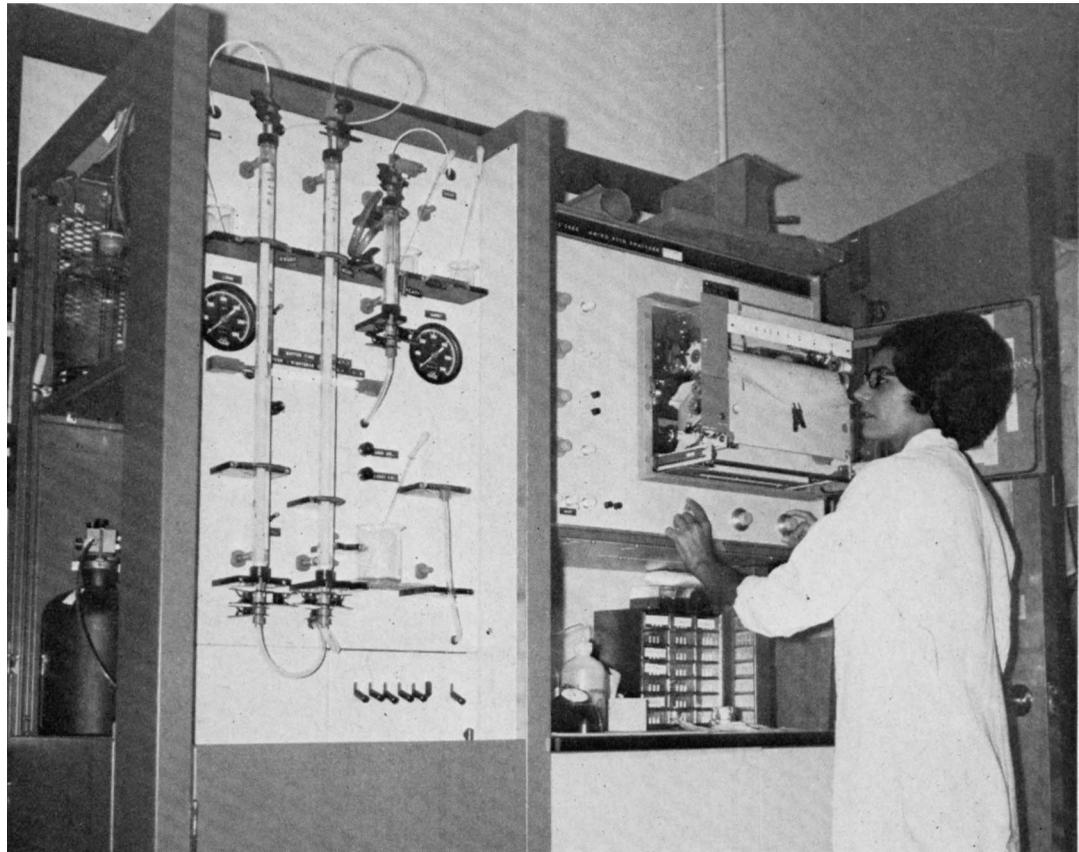


THE AMINO ACID ANALYZER shown in photograph to right is one of several such new research tools available in recent years to University agricultural researchers. This equipment is shown in use in the Department of Plant Pathology laboratory at Riverside. The analyzer separates complex mixtures of amino acids, giving characteristic elution patterns under carefully controlled conditions, and allowing identification of the individual amino acids making up a protein. The instrument may also be used to identify the amino acids exuded from the roots of plants. Such analyses, formerly done by hand and requiring days, are now done routinely in hours, with greater accuracy, by the analyzer. A recent use at Riverside has been in virus research. Different strains of plant pathogenic viruses have been identified by analysis of the amino acids of the protein coating of the virus.

# AMINO ACID ANALYZER

*University of California, Riverside*



## CALIFORNIA AGRICULTURE

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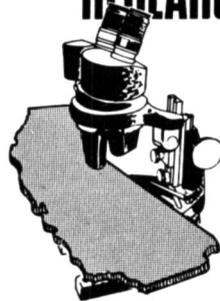
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## RESEARCH PREVIEWS



A continuing program of research in many aspects of agriculture is carried on at University campuses, field stations, leased areas, and many temporary plots loaned by cooperating landowners throughout the state. Listed below are some of the projects currently under way, but on which no formal progress reports can yet be made.

### REDUCING POLLUTION

There is a distinct possibility that stream pollution can be reduced to a considerable extent by substituting  $N_2O_4$  for  $Cl_2$  in the bleaching process during paper making. The new technique was

developed by researchers at the Forest Products Laboratory, in Richmond, California.

### EFFECTS OF ROOTSTOCKS ON WINE QUALITY

Viticulturists at Davis now believe that rootstocks affect wine composition and quality more than had previously been realized. Studies to prove or disprove this belief are being expanded.

### MORE SUGAR IN SHADE-GROWN GRAPES?

Viticulturists at Davis have found, to their surprise, that some grapes grown in the shade had higher sugar content than those grown in the sun. Artificial vineyard shading experiments are being conducted with wine grapes.