

UNIVERSITY OF CALIFORNIA
AGRICULTURAL EXTENSION SERVICE

DATE: April 17, 1969

Davis, California 95616

TO: A. L. Brown
T. E. Kearney
T. Lyons (T. S. Torngren)
V. Marble
E. F. Nourse
J. D. Prato
J. Quick
R. L. Sailsbery
J. D. Smith

FROM: B. A. Krantz
Extension Soils Specialist

RE: Calibration of Nitrogen Tests for Corn Sorghum.

You will recall that at our February 13 discussion of plant analysis on corn, the analyses were so fragmentary and variable that we felt that greenhouse and field studies should be set up to obtain better calibrations. Following this, Lloyd Brown, Jim Quick and I designed a greenhouse experiment. Lloyd set this up and planted it on March 11.

I am enclosing a copy of an experimental outline for the greenhouse study and am also sending copies of it to the farm advisors listed below so that they will know what is going on. The plants are growing well; we made our first sampling on April 8. Whenever any of you are on the campus, possibly on Picnic Day, or later, please drop by so we can show you the experiments.

I am sure all of you are well acquainted with the diphenylamine test. The Bray powder test was developed by Dr. Bray at the University of Illinois some time ago. It is sometimes referred to as the Alpha-Naphthylamine test. The distinct advantage of Bray nitrate powder test is that the powder is not corrosive. As you know the diphenylamine is dissolved in concentrated sulfuric acid which can create problems. Another advantage of the Bray powder test is that the color does not disappear as readily as with the diphenylamine. Some of the disadvantages of the Bray nitrate powder are that it must be stored in a blackened bottle as the alpha-naphthylamine is affected by light, also it is a little bit more difficult to apply the powder and get the juice and the powder to react. Later on we will supply all of you with bottles of the powder and complete instructions for its use.

Sincerely yours,

BAK:mn

Enclosure - Also Data Sheet for Liquid Zinc Sulphate.

cc: R. M. Barnes	C. E. Johnson	W. E. Pendery
R. S. Baskett	W. C. Lusk	W. R. Sheesley
~~C. C. Conley~~	O. D. McCutcheon	E. E. Stevenson

CO-OPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS,
U.S. Department of Agriculture and University of California co-operating.