

Fertilizers Now Finding Big Place In Forestry

OREGON STATE COLLEGE—Fertilizers have helped bring spectacular advances in agriculture during the last 25 years and they'll do the same for forestry in the next 25, an Oregon State College forest soils scientist believes.

Dr. C. T. Youngberg says research is showing that fertilizers offer great possibilities for increasing tree growth, stimulating cone and seed production, and getting seedlings off to a strong start.

In the case of Christmas trees, nitrogen fertilizers applied in late summer have been found to deepen and improve the green color and there is some indication that keeping quality is improved. Applied in the spring, fertilizers help lengthen the needles.

As our population increases and forest management practices become more intensive in the Northwest and the U.S., the role of soil fertilizers and fertilizer treatments will become increasingly important, Youngberg noted.

European countries, hard pressed for adequate timber supplies, have been using fertilizers on forests for half a century, he pointed out.

At Oregon State College, a research project is now underway on tree nutrition and forest soil fertility. The research will provide basic information as a guide for Northwest fertilizer programs of the future.

Very little information is available now on nutrient requirements of our major tree species and adequate methods for sampling forest soil fertility are lacking, Youngberg said.

The economics of fertilizers for forests is a basic consideration of course, Youngberg added, but studies elsewhere have indicated that fertilizers do pay good dividends under some conditions.

A University of Washington study with fertilizers on second growth Douglas fir in the Puget Sound region showed a return of about \$3 for each \$1 invested in fertilizers. The test area was in a favorable market location, however.

In many places, the economic factors are against use of fertilizers now but the great demand seen for wood fiber as the population increases will alter that balance, Youngberg believes. At present, the principal need is for scientific information which can serve later as the basis for cost-return decisions.

Blind Driving Tests Made

DALLAS, Tex (UPI)—Could a man fly an airplane, drive an auto or guide a submarine without actually being able to see objects that may be in his way?

Goodyear Aircraft Corporation scientists believe this could be done through the medium of electronics tied in with a human's ability to interpret displayed data.

Dr. A. J. Cacioppo, head of the company's human engineering department, said the belief is based on studies conducted by the Goodyear scientists under a contract with the Office of Naval Research.

The object of the study is to provide data from which may be designed and built visual electronic displays for guidance of pilots, tank commanders, submarine skippers and possibly motorists.

The idea would be that even if they couldn't see where they're going, they would still be able to proceed unerringly by watching characters displayed on an electronic screen to tell them of any obstacles in their paths.

For the present, fertilizers are finding wide use for specialty purposes such as nurseries, Christmas trees, and new plantings. Studies by Weyerhaeuser Company and the Industrial Forestry Association have shown that nitrogen fertilization of young Douglas fir increases cone and seed production.

Crown Zellerbach Corporation has developed fertilizer pellets that are used to advantage at planting time to give the new seedlings a boost.

Airplanes and helicopters are being used in some places to spread fertilizers on forest tracts but research still needs to be done in that area, Youngberg said. Sampling forest soils to determine fertility needs is also much more complex than with farm soils since tree roots extend down several feet into several layers of soil.

Objectives of Youngberg's research at OSC are to develop methods of evaluating soil fertility on forest lands; to determine nutrient requirements and develop deficiency symptom information for different trees; to determine the responsiveness of different forest soils to fertility treatments; and to determine the amount of nutrient drain by intermediate and harvest cuttings.

Girl Wants To Be A Mechanic

CLEVELAND, Ohio (UPI)—Mary Ann Semonovich, 18, is a long distance telephone operator, works part-time in a supermarket, lifts weights, goes bowling and takes a pretty active interest in almost all sports.

But what she really wants to do is become an auto mechanic.

And so, whenever Mary Ann has a free evening she usually can be found at a service station near her suburban Maple Heights home—pumping gas, tuning carburetors, fixing transmissions and changing springs.

"I'm dead serious about this," Mary Ann says. "I enjoy working on cars and I think there is a place for women in the business. Our smaller hands ought to help us make repairs in tight spots easier than men."

Mary Ann's dad, Vincent, a truck driver, suggests she ought to take up knitting.

Her mother is more understanding. "You do as you like, Mary Ann," she says.

59 Champagne Is Vintage

EPERNAY, France (UPI)—The year 1964 is really worth waiting for, say the men who make champagne here.

That's when 1959 vintages will become available, and, according to the experts, '59 will go down in history for the champagne it produced.

The vintners have just finished the greatest harvest in the district in at least five decades and are predicting the wine will match that of 1893, the greatest vintage year in champagne history.

Three months of uninterrupted dryness is credited by the grape growers for the extraordinary crop.

Grant Given College For New Research

OREGON STATE COLLEGE—A fourth quarter - million - dollar grant has been given Oregon State College by the National Science Foundation to help spearhead the special U. S. program of training for high school science and mathematics teachers.

Receipt of the new grant of \$290,300 was announced by President A. L. Strand.

The grant will be used in 1960-61 to support a fourth academic-year institute for 48 selected teachers, drawn from across the nation. The academic-year institute program was started by NSF in 1956 to help teachers improve their subject matter knowledge, to upgrade science and math training in U. S. high schools, and to increase the nation's supply of top quality scientists and teachers.

OSC was one of only 16 colleges picked to start the training in 1956 and has been on the select list each year since then. Next year, 33 colleges will offer the institutes for some 1600 teachers.

Dr. Stanley E. Williamson, head of science education, is director of the program at OSC.

Each of the high school teachers selected to attend one of the institutes will receive \$3000 plus allowances for dependents, books and travel. Teachers are enrolled in the graduate school at OSC and nine special courses have been organized for them.

Teachers must have taught for at least three years before they are eligible to apply for the training.

Information about the Institute program and the colleges giving the training will be made available to all U. S. high school science and mathematics teachers, Williamson said. Interested teachers may then apply directly to the college they wish to attend. Each college selects its assigned number of teachers.

OSC is the only Northwest school on the list again next year. Fourteen of this year's 50 teachers at OSC are from Oregon high schools with 15 other states represented.

TELEPHONE'S BIRTHPLACE

BOSTON (UPI)—The birthplace of the telephone has been restored and opened to the public. It is the attic workshop where Alexander Graham Bell first transmitted the human voice electrically over wires June 3, 1875. Originally, the workshop was located in what is now Scollay Square. The new location is a few blocks away at 185 Franklin Street.

Dry, Cull Cow Tagging System Now In Oregon Use

Small plastic tags which Oregon cattle will carry from country brand inspection points or auction markets to the slaughterhouse—whether it be in Oregon, Colorado, California or some other western state—are now being applied by the state's brand inspectors.

The tags will be glued on the left shoulder of all dry and cull cows. They tell where the animals originated and are the key to the new simplified method of re-certifying counties and state for brucellosis.

Fred Pope, animal division chief for the state department of agriculture, says this is how the new program works:

Presence of the tag is a signal to blood test for brucellosis whenever the animal is slaughtered. Blood samples will be sent to the State-Federal Brucellosis Laboratory at Salem and submitted to the agglutination test. If the test is clean, the herd of origin and the county will be given credit towards recertification. If it shows a reactor, it will also be credited to the herd and the rest of the eligible cattle blood tested.

Department representatives will place tags only on dry and cull cows. In saleyards, tags will be placed as the cows first come into the yard and this will be done quickly so it will not slow the fast moving operations.

Pope points out that this is an important innovation for the cattleman as it greatly reduces the on-the-ranch testing which has been going on for years. At the same time, the tagging system will bring to light any reactors and pinpoint the need for herd blood tests.

While the tags are a "must" for blood tests in whatever state they appear, Oregon will continue to test all eligible cattle sent to slaughter here.

The tagging plan has been under study by federal and state officials for more than two years. It has gone through field tests, both here and in other states, and is now starting full-scale operation. Seven-

MAGAZINE LOADERS

NEW YORK (UPI)—The population shift to suburbia has made drug stores the nation's largest magazine retailers.

Chain Store Age notes that 37 per cent of all single copy magazines are now bought at drug stores. Newsdealers, once dominant in the field, now account for only 7 per cent of single copy magazine sales, according to the trade publication.

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