

Atomic Energy Being Developed To Help Farmer

By ROBERT GEIGER
AP Newsfeatures Writer
WASHINGTON — Atomic scientists now are seeing what they can do to help the farmer.

Radioactive products from the chain-reacting uranium pile at Oak Ridge, Tenn., are being used in large quantities on experimental farms.

In one type of experiment, the Bureau of Plant Industry of the Department of Agriculture is seeking new information on how plants absorb phosphorus from soils. The phosphorus is made radioactive by exposure to radiation in the uranium pile, and its "tagged atoms" are traced in their course through the plant's digestive system.

Seeds From Bikini Used
In another type of experiment, the bureau is studying seeds which were exposed to the Bikini atomic bomb explosion. As exposure to radiation sometimes causes the offspring of plants to have characteristics radically different from the parent, it is possible that useful plant varieties will be developed.

A third experiment with radioactive carbon is probing the mystery of photosynthesis, the process by which light shining on plants converts carbon dioxide and water into food sugar. Researchers at the University of California at Berkeley hope to find ways to improve on nature's photosynthesis and thereby make plants more efficient as food producers.

Disease Immunity, Aim
The objective of scientists is to produce new plants that may be immune to certain diseases, or plants capable of producing crops of better quality or in larger quantity.

In the experiments using radioactive products from Oak Ridge, the scientists are seeking a solution to this problem:

Superphosphate is the principal chemical in mixed fertilizers. Last season U. S. farmers placed nearly 6,000,000 tons of it on their lands.

Most fertilizers are a mixture of nitrogen, phosphorus and potash. Crops may use 60 per cent of the nitrogen and potash. But they rarely take up more than 20 per cent of the phosphorus.

Scientists want to know how much of the plant's phosphorus comes from the applied fertilizer and how much comes from the "native" phosphorus of the soil.

Here is the method scientists are using to obtain the answer:

A superphosphate is prepared from the radioactive material at Oak Ridge, and it is fed to corn, cotton, potatoes and tobacco. Plants absorb this in the same way they do ordinary commercial fertilizer. It has unstable or "tagged atoms" which shoot off electrons at random. They may be counted on a sensitive device, called the Geiger counter, as plants grow and absorb nourishment from the soil and the fertilizer.

These results were obtained in laboratory experiments:

Perennial rye grass was planted on three kinds of soils.

The first was "evesboro" soil, a sandy loam of the East with very little native phosphorus. Matured grass grown on it absorbed 80 per cent of its phosphorus from the applied superphosphate; only 20 per cent from the soil.

The second was "Davidson" soil, from Orange County, Va., a heavier clay loam. It is a general farming soil typical of many of the red soils of the southeast. The plants absorbed 60 per cent of their phosphorus from the

applied superphosphate; 40 per cent from the soil.

The third soil was caribou soil from the potato producing region in Aroostook County, Me. It has a large supply of native soil phosphorus. This more fertile caribou soil supplied 88 per cent of the phosphorus the grass required and only 12 per cent was taken up from the applied superphosphate.

This first field experiment is a joint project of the Department of Agriculture, the North Carolina agricultural experiment station and Cornell University.

The first results have been so satisfactory that the bureau's scientists say:

"With tagged atoms we believe science can find the answer to many of the farmer's key fertilizer questions within a few years."

Motorists Told To Carry License Renewal Schedule

Every Oregon driver should carry a license renewal schedule with his driving permit until his old driver's license expires, it has been stressed by Secretary of State Farrell.

"Most of the questions and mistakes the license division has encountered," he said, "would have been avoided if the people concerned had carefully read and kept the renewal schedule. It was designed intentionally to fold to the size of the license card so the two could be carried together." Schedules are available free of charge from any service station, police station, sheriff's office, or driver's license clerk or examiner.

All Oregon driver's licenses expire during the next two years under a system adopted by the 1947 legislature. The expiration date of each license is determined by its serial number, lowest numbers first. Numbers 5R-33,000 to 5R-66,000 expire this month. Numbers below 5R-33,000 expired during June.

No individual notice is given when licenses expire.

Application for renewal in Roseburg should be made at City Hall between the hours of 8 A. M. and 5 P. M. on Monday through Friday. No examination is necessary. Applications, however, will not be accepted ahead of schedule.

Vocationists with old licenses who drive out-of-state risk arrest unless they carry Oregon renewal schedules to prove their permits are still valid.

Floods May Boost Fresh Drive for Basin Projects

WASHINGTON, July 7. — (AP) — The Republican economy program and the Missouri River floods may generate a new drive in Congress for basin authorities.

Senator Taylor (D-Idaho) says congressional action on the reclamation bureau and Army engineers' appropriations for 1948 has strengthened his conviction that the ultimate solution of river problems will be the creation of these authorities to coordinate reclamation and flood control work.

Senator Murray (D-Mont.) has announced that he will campaign during the legislative recess for a Missouri Valley authority. He has introduced a bill to establish it.

A bill also has been laid before Congress to authorize a Savannah River authority.

Taylor based his latest argument for a Columbia River authority on appropriations for control of the Snake River, a tributary of the Columbia.

He observed that the Army engineers were allowed \$300,000 for strengthening levees on the upper reaches of the Snake, while an irrigation project to be built in the same area was allowed only \$900,000 of the \$2,500,000 recommended by the budget bureau.

"The money has thus been appropriated for patchwork," Taylor told a reporter, "while the money for the project that would solve the problem for all time has been trimmed to the point where construction cannot be started."

TRAFFIC FINES LEVIED

Seven persons were reported fined for traffic violations Monday by Justice of the Peace Thomas C. Hartfield. They included:

Dean B. Brown, reckless driving, \$50; Elwood Hussey, reckless driving, \$25; James T. Davis, drunkenness on public highway, \$25; Elmer T. Schlender, four in driver's seat, \$10; Miles Standley, overload, \$10; Ronald J. Sherritt, defective muffler, \$10; John J. Albos, axle overload, \$10, no chauffeur's license, \$10.

DR. LANGE RETAINED

SALEM, Ore., July 8. — (AP) — Dr. Fred W. Lange, Salem, was reappointed by Governor Snell today to the veterinary medical examining board for a four-year term.

Off-Coast Trolling Regulations Stated

PORTLAND, July 8. — (AP) — The State Fish Commission will hold a hearing here July 24 on regulations and management of ocean trolling for salmon off the Oregon coast.

Master Fish Warden Suomela said the legislature delegated authority for establishing regulations to the commission.

WASHINGTON, July 8. — (AP) — A measure pertaining to Pacific Northwest fisheries was given House approval and transmitted yesterday to the Senate. It was the marine fisheries agreement drawn up by California, Oregon and Washington. Under this bill, regulation work of the three states will be coordinated with present activities of the Federal Fish and Wildlife service.

Laws of Eyesight Cited to Explain 'Flying Saucers'

By HOWARD W. BLAKESLEE, Associated Press Science Editor

NEW YORK, July 8. — (AP) — Much of what has been described about the flying saucers reported from nearly all parts of the country may be explained by certain laws of eyesight.

All objects appear round or nearly so at any distance which is close to the limit of how far a person can see.

If the objects are seen by reflected light, as in most cases reported, they are almost certain to be round, and if the reflections are sunlight, then the sizes reported are those which would be expected from distant light reflections.

Descriptions of virtually all the saucers as round and flat fit exactly with the tricks that eyes play. This trickiness varies with differences in weather and lighting.

This writer has seen flying saucers over Long Island sound near his home not only this year but in previous years.

They were round, bright and moving fast. But they were no mystery because they were light reflected from the bodies of airplanes that soon identified themselves by changing course and coming near to be seen distinctly.

Many descriptions of move-

ments of the flying saucers fit with the common maneuvers of airplanes, singly or in groups. Some of the maneuvering reported, which took saucers out of sight and back into sight again, resembles what can be seen while watching distant airplanes.

Device Keeps Sow Off Pigs' Bodies

AP Newsfeature

LEXINGTON, Ky. — More little piggies are going to market as a result of a simple innovation developed at the University of Kentucky to keep heavyweighted sows from mashing to death their little ones.

Slanting floors in the farrowing houses provided the answer. The sow lies with her head or back up the slope, and the idea is that she is not likely to roll over and crush any of her litter.

On 49 Kentucky farms where sows have been kept since introduction of the method, out of 385 litters an average of only one pig out of 30 farrowed had been mashed on slanting floors. On the same farms, nearly one pig out of four was mashed on level floors.

When the farrowing season is spread over two weeks, as it is on most hog farms, only a third to a half of the farrowing pens need to be fitted with slanting floors. When the litters are five to seven days old, they are out of serious danger of being crushed and can be moved to level floors so that another sow can move into the tilted stall to farrow.

HELD TO GRAND JURY

Glenn O. Lay, 32, who was brought here from Colorado last week as a suspect in the Carstens Furniture Store safe robbery, was bound over to the grand jury by Justice of the Peace Ward C. Watson at Sutherlin yesterday, with bail set at \$5,000. The charge was receiving and having possession of stolen property.

Makes 10 BIG Delicious Drinks SIX FLAVORS AT GROCERS Kool-Aid

Radio Turns On Heat Waves To Cure Bodily Ills

AP Newsfeatures

ROCHESTER, Minn. — Radar-length radio waves are being used in a new heat-treatment machine at the Mayo Clinic in Rochester, Minn.

It employs radio waves that vibrate three billion times per second and have a wave length of about four inches. They are waves 30 times shorter than those used in previous machines.

The device has been tested successfully on dogs and will be applied to treating humans, Dr. Frank J. Krusen, J. F. Herick, Ursula Leden and Khalil G. Wadim report in the Proceedings of the Staff Meetings of the Mayo Clinic, a fortnightly bulletin.

Heat machines beam electrical currents of radiation into the body to heat muscles or other internal tissue, producing a kind of artificial fever. Such heat is beneficial in treating sprains, stiffness, and in helping the body fight infections.

The ultra-short radio waves can be focused better, the Mayo researchers said, and permit high internal heating without undue heating of the skin. They can be spotlighted to reach only certain areas.

The heart of the new machine is a tube like that used in radar.

In radar this tube, called the magnetron, sends out bursts of radio waves which are reflected or echoed back by the target. In the heat machine, the tube is modified to send out a continuous beam of radio waves.

The machine can be placed very close to the body, but the patient can move away temporarily if the skin temperature becomes uncomfortable, they said.

Five times as much Vitamin A has been found in the milk of cows fed on good alfalfa hay as in the milk of cows fed on poor timothy hay.

The tortoise is a member of the reptile family, and the name is usually applied to those of the order who live on land.

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EVELYN'S QUITTING BUSINESS

Well Known Fashion Shop Must Vacate Premises at Once!

ENTIRE \$25,000 STOCK MUST BE LIQUIDATED AT ONCE.

It was announced today, by the owners of Evelyn's, prominent Roseburg Fashion Apparel Shop, that they will soon close their doors and retire completely from business. The entire stock of this popular fashion shop has been re-grouped and re-priced to impel complete and immediate disposal. Due to the short remaining time, prices have been cut to cost and less to turn them into immediate cash.

Complete Disposal

Entire stock DRESSES at cost and below!

5.95 DRESSES 1.66
Large sizes Street styles
Floral prints Casual styles
Novelty Rayons - Cottons

9.95 DRESSES 4.66
Rayons Dressy styles
Sheers Sport styles
Bemberg All sizes

16.95 DRESSES 8.66
Better dresses Sport styles
Crepes Street styles
Gabardines All sizes

22.95 DRESSES 12.66
Romaines Jersey
Alpacas Sheers
Crepes Bemberg

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Gowns Reg. 3.95 2-Tone Jersey Slips 1.79
Slips Reg. 2.99 1.77
Satin

Gowns Reg. 7.95 Lace trim 3.88
Satin

Gowns Reg. 3.95 Lace trim 66c
Satin Reg. 1.95 Bras 59c

NOTICE TO DEALERS

Fixtures are already sold—Please do not inquire. You are invited to purchase any quantities you wish of all merchandise on display, except certain less-than-cost limited quantities reserved for customers or items reserved to back up advertising already published.

Public Closeout Starts 9:30 A. M. on the Premises

EVELYN'S FASHION SHOP

121 N. JACKSON STREET

ROSEBURG, OREGON

LEASE IS SOLD

The emergency is aggravated by the fact that the lease on the store building itself has been sold and the new lessees of the property will take possession in the near future. Evelyn's are forced to clear the place to the bare walls to give possession by the expiration of their short period of grace. Residents of Roseburg will benefit by dramatic merchandise bargains during this gigantic forced disposal.

Everything to be closed out To Bare Walls.

COMPLETE DISPOSAL SUITS AND COATS

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29.95 New Suits . . . 10.00
100% wool Tailored styles Sport styles Cardigans Dressy styles Small sizes only

29.95 Shorty Coats . . 13.88
100% wool suedees Rose, blue, aqua
100% wool fleeces Gold, kelly, white
Briefers—Shorties 10 to 20 only

49.99 Coats & Suits . . 24.99
100% wool fabrics All colors
Styles to wear now Better fabrics
Styles for fall wear All sizes

59.95 Coats & Suits . . 28.00
100% wool gabardine Finely tailored
100% wool covert All colors
100% wool crepes All sizes

Sweaters and Blouses

100% Wool Sweaters Reg. to 4.95 2.00
100% Wool Sweaters Reg. to 7.95 3.00
Better Blouses Reg. to 4.95 2.00
Better Blouses Reg. to 6.95 3.00

Pedal Pushers Reg. to 4.95 3.00
Chenille Robes Reg. to 14.95 5.00
100% Wool Skirts 1/2 off
Play Clothes 1/2 off

EARLY BIRD SPECIALS

LIMITED QUANTITIES

Short Lines Odds and Ends On Sale 9:30 A. M. Until Sold Out!

76 ONLY! Reg. 79c Head Scarfs 5c

27 ONLY! Reg. 6.95 Beach Coats 1.00

289 PAIRS! Reg. 1.08 Rayon Hose 59c
2 Pcs. \$1.00

12 ONLY! Reg. 7.95 Trench Coats 1.00

46 ONLY! Reg. 1.29 Jersey Dickies 10c

104 ONLY! Reg. 4.95 Sheer Dickies 77c
Cotton and Rayon Dressy and Sport

60 ONLY! Reg. to 5.95 Sport Skirts 1.00

72 ONLY! Reg. to 9.95 Cotton and Rayon Robes 3.66

13 ONLY! Reg. to 16.50 Dobbie and Other National Brands Hats 2.00

39 ONLY! Reg. 2.95 Hand Bags 79c

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