

HORTICULTURIST



*Creating food, medicine,
and pleasure from plants.*

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The Latin words *hortus* (garden plant) and *cultura* (culture) together form horticulture, classically defined as the culture of garden plants.

But today horticulture is more than garden plant culture. Horticulturists work in crop production; plant propagation; plant breeding; genetic engineering; plant physiology; plant biochemistry; landscape design, installation, construction, and maintenance; and storage, processing, and transit (of fruits, berries, nuts, vegetables, flowers, trees, shrubs, and turf). They improve crop yield, quality, nutritional value, and resistance to insects, diseases, and environmental stresses. They make plants more adaptable to different climates and soils and better fit for food uses or processes. And they grow and improve plants used for medicines or spices.

Horticulturists can work in industry, government, or educational institutions. They can be cropping systems engineers, wholesale or retail business managers, plant specialists in the landscaping industry, propagators and tissue culture specialists (fruit, vegetables, ornamentals, and turf), crop inspectors, crop production advisors, extension specialists, plant breeders, research scientists, and educators. You'll find horticulturists in offices, laboratories, greenhouses, and out in production or research fields.

In college take courses in biology, chemistry, mathematics, genetics, physiology, statistics, computer science, landscape design and construction, and communications to complement plant science and horticulture coursework. Plant science and horticulture courses include plant materials, plant propagation, tissue culture, crop production, post harvest handling, plant breeding, crop nutrition, entomology, plant pathology, economics, and business. For many careers you must have a master's or doctoral degree.

In high school take basic courses in [rhetoric and speech communications](#), [mathematics](#), [chemistry](#), [biology](#), and [computer sciences](#).



Photos: Kathryn Elsesser-Luba, U.S. Department of Agriculture-Agricultural Research Service

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