborhood and Community Improvement