

# [***Cornell Online Course Unites Global Soil Health Leaders***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:69SC-CHW1-DY7P-T02V-00000-00&context=1516831)

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**Body**

The Cornell ***Soil Health*** Program - consisting of experts focusing on research, outreach and education - hosted an international certificate course on ***soil health*** starting Oct. 3 and ending Nov. 14, aiming to educate participants on ***soil health*** principles, metrics and management.

The virtual course was open to any interested students, practitioners or educators with relevant background in agriculture and ***soil*** science from across the globe. Registration fees varied depending on course level and the discounts were provided for New York State residents and participants from developing countries.

The Advanced ***Soil Health*** course provided participants with knowledge on leading ***soil*** science, assessment and management. ***Soil health*** refers to the integration of physical, chemical and biological properties of ***soils*** to perform functions that sustain plant, animal and human life.

Scholars find that studying ***soil health*** is valuable because of its many connections to human life. In addition to being an important source of supplying nutrients, robust ***soil*** is necessary for storing carbon from the atmosphere through carbon sequestration. ***Soils*** are directly and indirectly responsible for 95 percent of the world's food production, according to the Food and Agriculture Organization. A shortage of nutrients in ***soils*** can limit crop yield, making ***soil health*** important for sustaining a steadily growing global population.

The program is taught by faculty lead of the Cornell ***Soil Health*** Program Prof. Harold van Es, integrative plant science ***soil*** and crop sciences, and Extension Associates Debbie Aller and Joseph Amsili.

"We all rely on [***soils***] and they are often neglected and really taken for granted, so it's a way to educate more people," Aller said. "They're critical to a sustainable and healthy food system or agricultural system. We rely on them everyday for medicine, for clean water, for more nutritious food - pretty much everything."

Leaderboard 2

The course, consisting of virtual live-lectures and asynchronous work, offered two tracks this year: a basic course consisting of three modules and a more advanced course with four additional modules. After completing the course, participants received a certificate of completion.

The modules spanned a wide range of topics, from ***soil*** chemistry and biology to ***soil*** assessment - the process of measuring indicators that correspond to specific aspects of ***soil health***, which can then be addressed through different management techniques.

For example, Wet Aggregate Stability is an indicator that measures the ability of a ***soil*** sample to remain intact when rained on. Poorer aggregation reduces the capability of a ***soil*** to store water, exchange air and germinate seeds. For farmers, this means increased plant stress, erosion and flooding, which make fields harder to manage. Many different management strategies can address Wet Aggregate Stability, such as reduced tilling and the rotation of crops with sod crops and fungi hosts for increased biodiversity.

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