

## Look At Soil Organics Before Considering Fertilizer Use

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LANCASTER (Lancaster Co.)  
— CEC.

No, it's not some government agency. It's not the name of some committee, nor is it a measurement of time.

Actually, it's an acronym for "cation exchange capacity." In other words, it's terminology used in your soil test report to show the nutrient and moisture-holding capacities of your soil.

The CEC measurement is listed on the first page of your Penn State soil test report under "Laboratory Results" in the middle column. Look for it. Because if the CEC is under 15, you may have to add organic matter allow your crops, including any shade trees you may have, to grow.

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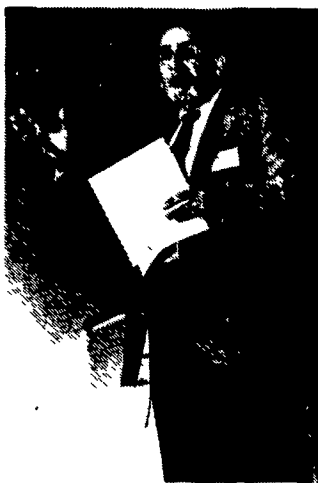
tilizer bags before we look at other problems," said Dr. Robert Nuss, professor of ornamental horticulture, Penn State, at the 28th annual Shade Tree Symposium at the Host Resort last week.

Nuss spoke about the importance of obtaining, understanding, and utilizing soil test results.

He outlined the soil reports prepared for horticulturists, landscape personnel, tree farmers, and others at the symposium by the Penn State Merkle Laboratory in University Park.

The CEC reading can be used with other determinations, including soil pH and other micronutrient amounts, to plan the fertility program of your crop.

"Soil testing will tell you when you need fertilizer, but just as importantly, when you don't," said Nuss.



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Nuss said that tree growers should become familiar with the nutrient needs of particular plants (some need greater or lower pH, depending on species) and the soil they are grown in.

If growers are experiencing problems, they must understand that problems occur gradually. The death of a tree is a gradual response, and could be caused by many factors, some of which intermesh.

It's important to remember also that fertilizer helps the tree make its own food. The food for the plant is made by the leaves, so it is important to look at leaf quality and vigor.

Step by step, Nuss went over all the important details to fill in when obtaining a test report, available at all extension offices for \$6. Nuss explained the importance of filling

in the correct information about the site and obtaining a true composite sample of the soil to be tested.

Also, Nuss showed those attending the symposium ways to read the recommendations and how to fix soil fertility problems.

He told those present that it takes time to make good plant materials, and "it won't happen overnight. It may takes weeks, months — it may take a year," he said.

He cautioned not to depend on using foliar treatments to solve long-term problems. Solid materials applied to the soil itself are necessary.

"The plant is a mirror image of problems in the soil itself," said Nuss. He said the soil test will help solve problems, and is "only as good as you make it."

## Up To Your Ears In Triazine-Resistant Weeds?

