

Delaware soil scientist looks back on 40-year career

NEWARK, Del. — University of Delaware soil scientist Leo J. Cotnoir will retire December 31 after a career spanning nearly four decades. He joined the College of Agricultural Sciences in 1947 as a member of the plant science department faculty and director of the Delaware Agricultural Experiment Station's soil testing laboratory. Under his direction that laboratory has grown from a few vials, simple bench equipment and hand written reports to a

highly sophisticated, fully automated operation with computerized reports.

A Connecticut native, Cotnoir holds a bachelor degree in chemistry from Assumption College in Worcester, Mass., and a master's degree in soils from the University of Connecticut. Before coming to Delaware he completed all requirements except the dissertation for a doctorate in soil physics from Purdue University.

As director of the University of

Delaware soil testing program—a post he held until last spring—Cotnoir coordinated the development and updating of fertilizer recommendations for all crops grown in the state—field and vegetable, turf, home garden, ornamental, nursery and greenhouse.

He also collaborated on an effort to standardize soil test recommendations for the mid-Atlantic region. The resulting cooperation among soil specialists at experiment stations in Delaware, New Jersey, Maryland, West Virginia, Virginia, North Carolina and South Carolina is unique in the U.S. It has increased the credibility of the soil test programs in all seven states and has also made it possible to maximize soil research efforts at each experiment station.

As lab director, Cotnoir has watched fertilizer use dramatically increase over the past 38 years in response to higher yielding crop varieties and more information on crop fertility practices. "The soil test has had a tremendous influence on fertilizer usage," he says. "There's no doubt in my mind that it has substantially increased the use of fertilizer. On the other hand, as farm economics have worsened over the last decade, farmers have been able to take advantage of high soil test readings to maintain optimum fertility without using

more fertilizer than they need."

When Cotnoir joined the university in the late 1940s, the Delaware Agricultural Experiment Station and U.S. Department of Agriculture were engaged in a project to survey all the soils in the state. He participated in this effort, helping develop guidelines for the project and interpret soil samples.

In the 1960s he played a supporting role in reclassifying the soils in that original survey. "Delaware was the first state to be completely remapped according to contemporary soil standards," Cotnoir recalls. Today, the resulting soil maps serve a number of purposes. As indicators of land productivity they are used for farmland tax assessment and management aids for crop farmers. They also provide essential information for soil conservation purposes.

Though he never held an extension appointment, over the years Cotnoir generously supported educational activities of the Delaware Cooperative Extension Service. As an authority on soils and fertilizers, he contributed frequently to statewide programs for farmers, home gardeners and producers of turf and nursery crops. He also participated in programs dealing with soil conservation, waste disposal and water quality.

During the late 1970s and early

1980s, he was the guiding force behind a series of soils-related workshops for extension agricultural agents and specialists. Cotnoir played a leading role in assembling research data and updating the university's fertilizer recommendations in order to help financially hard-pressed farmers reduce production costs. He also served on the college's Soybean Task Force, a joint research/extension project aimed at identifying key yield-limiting factors for this crop in Delaware.

In recognition of his untiring support of these and other programs, the extension service presented Cotnoir with its Friend of Extension award at its annual conference in 1984.

Much as he enjoyed his soil lab work, Cotnoir—the father of eight—always felt special enthusiasm for his faculty responsibilities. "Teaching has been one of my joys over the years," he says. "I've had the privilege of teaching just about every course in the department—including field crops and plant breeding—though of course I taught mostly soil-related subjects." He likes to follow the careers of former students, many of them now living in other parts of the country. After retiring he says he will probably miss teaching the most.

As for his retirement plans, Cotnoir expects to continue his present involvement with the Longwood Foundation's professional gardener's training program. He also hopes to do some consulting, in addition to tackling household projects he's had little time for in the past.



University of Delaware soil scientist Leo Cotnoir will retire on Dec. 31, after nearly four decades of service as soils lab head and teacher.

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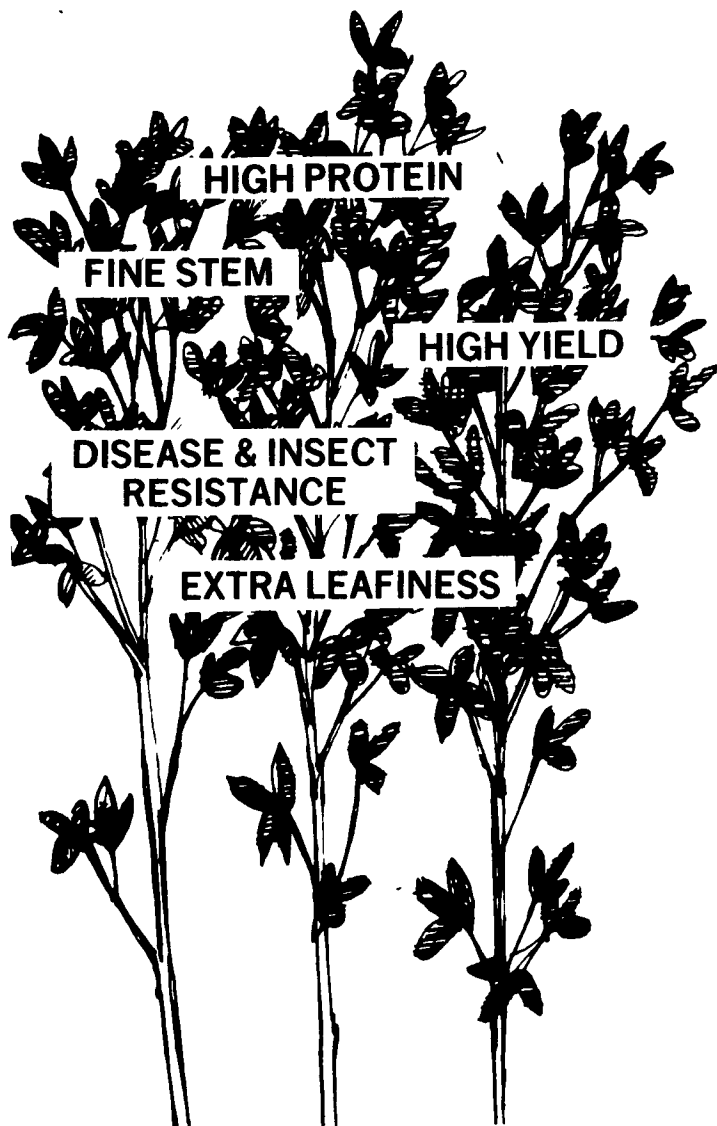
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