

689 53
S 707
1953



Southern Weed Conference
Sixth Proceedings
1953

NEW ORLEANS, LOUISIANA
January 12-13, 1953

PUBLIC SUPPORT FOR AGRICULTURAL RESEARCH

D. A. Hinkle, Head
Department of Agronomy
University of Arkansas

I want to take this opportunity to extend a hearty welcome to all of you to this, the 6th Annual Southern Weed Conference. I feel all will agree with me that your program chairman has arranged an outstanding program for today and tomorrow. We hope all of you will go away from this conference with a feeling that it was the best we have ever had.

According to our program, I am scheduled to deliver before you a thirty minute welcoming address. It is not my intent to take thirty minutes to tell you that you are welcome here at this conference. In thirty minutes I probably could get around to each individual and tell him how happy we are he is here. But rather I'll just say again on behalf of all the officers and committee chairmen of the Southern Weed Conference, that regardless of whomever you represent--industry, state experiment station, extension service, U. S. Department of Agriculture, or regulatory service--you are welcome at this conference, and we are glad you are here.

In the remaining time that has been allotted to me, I want to talk to you about a situation which has disturbed me for some time. Furthermore, I believe this situation also alarms other agricultural research workers, irrespective of their specific field of research.

I refer to the obvious lack of public support for agricultural research. To anyone who is acquainted with the many benefits that have accrued from such research, it seems almost unbelievable that the American public would have to be sold on its value. The role of research in the welfare of this country is so obvious to us, the research workers. We know, for example, that without past research 16 percent of our population today could not be producing all the food, fiber and other raw materials needed to feed and clothe our 150 million people. Few people realize that the increase in the value of the 1952 corn crop resulting from planting hybrid corn would more than repay the federal and state governments for all the money that has been spent on agricultural research. We should not have to glamorize agricultural research in order to prove its worth. On a dollar-and-cents basis it has returned to the Nation many times its cost.

It would seem that, on the basis of the many wonderful accomplishments, public support for agricultural research through the National Congress and the state legislatures should be readily forthcoming. Such has not been the case during the last ten or twelve years. Apparently the agricultural research worker has been so involved with his test-tubes, his greenhouse flats, and his well-randomized and replicated field plots that he has overlooked the necessity of keeping the public properly informed.

We must never forget that the public is now 84 percent urban. It is easy for the city dweller to forget that the high standard of living he enjoys is in large part due to past research in agriculture.

In setting up the Department of Agriculture and the Land Grant College system our forefathers realized better than most people do today that farmers by themselves are not in a position to provide their own research. The federal government's responsibility and its method of cooperation with the states in agricultural research has been clearly defined by legislation passed by the Congress back in the 19th century and in the early years of the 20th century. In this legislation, the field of agricultural research was set apart as one of those few peculiar areas in which the federal and state governments could make a contribution. Our system has worked so well, and our accomplishments have been so truly remarkable, that many foreign countries have attempted to copy our system.

Our agricultural economy cannot continue to exist indefinitely on the basis of past research. Our experiment stations must continue to pour out new research findings--both practical and basic--in an ever increasing volume. However, in the 12 year period since 1940 someone has forgotten to sell the great value of agricultural research to those who hold the purse strings. During this time our national economy has gone through the greatest period of growth in its history. Total production of almost everything has increased by a third or more. Our population has increased by 23 million people, but the number of people on our farms has actually decreased by six million. This shift from rural to urban occupations has meant that we have had to feed and clothe 29 million more people. Our farm people have been able to do this remarkably well because the efficiency of production for each farm worker has greatly increased as a result of research. The question to be raised is: Have appropriations for agricultural research kept pace with this expansion in our economy? Let's look at the record.

Federal appropriations for agricultural research in 1940 were about 29 million dollars. In 1952 appropriations were about 56 million dollars. Everyone knows that the buying power of the dollar is only about 56 percent of what it was in 1940. Therefore, the 56 million dollars appropriated in 1952 represents about 31 million in terms of 1940 dollars. Thus, the federal support for research in agriculture in 1952 was only very little more than in 1940, despite the great expansion in our economy during this period. It is not so much the matter of the size of the budget for the Department of Agriculture; rather it is the matter of proper emphasis. It seems inconceivable that a department which originally began as a research agency would now find itself spending only about 4 percent of its budget on research. There are many who feel it is time for a change--in emphasis.

During the twelve-year period from 1940 to 1951 the state appropriations for agricultural research have increased in a much more realistic manner. In 1940 the appropriations made by all state governments were

12.6 million dollars the income two-fold.

Industry's look at the figure we have the amount Louisiana, Mississippi, June 30, 1951. government, state industry, etc. sale of product puted the total.

State

Louisiana
Mississippi
Oklahoma
Arkansas

On the basis of farm income, better support Arkansas. But portion being

It cannot be under-powered financial support. It is compelled to labels, fill similar jobs be done by a situations e years of tra available. I dollars would

How are research pr the America

12.6 million dollars, and in 1951 they were 51 million. Thus, in actual dollars the increase has been four-fold, and in terms of buying power, two-fold.

Industry spends for research an average of \$2.50 for each \$100.00 of gross income. How does agriculture compare with this figure? Let's look at the figures for four states in this immediate area. In the table we have the amount of funds available to the experiment stations in Louisiana, Mississippi, Oklahoma, and Arkansas for the fiscal year ending June 30, 1951. These are the total funds available from the federal government, state appropriations, sale of products, grants-in-aid from industry, etc. In a second column we have the gross farm income from sale of products in the four states, and in the last column we have computed the total research funds available in terms of gross farm income.

State	Funds Available for A.E.S.	Gross Farm Income	Funds Available Per \$100 of Gross Income
Louisiana	\$1,510,746	\$319,993,000	\$0.47
Mississippi	1,861,686	477,742,000	0.39
Oklahoma	1,525,686	564,597,000	0.27
Arkansas	1,017,455	512,098,000	0.20

On the basis of research funds available per 100 dollars of gross farm income, it can be seen that agricultural research is relatively better supported in Louisiana and Mississippi than in Oklahoma and Arkansas. But in no case do the figures anywhere near approach the proportion being spent by industry for research

It cannot be denied that the present agricultural research machine is under-powered and operating inefficiently because of inadequate financial support. For example, I have a number of highly skilled scientists in the Agronomy Department at the University of Arkansas who are compelled to spend considerable time doing routine tasks of marking labels, filling seed envelopes, running chemical analyses, and many similar jobs which are merely the mechanics of research and which could be done by any intelligent person at a helper's wage. I am sure similar situations exist at other institutions. The "know how" resulting from years of training could be expanded several-fold if extra hands were available. In many cases the investment of an additional few thousand dollars would speed up the research output several times.

How are we going to get a really adequate, expanded agricultural research program? There is only one way to get it and that is to sell the American people on the need for such a program. It is a selling

job that has to be done. We will have to think of research results as a product—a product we have for sale. We know the product is needed by the American farmer and the nation as a whole. We know that money invested in it will pay handsome dividends. We must create a demand for it in the minds of the American public.

Most research workers are not good salesmen. I belong to a service club and quite frequently I am given tickets to sell for some show or entertainment to raise money for club activities. I would rather do anything than to try to sell those tickets. But as research workers, we must not hibernate in our laboratories or plots and assume our needs are going to be looked after by someone else.

Our selling job will have to be a year-round program—and not carried on just before the Legislature or the Congress convenes. We must have a truly adequate program. It is easier to sell an adequate program than a "watered-down" one. We will need the proper kinds of organizations to look after our research interests.

Probably the best type of organization at the state level is the Agricultural Council which represents all segments of the agricultural industry in the State. Without the guidance of such a council, it often happens that one farm organization finds itself fighting another for appropriations. At the national level much can and is being done by organizations such as the National Cotton Council and others to present the benefits of and need for agriculture research. Present indications point to more recognition for research by the Department of Agriculture under the new administration.

We realize that our standards of living will surely fall unless agriculture research is expanded. When we have sold John Q. Public on our product, more nearly adequate support will be forthcoming. All of us can aid this cause by constantly striving to keep the public informed of the benefits of agricultural research.

Experi
bamate (CIF
of dinitro-
Branch Expe
to present
sent in det
formance of

A. Experi

The pl
April 22.
fan-type no
press wheel
cides are p
acre. All
tivation of
from being m
periment 1 w
the un-hoed
ation from p
vation and s
dopended mor
ment applied
replicated f
on counts of
with four qu
a weed score
od for each
X 1, plus no
counts were
each plot.

B. Experi

This sm
tion of CIPC
The plots co
ted three tin
planting, wo
depth of 1/2
made after p
volume of sp
in extremely

- 1/ Agronomist
and Agric
Mississippi
- 2/ Agronomist
Stoneville

MINUTES OF THE BUSINESS MEETING

SOUTHERN WEED CONFERENCE

Jung Hotel, New Orleans, Louisiana
February 13, 1953

Dr. D. A. Hinkle, President, presiding.

President Hinkle discussed the Southern Weed Conference association with the S-18 Technical Committee. Last year the S-18 Technical Committee members were made Ex-officio members of the Southern Weed Conference. A letter was read from Dr. Randall J. Jones, administrative adviser to S-18, stating that the Committee of Nine (composed of Experiment Station Directors) requested that the S-18 Technical Committee remain as an independent organization. S. J. P. Chilton moved that we accept the suggestion of the Committee of Nine that the S-18 Technical Committee withdraw from the Southern Weed Conference as Ex-officio members. Seconded by V. S. Searcy. Motion carried.

President Hinkle stated that E. C. Tullis has consented to abstract the Southern Weed Conference Proceedings for Biological Abstracts. The Conference appreciates his contribution.

Dr. Hinkle reported that the Executive Committee has chosen January 11, 12, 13, 1954 and Memphis, Tennessee, as the time and place for the next conference.

E. G. Rodgers discussed the possibility of having commercial displays of chemicals and equipment. Further action was turned over to the Program Committee.

C. J. Waldron suggested that brush control was a very important phase of our work, and that perhaps more time on the program should be devoted to it.

Secretary-Treasurer's report given by G. C. Klingman

FINANCIAL STATEMENT
Southern Weed Conference
February 12, 1953

ASSETS

Cash carried forward from 1952	\$160.66
Total receipts at 1952 conference	412.00
Cash from sale of Proceedings after 1952 conference	370.50
<hr/>	
Total assets	\$943.16

EXPENDITURES

1. Cost of producing 5th Proceedings and stenographic assistance	\$371.78
2. Stamps	52.00
3. Plastic Identification badges (200)	10.98
4. Printing programs	45.92
<hr/>	
Total expenditures	\$480.75
<hr/>	
Total cash on hand	\$462.41

Audited and approved by:
W. B. Albert
Leonard Lett

Respectfully submitted
Glenn C. Klingman
Secretary-Treasurer

W. B.
Seconded b

W. B.
mittee had
would be a

Pres
Vice-
Secre
Janu
Membe

Nomin

S. J.
Tullis. M

Hoyt
ing member
year's exp
certain it

E. C.
of the Ark
(Circular
Department
Legislation

F. W.
Lovvorn ha
for the st

F. W.
Factors Up
doing rese
factors, e
graphs, so
studies.
collecting
fluence of
sufficient
phase of h

W. C.
as Editor
February 1
sent to Dr

Presi
Weed Confer
holding the
Central We
Motion carr

W. B. Albert moved that the Treasurer's report be accepted as presented. Seconded by F. W. Snyder. Motion carried.

W. B. Albert reported for the nominating committee, stating that the committee had selected only one name for the various offices and that nominations would be accepted from the floor. Those nominated were:

President	W. B. Ennis, Jr.
Vice-President	W. C. Shaw
Secretary-Treasurer (to take office January 11, 1954)	E. G. Rodgers
Members at large to Executive Council	Mark Weed C. E. Fisher Barrett Collier

Nominations opened to the floor.

S. J. P. Chilton moved that the nominations be closed. Seconded by E. C. Tullis. Motion carried. Unanimous ballot cast for the officers named above.

Hoyt Nation, Chairman of Public Relations, discussed the need for sustaining memberships. While there was an increase in the treasury this year, the year's expenses were not a reflection of all the expenses of the society and certain items of expense did not occur this year that will likely be encountered.

E. C. Tullis, Chairman of the Legislative Committee, reported that copies of the Arkansas state law on "Sale and Use of 2,4-D and Other Economic Poisons" (Circular 9 of the Arkansas State Plant Board) were furnished to the Texas State Department of Agriculture for use in the revision of the Texas State Law and Legislations pertaining to the sale and use of hormone-type herbicides.

F. W. Snyder, Chairman of the Terminology Committee, reported that Dr. Lovvorn has contacted all of the Weed Conferences seeking ideas and procedures for the standardization of terminology in weed control research.

F. W. Snyder, Chairman of the Committee on Influence of Environmental Factors Upon Herbicidal Action, reported that this committee urges every worker doing research on herbicides to collect all possible data on environmental factors, especially the climatic factors, through greater use of hygrothermographs, soil thermographs, rain gages, etc. in both field and greenhouse studies. This committee believes it may function best as a clearing house, collecting and compiling data and observations of research workers on the influence of environmental factors upon herbicidal action. It is hoped that sufficient information will be available to issue an annual report on this phase of herbicide research.

W. C. Shaw reported that Dr. R. D. Sweet, Cornell University, will continue as Editor of the publication "Weeds". The publication had a cash balance on February 1, 1953 of approximately \$750.00. Subscription renewals should be sent to Dr. Lovvorn.

President Hinkle discussed the time and location of the First National Weed Conference meeting. Hoyt Nation moved that we go on record as favoring holding the National meeting just prior to and in the same city as the North Central Weed Control Conference for the year 1953. Seconded by W. B. Albert. Motion carried.

Hoyt Nation moved that we send an official delegate to the National Weed Conference and that his expenses be paid by the Southern Weed Conference. Seconded by Sam Fretberg. Motion carried.

S. J. P. Chilton moved that the secretary write to B. B. Jones of the Louisiana Agricultural Extension Service to thank him for arranging for the hotel accommodations and also to Emmett J. Beiger of the Jung Hotel for its hospitality and fine accommodations.

Meeting adjourned.

Glenn C. Klingman
Secretary-Treasurer

Akin, W.
Albert,
Antogmin
Ashbaugh
Bailey,
Balk, W.
Bailey,
Bernes,
Texas
Barrier,
Barrons,
Bestian,
Beasley,
Beck, W.
Böhrens,
Berggren,
Bickerto
Houston
Bogen, J.
Bogle, J.
Bogle, R.
Bovier,
Bramlett
Texas
Brennes,
Brown, J.
Brown, L.
Burns, E.
Tenn.
Butler,
Byrd, Fe
Calhoun,
Centwell
Chappell
Chilton,
Chisholm
Collier,
Colmer,
Condron,
Texas.
Cook, F.
Core, G.
Cottier,
Coward,
Cox, Tho
Crein, H
Cresap,
Creasy,
Wilmington
Dance, C
Derley,
Island
Davis, D
Auburn,