

centennial year of the establishment of the United States Department of Agriculture:

NOW, THEREFORE, I, JOHN F. KENNEDY, President of the United States of America, do hereby designate the year 1962 as United States Department of Agriculture Centennial Year; and I request the Department of Agriculture to plan and to participate in appropriate activities recognizing the anniversary to the end that the centennial may serve as an occasion to commemorate the contributions of agriculture to the health and welfare of every citizen, to the national well-being, and to the development of emerging nations.

I also request that, in its centennial observances, the Department of Agriculture cooperate with Land-Grant universities and colleges in recognition of a century of mutually beneficial cooperative relationships, and with other appropriate organizations and individuals.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Seal of the United States of America to be affixed.

DONE at the City of Washington this twenty-fifth day of August in the year of our Lord nineteen hundred and sixty-one, and of the Independence of the United States of America the one hundred and eighty-sixth.

JOHN F. KENNEDY

## Future Farmers Now Future Teachers



These former Arizona Future Farmers, now seniors in Agricultural Education at the University of Arizona, will soon become qualified teachers of agriculture.

Six of these men recently completed their first phase of student teaching, and two did student teaching last year. Left to right: Clayton Lambeth from Casa Grande teaching at Amphitheater, where William F. Hendrix is supervising teacher; Gordon Elliott from Douglas completed student teaching at Chandler under direction of Paul Vance, supervising teacher; Charles Van Meter from Glendale completed student teaching at Tolleson, where R. Clair

Decker was his supervising teacher; Pat English from Douglas teaching at Coolidge under direction of Cy Henry and John Mayfield, supervising teachers.

Robert Sotomayor from Amphitheater teaching at Douglas, directed by the veteran Frank Adams, supervising teacher; Carnell Sipes from Coolidge teaching at Benson, Vincent Salmon supervising teacher; Stuart Anderson from Agua Fria teaching at Tolleson; and Richard Rabago from Douglas teaching at Casa Grande where Jerry Busby and Max Huff are supervising teachers.

Anderson, Lambeth and Sotomayor are former state FFA officers and the others were members and leaders in FFA in their respective high schools.

## Strontium Uptake Study is Under Way

This university's Department of Agricultural Chemistry and Soils, which has been aided in its research studies by frequent grants-in-aid from the Atomic Energy Commission, now is initiating research under an AEC contract for a study of "The uptake of strontium by various type crops, and factors affecting uptake and translocation of strontium and calcium native to soil."

Dr. W. H. Fuller, department head, explains that the over all objective of this contract is "to learn as much as possible regarding (1) the behavior of radioactive strontium as a fallout contaminant in soils and (2) methods for controlling the uptake of radiostrontium contamination into food plants.

"This research," he notes, "is ultimately aimed at controlling the entry of the long-life radioactive atom into the human food chain."

The immediate specific objective of the research this year is to determine the behavior of calcium and strontium with respect to its absorption by plants from native soil sources and compounds of different chemical and physical characteristics.

Radiostrontium is one of the most biologically hazardous products of nuclear fission because it is absorbed by plants and enters the food chain as readily as other ions with which it competes, such as calcium. The plant does not distinguish between calcium and strontium in its nutrition.

Since soils in arid and semiarid regions contain abundant supplies of calcium not only as free salts, but on the soil colloid in the exchange complex, calcium becomes an important element in the absorption and translocation of radiostrontium that might contaminate agricultural soils.

The research undertaken in this project will reveal the factors controlling radiostrontium uptake and the effect of various forms of calcium on strontium uptake by plants. The research will determine the movement of radiostrontium in soils and the factors affecting this movement, as well as rate of movement as influenced by the presence of various sources of calcium. An attempt will be made to determine the factors controlling the fixation of radiostrontium in soils in a position unavailable to plants.

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