REPORT

Western Society of Weed Science

Las Vegas, Nevada

February 10, 1969

WESTERN SOCIETY OF WEED SCIENCE

Caesars Palace Hotel

Las Vegas, Nevada

Minutes of the Business Meeting – February 10, 1969

The meeting convened at 11:10 a.m. with President Hamilton's suggestion that the reading of Business Meeting Minutes from March 21, 1968 be dispensed with considering the short time allotted. Motion from the floor supported this suggestion. Seconded by E. E. Schweizer. Passed unanimously.

Treasurer's Report – J. L. Anderson – Business Manager

Report indicated sound financial condition. Reserve funds in excess of required operating capitol were adequate to allow purchase of savings certificates. Savings now total \$1800.00. The WSWS qualifies and has filed for non-profit organization status.

Finance Committee Report – E. E. Schweizer, Chairman – J. Whitworth, D. W. Ragsdale

Schweizer reported the financial statement to be in good order and well documented. Acceptance of the Treasurer's Report was recommended.

The Committee further recommended (1) Business Manager authority to purchase savings certificates when the general cash fund exceeds \$1,000.00 and (2) that such certificates be redeemable on joint signature by the Business Manager and the Society President.

R. H. Schieferstein moved that the Treasury and Finance Committee Reports be accepted as presented. Second from the floor. Passed unanimously.

Noxious Weed Contingency Fund Committee — J. W. Koehler, Chairman, L. C.Erickson, S. W. Strew

Investigation results relative to Resolution 6, 1968, were reported by J. W. Koehler. The following determinations were derived:

- a. Weeds do not come under the provisions of the existing Pest Contingency Fund Program.
- b. Funds amounting to \$1.5 million annually should be established as a Noxious Weed Control Contingency Fund in the United States Department of Agriculture.
- The National Association of State Departments of Agriculture passed a resolution urging enactment of a Federal Noxious Weed Control Law and the establishment of a Noxious Weed Control Contingency Fund in the U.S.D.S., to be maintained at \$1.5 million annually. They further resolved that this fund be administered in a manner similar to the Plant Pest Control Contingency Fund.

The Committee recommended WSWS endorsement of NASDA 1966 resolution and further resolve that the Secretary of Agriculture take immediate action to amend the Organic Act of the U.S.D.S., the Plant Pest Control Act and the Plant Quarantine Act to include noxious weeds and their propagation parts.

Special note was made that Federal authority does not cover (1) the importation or interstate movement of noxious weeds, weed parts and seeds and (2) the importation or interstate movement of materials infested with noxious weeds and their propagation parts other than agricultural and vegetable seeds covered by the Federal Seed Act.

R. H. Schieferstein moved that WSWS support the committee recommendations. Second from the floor. Unanimously passed.

Weed Recognition and Education Committee -R. E. Higgins, Chairman, W. B. McHenry and P. E. Heikes

Higgins reported that a single, organized approach to obtain weed identification and education aids was not developed. The following possibilities were offered for consideration:

- 1. **Sources of Educational Aids.** Individual weed sheets can be purchased in quantity and specific control information added from the following:
- a. Colorado $-8\frac{1}{4} \times 11$ " -18 weed species in color and 10 in black and white. Colorado State University Attn: P. E. Heikes.
- b. Nebraska 6" x 9" 101 weeds in full color if order can be programmed with reproduction of Nebraska Weeds. Weed and Seed Division, Department of Agriculture or Service Press, Inc., Henderson, Nebraska.
- c. California and Washington, Weed recognition publications being developed.
- d. Oregon Oregon State University has developed individual weed recognition and control sheets.

2. Implementation

- a. Cooperative financial assistance from industry. Example Colorado State University and Adolph Coors Company.
- b. Multi-State Cooperation to obtain large quantity discounts. Cooperative structure to be worked out by Extension Service Directors and Weed Specialists.

Further study of weed identification and education aspects in committee was recommended by this Committee

Research Committee Report – D. E. Bayer, Chairman

Hurried preparation of the Research Progress Report as a result of temporary loss of one section in the mails, caused a minor error in Report assembly. Library copies will be corrected.

A brief report was offered by each section chairman.

Project 1 — **Perennial Herbaceous Weeds.** Meetings were conducted by P. E. Heikes in the absence of Louis Jensen and Clyde Elmore. Elmore is the new Chairman. Les Sonder is Chairman-Elect.

Discussion centered around current registration restrictions. Recommend future emphasis on follow up aspects of soil residual, crop influence, etc., rather than perennial control alone.

Project 2 – Herbaceous Range Weeds. Meeting conducted by Roger Scott. Eugene Cronin is the new Chairman; Bob Martin – Chairman-Elect.

Relative economics a problem in rangeland situations. Few products are registered for use. Poisonous weeds an important aspect.

Project 3 — Undesirable Woody Plants. Meeting conducted by Jack Warren. Lyle Green is the new Chairman; Howard Morton, Chairman-Elect.

There is need for more information relative to wide range effects of herbicides on the environment. Must consider total effect. Industry must maintain close liason with State and Federal Agencies to determine label merit and requirements.

Project 4 – Weeds in Horticultural Crops. Meeting conducted by W. L. Anliker, J. R. McKinley is the new Chairman; Art Lange – Chairman-Elect.

Discussion centered around factors effecting herbicide activation. It was noted that Texas and California were the only report contributors.

Project 5 — Weeds in Agronomic Crops. Meeting conducted by Gene Chamberlain. G. A. Lee is the new Chairman; Larry Slater — Chairman-Elect.

Considerable interest in sugarbeet weed control. Active interest in soil persistence of herbicides.

Project 6 – Aquatic and Ditchbank Weeds. Meeting conducted by V. F. Bruns. W. D. Boyle is the new Chairman; R. D. Comes – Chairman-Elect.

Primary interest in registration requirements and status of aquatic herbicides.

Project 7 — Chemical and Physiological Studies. Meeting conducted by R. H. Schieferstein, Tom Muzik is the new Chairman; E. E. Schweizer, Chairman-Elect.

Discussion centered around herbicide persistence and foliar uptake of herbicides as influenced by oil and other additives.

Nominations Committee Report and Election Results -R. A. Fosse, Chairman, W. A. Harvey and J. M. Hodgson.

R. A. Fosse presented the results of the balloting as directed by the Executive Committee. Officers elected by the Society are:

President-Elect — K. W. Dunster
Secretary — A. P. Appleby
Representative WSSA — K. C. Hamilton

Chairman-Elect - Research Section - Gary Lee

Chairman Elect – Extension & Regulatory Section – D. G. Swan

A tie vote for the office of Chairman-Elect, Research Section was decided by the Executive Committee.

Proposed Amendment – WSWS Constitution

President Hamilton introduced the amendment proposed by J. M. Hodgson relative to Article VI, Section 1 — Election of Officers. The proposed amendment provides for the selection of Society Officers by mail ballot.

A motion to accept the amendment by G. Crabtree and seconded by R. Higgins was passed unanimously.

Resolutions Committee Report – J. L. Fults, Chairman, W. D. Boyle and L. E. Warren

The Committee has reviewed all resolutions from members of the Society and offers the following resolutions for consideration and possible adoption by the Society and further moves that the Society Secretary send copies of adopted resolutions to appropriate agencies and/or individuals concerned.

Resolution No. 1:

Whereas, our Society officers, President K. C. Hamilton; Vice President Harold Alley; Secretary Ken Dunster; Representative to the Weed Science Society of America J. M. Hodgson; Director At Large R. N. Schieferstein; Chairman of the Research Section Dave Bayer; Chairman of Education and Regulatory Section Phil Martinelli; Treasurer-Business Manager J. L. Anderson, have conducted this meeting of the Society in an effective and pleasing manner.

Now, therefore, be it resolved that we express to them our appreciation and thanks for their services.

Resolution No. 2:

Whereas, the Western Society of Weed Science assembled in Las Vegas, Nevada on February 10, 1969, appreciates the opportunity to meet in Las Vegas, and,

Whereas, the local arrangements Committee, Dudley Zoller, Chairman, R. E. Higgins, have done an outstanding job.

Now, therefore be it resolved, that we express our appreciation and thanks for their services.

Resolution No. 3:

Whereas, this Society appreciates the leadership and assistance of the standing committees: Program Committee Harold Alley, Chairman, Dave Bayer, Phil Martinelli; Finance Committee Edward Schweizer, Chairman, Dan Ragsdale, J. W. Whitworth; Nomination Committee Dick Fosse, Chairman, Bill Harvey; Executive Committee K. C. Hamilton, Chairman, Harold Alley, Ken Dunster, Stanley Strew, Dave Bayer, Phil Martinelli; Resolutions Committee Jess Fults, Chairman, W. Dean Boyle, L. E. Warren.

Now therefores, be it resolved that we express to them our appreciation and thanks for there services.

Resolution No. 4:

Whereas, perennial noxious weeds, growing in crop and rangeland almost completely eliminate any crop production.

Whereas, small patches of perennial noxious weeds are most effectively and economically eliminated.

Whereas, small patches of perennial noxious weeds are the nurseries for future large infestations.

Whereas, it is unlawful in most states and all Weed and Pest Control Districts to allow perennial noxious weeds to flourish.

Whereas, small patches of perennial weeds are most effectively eliminated by the use of herbicides, such as 2,3,6-TBA, dicamba, fenac, the 1:2 mixture of picloram and 2,4,D and granular formulations of picloram and sodium chlorate.

Whereas, the Pesticides Regulation Division, ARS, USDA and/or the Food and Drug Administration, Dept. of H. E. W., have ruled that the above named herbicides should not be used on cropland, rangeland, pastureland, or hayland.

Whereas, perennial noxious weeds are common on cropland, rangeland, pastureland or hayland with potential of infesting many more acres of productive land.

Whereas, chemical damage that has occurred in cropping areas has largely been due to misuse, the restrictions limit the effectiveness of programs where proper use is practiced.

Whereas, the percentage crops damaged by herbicides are very small, economic wise, as compared to the economic damage caused by flourishing weeds.

Whereas, there will be very little crop grown in treated areas until the herbicide has dissipated from the soil, thus minimum chance of harvesting herbicide residue, either by grazing animals or harvesting machinery.

Whereas, there can be little danger to man or animals from residues of any of the above restricted herbicides applied at rates necessary to kill perennial noxious weeds.

NOW, THEREFORE, BE IT RESOLVED, that we request and urge the Pesticide Regulation Division of the Agricultural Research Service of the United States Department of Agriculture and the Food and Drug Administration of the United States Department of Health, Education and Welfare allow the use of dicamba, fenac, 2, 3, 6-TBA, picloram 2,4-D mix and granular picloram (except in irrigated areas where beans, potatoes or sugarbeets are grown in the crop rotation) for patch treatment on areas that do not exceed one acre in size or several such areas whose total area does not exceed 5% of the acreage in the field for the control of noxious weeds in cropland, pastureland, rangeland or hayland.

Motion and second from the floor to adopt Resolutions 1, 2, 3 and 5. Unanimously passed.

The Committee recommended that Resolution No. 4 be tabled for further study. Considerable discussion followed. A question was raised by Jack Warren concerning treatment extent stipulations. Schieferstein felt the entire proposal needed additional review.

H. P. Alley moved, seconded by P. E. Heikes, to forward Resolution No. 4 as written to personnel responsible for herbicide registration in Washington, D. C.

Motion amended to include appointment of a study group to review and revise the proposal. Motion carried by a margin of three votes.

Resolution No. 5:

Whereas, it is easier to control new weeds when their introduction has recently occurred.

NOW, THEREFORE, BE IT RESOLVED, that all weed control workers who positively identify new weeds, report them immediately to regulatory, research and administrative agencies.

Motion amended to include appointment of a study group to further review the situation and consider possible revisions for future proposals. Motion carried by a margin of 3 votes:

Honorary Membership

Plaques were awarded to Lambert C. Erickson and Jesse M. Hodgson for meritorious service in the field of Weed Science. As honorary members they will have all of the privileges of active members and receive publications of the Society.

NEW BUSINESS

Local Arrangement Committee – 1970 – Harry Agamalian, Chairman, D. E. Bayer and Art Lange

The Sacramento Inn, Sacramento, California has been selected as the site of the 1970 meeting of WSWS. Meetings will be held March 17, 18 and 19.

President Hamilton offered commendations and thanks to standing committees and the Society Membership for support received. The meeting was turned over to incoming President H. P. Alley who adjourned the WSWA Business Meeting at 12:05 a.m.

K. W. DUNSTER Secretary – WSWS

KWD:wg

FINANCIAL STATEMENT OF WESTERN SOCIETY OF WEED SCIENCE

March 10, 1968 - February 10, 1969

Income

| On hand, March 10, 1968 Registration, Boise Meeting (237 @ \$2.00) Luncheon Tickets — 140 @ \$2.25 1968 Research Progress Reports 1968 Proceedings Sale of Old Publications Payment of outstanding accounts Dues, persons not attending meetings Sale of WSSA handbook | \$1,970.25 474.00 315.00 917.00 891.00 105.00 24.00 65.00 96.00 |
|--|---|
| Interest on savings | 45.00 |
| | \$4,902.25 |
| Expenditures | |
| Boise meeting incidental expenses Boise Luncheon 1968 Research Progress Report 1968 Proceedings Office Supplies Postage (Mailings to membership \$61.00) Las Vegas Meeting expenses 1969 Research Progress Report (partial cost) Plaques for honorary members Refunds Gratis Publications (37) Payment WSSA handbook | \$ 65.62 315.00 530.73 563.00 100.75 194.00 10.00 77.30 105.00 6.00 96.00 |
| Liquid Assets | |
| Savings (\$1800.00) Checking (988.85) Cash on hand (50.00) | \$2,838.85 |
| Accounts Receivable | 45.50 |
| Potential Net Worth | |
| Old publications on hand (583) | \$2,884.35 |

AUDIT OF THE FINANCIAL STATUS OF THE WESTERN SOCIETY OF WEED SCIENCE

The financial records of the WSWS for period covering March 11, 1968, to February 9, 1969, were reviewed by the Finance Committee on February 9, 1969. A financial statement was prepared and submitted by LaMar Anderson, Society Business Manager. It was found to be properly documented and in good order.

ASSETS

| Checking | \$ | 988.85 |
|---------------------|-----|---------|
| Savings | 1 | ,800.00 |
| Cash on hand | | 50.00 |
| | \$2 | ,838.85 |
| Accounts Receivable | | 45.50 |
| Net Worth | 2 | ,884.35 |

The WSWS finances in this audit period showed a net profit of \$868.60.

Therefore, the Committee recommends that the financial report be accepted as submitted by the Business Manager.

The Finance Committee also discussed the purchase of savings certificates and made these recommendations at the WSWS business meeting:

- 1. The Business Manager should have the authority to purchase savings certificates at any time the balance in the checking account is in excess of \$1,000.
- 2. Savings certificates should be redeemable on the signature of either the Business Manager or the current president.

Edward E. Schweizer, Chairman Dan W. Ragsdale J. Wayne Whitworth

PROPOSED CHANGE TO WSWS CONSTITUTION

The following change to the WSWS Constitution has been proposed to clarify our procedures of nominating and electing officers. Please consider the proposed change so that it may be discussed and voted on during the business meeting at Las Vegas.

Present terminology

Article VI — Election of Officers. Section 1. The Nominating Committee shall be appointed by the President, with the advice and consent of the Executive Committee. They shall present their nominations for each office to be filled at the annual meeting. No members name shall be placed in nomination by the Nominating Committee without his prior consent. All candidates for office shall be selected from the Society membership and shall be elected by the majority of the members voting.

Suggested terminology*

Article VI – Election of Officers Section 1. The Nominating Committee shall be appointed by the President, with the advice and consent of the Executive Committee. They shall present at least two nominees for each office before the annual meeting as directed by the President. Balloting of members for their choice of the nominees shall occur as directed by the Executive Committee. No members name shall be placed in nomination by the Nominating Committee without his consent. All candidates for office shall be selected from the Society Membership as shown on the latest registration list and shall be elected by a majority of the members voting.

^{*}New material is underlined.

OFFICERS WESTERN SOCIETY OF WEED SCIENCE 1969–1970

- President: H. P. Alley, Plant Science Division, University of Wyoming, Laramie, Wyoming
- President-Elect: K. W. Dunster, 221 Sierra Vista Drive, Loveland, Colorado 80537
- Secretary: A. P. Appleby, Farm Crops Department, Oregon State University, Corvallis, Oregon 97331
- Chairman Research Section: J. H. Dawson, Irrigation Experiment Station, Prosser, Washington 99350
- Chairman-Elect Research Section: G. A. Lee, Plant Science Division, University of Wyoming, Laramie, Wyoming 82070
- Chairman Extension and Regulatory Section: Rex Warren, Oregon State University, Corvallis, Oregon 97331
- Chairman-Elect Extension and Regulatory Section: D. G. Swan, 173 Johnson Hall, Washington State University, Pullman, Washington 99163
- Immediate Past President: K. C. Hamilton, Department of Agronomy, University of Arizona, Tucson, Arizona 85721
- Representative WSSA: K. C. Hamilton
- Treasurer-Business Manager: J. L. Anderson, Plant Science Division, Utah State University, Logan, Utah 84321
- Member at Large: To be selected

STANDING COMMITTEES

Finance Committee: J. W. Whitworth, Chairman; E. E. Schweizer, one to be appointed.

Resolutions Committee: L. E. Warren, Chairman; J. L. Fults, one to be appointed.

Nominating Committee: J. M. Hodgson, Chairman; R. A. Fosse, one to be appointed.

Local Arrangements Committee: Harry Agamalian, Chairman; D. E. Bayer, Art Lange

Program Committee: K. W. Dunster, Chairman; J. H. Dawson, Rex Warren.

CHAIRMAN AND CHAIRMAN-ELECT – PROJECTS 1 THROUGH 7

Project 1 – Perennial Herbaceous Weeds

Chairman – Clyde Elmore, University of California, Botany Department, Davis, California

Chairman Elect — Les Sonder, Plant Science Division, Montana State University, Bozeman, Montana 59715

Project 2 – Herbaceous Range Weeds

Chairman – Eugene Cronin, USDA-ARS, Botany Department, Utah State University, Logan, Utah 84321

Chairman-Elect – R. D. Martin, Bureau of Land Management, P. O. Box 3861, Portland, Oregon 97208

Project 3 – Undesirable Woody Plants

Chairman – Lisle Green, Forest Service Lab., P. O. Box 5007, Riverside, California

Chairman-Elect - Howard Morton

Project 4 – Weeds in Horticultural Crops

Chairman – J. R. McKinley, 611 East 29th Avenue, Albany, Oregon 97321

Chairman-Elect – Art Lange, Horticultural Department, University of California, Riverside, California 92502

Project 5 – Weeds in Agronomic Crops

Chairman – G. A. Lee, Plant Science Division, University of Wyoming, Laramie, Wyoming

Chairman-Elect — Larry Slater

Project 6 – Aquatic and Ditchbank Weeds

Chairman – W. D. Boyle, Bureau of Reclamation, P. O. Box 8008, Boise, Idaho 83701

Chairman-Elect – R. D. Comes, USDA-ARS, Irrigation Agricultural Research Station, Prosser, Washington 99350

Project 7 — Chemical and Physiological Studies

 $\begin{array}{c} Chairman-T.\ J.\ Muzik,\ Department\ of\ Agronomy,\ Washington\ State\ University,\ Pullman,\\ Washington\ 99163 \end{array}$

Chairman-Elect — E. E. Schweizer, USDA-ARS, Crops Research Center, Colorado State University, Ft. Collins, Colorado 80521

REPORT OF WSWS REPRESENTATIVE TO WSSA, 1969

The Executive Committee of Weed Science Society of America met in Las Vegas,

Nevada on February 10 and 13, 1969. During the first half-day session the WSWS representative was J. Hodgson.

The Financial Report by F. W. Slife indicated a need for increasing income because of rising costs of publishing Weed Science. It was decided to increase WSSA membership from \$12.00 to \$15.00 per year and increase page charges to \$20.00 per page.

The Editors Report by Earl Rodgers indicated an increased number of manuscripts submitted. The time lag between submission of papers and publication was discussed and it was decided to publish six issues of Weed Science per year starting in 1970.

Many changes in the WSSA Constitution were discussed and will be sent to the membership for their approval.

The next meeting of WSSA is February 3, 4, and 5, 1970 at the Queen Elizabeth Hotel, Montreal, Canada. In 1971 WSSA will meet in Dallas, Texas and in 1972 in St. Louis, Missouri.

The full report of the Business Meeting of WSSA will be published in Weed Science.

K. C. Hamilton

REGISTRATION LIST

Western Society of Weed Science Las Vegas, Nevada — February 10-13, 1969

Walter W. Abramitis 1315 – 59th St. Downers Grove, Illinois 60515

Harry Agamalian 118 Wilgart Way Salinas, California 93901

Chuma S. O. Agbakoba Washington State University Agronomy Department Pullman, Washington 99163

Frank B. Aguon Agana, Guam 96910

Ali A. Akhavein Department of Farm Crops Oregon State University Corvallis, Oregon 97331

W. E. Albeke 1500 N. E. Irving St. Portland, Oregon 97232

Harold Alley Plant Science Division University of Wyoming Laramie, Wyoming 82070

W. L. Anliker 811 S. E. 97th Ave. Vancouver, Washington 98664

J. LaMar Anderson
Department of Plant Science
Utah State University
Logan, Utah 84321

Arnold P. Appleby Farm Crops Department Oregon State University Corvallis, Oregon 97331

H. Fred Arle 4207 E. Broadway Phoenix Arizona 85040 Duane Arneklev 811 Kilbirnie Ct. Sunnyvale, California 94087

Floyd M. Ashton Department of Botany University of California Davis, California 95616

David G. Austin 332 Bedford Pl. Thousand Oaks, California 91360

D. E. Baldridge Huntley Experiment Station Huntley, Montana 59037

John D. Bandeen Crop Science Department University of Guelph Guelph, Ontario Canada

Paul G. Bartels
Department of Biol. Science
University of Arizona
Tucson, Arizona 85721

Thomas R. Bartley Bureau of Reclamation Denver Federal Center Denver, Colorado 80225

Fred H. Bauermeister CIBA Agrochemical Company 135 Progress Parkway Suite 106 Hazelwood, Missouri 63042

Joseph C. Bauman 1733 Adunis Way Sacramento, California 95825

David E. Bayer Botany Department University of California Davis, California 95616 C. A. Beasley 820 Mission St. South Pasadena, California 91030

Bert L. Bohmont Colorado State University Ft. Collins, Colorado 80521

R. Charles Bowers 906 'F' Street Davis, California 95616

L. W. Bowser c/o Bureau of Reclamation Boulder City, Nevada 89005

W. Dean Boyle P. O. Box 8008 Bureau of Reclamation Boise, Idaho 83707

Art Bronson 615 S. Flower, Rm 301 Atlantic Richfield Los Angeles, California 90054

V. F. Bruns Irr. Ag. Res. & Ext. Center Prosser, Washington 99350

Larry C. Burrill Farm Crops Department Oregon State University Corvallis, Oregon 97331

Will D. Carpenter Monsanto 800 N. Lundberg St. Louis, Missouri 63166

Charles W. Carter Holly Sugar Corp. P. O. Box 60 Tracy, California 95376

Earl Chamberlain 1126 Millburn Court St. Charles, Illinois 60174

Gene Chamberlain Eli Lilly & Co. 14819 S. E. Primrose Milwaukie, Oregon 97222 D. O. Chilcote 1525 N. W. 14th Corvallis, Oregon 97330

James B. Chiles 1833 – 11th Avenue Yuma, Arizona 85364

M. Dale Christensen 3107 Hacienda Drive Concord, California 94520

Ronald L. Collins 529 N. E. 17th St. Hillsboro, Oregon 97123

Richard D. Comes U.S.D.A., Irr. Ag. Res. & Ext. Center Prosser, Washington 99350

Howard P. Cords Div. of Plant, Soil & Water Science University of Nevada Reno, Nevada 89507

Jack P. Corkins 1696 So. Leggett Porterville, California 93257

Garvin Crabtree Horticulture Department Oregon State University Corvallis, Oregon 97331

Mark Cravens 600 Linden Street Carpinteria, California 93013

Eugene H. Cronin Department of Botany Utah State University Logan, Utah 84321

L. L. Danielson CPRB—USDA Plant Industry Beltsville, Maryland 20705

J. H. Davidson The Dow Chemical Company Agricultural Products Department Midland, Michigan 48640 Jean H. Dawson USDA, ARS, Crops Res. Div. P. O. Box 30 Prosser, Washington 99350

D. W. Dean 3242 Garfield Ave. Alameda, California 94501

Donald L. DeLay Rhodia Inc. P. O. Box 1293 Visalia, California 93277

D. G. Denning Chemagro Crop. 2828 Telegraph Ave. Berkeley, California 94700

Paul Dennison 1539 Maple St. Pasadena, California 91106

James L. Dewlen 8825 Davona Drive Dublin, California 94536

Joseph E. Dorr Geigy Chemical Corp. Ardsley, New York 10502

K. W. Dunster221 Sierra Vista Dr.Loveland, Colorado 80537

E. G. Eckroth Box 764 Sheridan, Wyoming 82801

B. R. Ellison 580 West 13th South Salt Lake City, Utah 84115

Clyde Elmore Botany Department University of California

Duane Erickson Route No. 1 Troy, Idaho 83871 Lambert C. Erickson Plant Science Department University of Idaho Moscow, Idaho 83843

Stanford Fertig
AmChem Products, Inc.
Ambler, Pennsylvania 19002

P. W. Finnerty 16825 Canterbury Dr. Minnetonka, Minnesota 55343

Richard A. Fosse Amchem Products Inc. P. O. 2698 Fremont, California 94536

Peter A. Frank USDA, ARS, Rm. 213 Bldg. 56 Denver Federal Center Denver, Colorado 80225

Tosh Fuchigami 12123 So. Halldale Ave. Los Angeles, California 90047

Jess L. Fults
Botany — Weed Lab
Colorado State University
Ft. Collins, Colorado 80521

Alvin F. Gale Univ. Sta. P. O. Box 3354 University of Wyoming Laramie, Wyoming 82070

Lupe L. Garcia Rt. 1, Box 1574 Las Cruces, New Mexico 88001

Orris Gibson Botany Department University of California Davis, California 95616

Waler L. Gould Agronomy Department New Mexico State University Las Cruces, New Mexico 88001 H. J. Gratkowski 22 Royal Oaks Drive Roseburg, Oregon 97420

Reed A. Gray Stauffer Chemical Company P. O. Box 760 Mt. View, California 94040

Lisle R. Green P. O. Box 5007 Riverside, California 92507

William F. R. Griffith 5425 SW Dover Lane Portland, Oregon 97225

Jim B. Grumbles 31 Briereroff Office Park Lubbock, Texas 79413

Harold Guenthner Agronomy Department Washington State University Pullman, Washington 99163

K. C. Hamilton Department of Agronomy University of Arizona Tucson, Arizona 85716

Richard D. Hart Amchem Products Ambler, Pennsylvania 19002

W. A. Harvey Botany Department University of California Davis, California 95616

Alan R. Hattrup 2510 Braeburn Drive Soap Lake, Washington 98851

Gene Heikes Colorado State University Extension Service Fort Collins, Colorado 80521

Jan A. Herhobtt c/o Chevron Chem. Co. (Ortho) P. O. Box 118 Moorestown, New Jersey 08057 Robert E. Higgins Box 300 Boise, Idaho 83701

Jesse M. Hodgson Plant & Soil Science Montana State University Bozeman, Montana 59715

E. B. Hollingsworth U.S. Department of Agriculture Rt. 1, Box 28 Los Lunas, New Mexico 87031

J. T. Holstun, Jr.
Plant Industry Station CRD, USDA
Beltsville, Maryland 20705

Ed Horton 685 E. 1250 No. Ogden, Utah 84404

Herbert M. Hull U. S. Department of Agriculture 2000 E. Allen Rd. Tucson, Arizona 85719

Peter S. Illoway Wyoming Department of Agriculture 311 Capitol Building Cheyenne, Wyoming 82001

Thomas N. Johnsen Jr. CRD, ARS, USDA, Forestry Sciences Lab. Flagstaff, Arizona 86001

Roy Johnson Amchem Products Ambler, Pennsylvania 19002

Lowell S. Jordan Horticultural Sciences University of California Riverside, California 92502

Jonathan T. Kajiwara Box 75 Aiea, Hawaii 96701

Paul E. Keeley U.S. Cotton Research Station 17053 Shafter Ave. Shafter, California 93263 Harold M. Kempen 2610 M St. P. O. 2509 Bakersfield, California 93303

Gary W. Kennedy 181 Grace Place No. 3 Denver, Colorado 80221

Dayton L. Klingman Plant Industry Station Beltsville, Maryland 20705

James W. Koehler 1220 N. St. Sacramento, California 95814

H. A. Kohrmann 605 Brown Ave. Fort Collins, Colorado 80521

Lester B. Kreps Botany Department, PI 206 Utah State University Logan, Utah 84321

Alex Lange P. O. Box 60 Tracy, California 95376

Art Lange Batchelor 2125 University of California 92502

M. P. Lavelleye 485 Glenhill Drive Riverside, California 92507

Gary A. Lee Plant Science Division University Station P. O. Box 3354 Laramie, Wyoming 82070

Oliver A. Leonard Botany, University of California Davis, California 95616

Ming-Yu Li Food Protection & Toxicology Center University of California Davis, California 95616 Jack Lowry 412 No. Lane Worland, Wyoming 82401

O. J. Lowry Box 1609 Amarillo, Texas 79105

Robert A. Madsen Room 1-607 300 Las Blvd. So. Las Vegas, Nevada 89101

John E. Marcroft D'Arrigo Bros. P. O. Box 850 Salinas, California 93901

Robert D. Martin 710 N. E. Holladay Bureau of Land Management Portland, Oregon 97208

P. C. Martinelli P. O. Box 1209 Reno, Nevada 89504

G. W. Mason Ivon Watkins — Dow Ltd. Box 144 New Plymouth, New Zealand

Garry D. Massey 7521 W. California Ave. Fresno, California 93706

F. B. Maughan 6619 N. Gadcloffe Bristol, Pennsylvania 19007

John W. May Shell Chem. Co. Suite 1000, 500 Northwest Plaza St. Ann, Missouri 63074

W. B. McHenry Botany Department University of California Davis, California 95616 James R. McKinley 611 E. 29th Albany, Oregon 97321

Robert M. Menges USDA, ARS, Box 267 Weslaco, Texas 78596

John H. Miller U.S. Cotton Res. Station Shafter, California 93263

Carl M. Monroe Shell Chem. Co. Agril Chem. Div. 110 West 1st St. New York, New York 10020

Howard Morton 2000 E. Allen Rd. Tucson, Arizona 85705

T. J. Muzik Department of Agronomy Pullman, Washington 99163

Tom Neidlinger 15536 NE Glisan Portland, Oregon 97230

Russell T. Nelson P. O. Box 1297 Tacoma, Washington 98401

Michael Newton Oregon State University School of Forestry Corvallis, Oregon 97331

Myrvin E. Noble U. S. Bureau of Land Management Building 50 Federal Center Denver, Colorado 80225

Robert F. Norris Department of Botany University of California Davis, California 95616

Alex Ogg Jr. 1350 S. E. Vica Corvallis, Oregon 97330 A. Omid 940 Hensley St. Richmond, California 94801

Dwight V. Peabody, Jr. Nw. Wash. Res. & Ext. Unit Mt. Vernon, Washington 98273

Irvine L. Phillips
P. O. Box 351
Greenfield, California 93927

Frank E. Phipps 9880 SW Pennbrook Tigard, Oregon 97223

Tim R. Plumb P. O. Box 5007 Riverside, California 91507

Chuck Prochnow P. O. Box 68 North Portland, Oregon 97043

P. C. Quimby, Jr. USDA, ARS Rt. 1, Box 28 Los Lunas, New Mexico 87031

Dan W. Ragsdale 2304 Oak Crest Dr. Riverside, California 92506

James L. Reed P. O. Box 4250 Shell Chem. Co. Downey, California 90240

Thomas A. Reeve So. Nevada Field Lab Box 126 Logandale, Nevada 89021

Arthur L. Rivers 7471 Teller St. Arvada, Colorado 80002

James E. Rodebush P. O. Box 760 Mountain View, California 94040 Edward Rowehl P. O. Box 2290 Vero Beach, Florida 32960

Donald J. Rydrych Box 370 Pendleton, Oregon 97801

Wallace Savage 634 Addison Ave. W. Twin Falls, Idaho 83301

Dean Schachterle Bureau of Reclamation Building 20 Denver Federal Center Denver, Colorado 80225

Gerald J. Schut 6312 Arlington Ave. Los Vegas, Nevada 89107

Robert H. Schieferstein P. O. Box 4248 Modesto, California 95352

Roland Schirman USDA Agron. Department Washington State University Pullman, Washington 99163

R. A. Schwartzbeck 9009 W. 67 St. Merriam, Kansas 66202

Edward E. Schweizer Crops Research Lab Colorado State University Fort Collins, Colorado 80521

Paul R. Scott Drawer 1778 Hereford, Texas 79045

Roger G. Scott 201 Whitaker Drive, Apt. 3 Missoula, Montana 59801

R. E. Scribner 11808 Bloomfield Rd. Santa Fe Springs, California 92621 R. F. Seabury 8 No. 24th Ave. Yakima, Washington 9802

G. W. Selleck Monsanto Co. Ag. De velopment Lindbergh Blvd. St. Louis, Missouri 63166

Clay Shelton
P. O. Box 68
No. Portland, Oregon 97043

Clarence H. Slater 12821 – 25th Ave. Spokane, Washington 99216

Hal G. Simkover Shall Chem. Co. 100 Bush St. San Francisco, California 94100

Everett P. Smyth 1243 Dewey Drive College Place, Washington 99324

Leslie W. Sonder Montana State University Bozeman, Montana 59715

L. Southwick Dow Chem. Co. 4504 Bond Court Midland, Michigan 48640

C. Robert Staib Hercules Inc. One Maritime Plaza San Francisco, California 94111

David W. Staniforth Department of Botany Iowa State University Ames, Iowa 50010

Paul Steenwyk 1271 N. Fancher Fresno, California 93727

Lyle W. Stempke Moccasin, Montana 59462 Vern R. Stewart Rt. 4 Kalispell, Montana 59901

Loyd L. Stitt 1085 Johnson Place Reno, Nevada 89502

S. W. Strew Colloidal Products Crop. P. O. Box 667 Sausalito, California 94965

Dean G. Swan 173 Johnson Hall Washington State University Pullman, Washington 99163

B. Brooks Taylor Plant, Soil & Water Science University of Nevada Reno, Nevada 89502

Ray Thatcher Extension Services Utah State University Logan, Utah 84321

James M. Thompson 230 Primrose Dr. Salinas, California 92901

Leland E. Tigges Bureau of Reclamation 23 Jackie Lane Billings, Montana 59102

F. Leonard Timmons 900 So. 13th Laramie, Wyoming 82070

Rene Trevino Retzloff Chemical Box 45296 Houston, Texas 77045

Lee Van Deren 1356 Via Latina Carpinteria, California 93013 Robert L. Warden The Dow Chemical Company P. O. Box 959 Davis, California 95616

Lloyd C. Warner 7121 Cherry Tree Lane Salt Lake City, Utah 84121

L. E. Warren P. O. Box 959 Davis, California 95822

Rex Warren
Department of Farm Crops
FC 101 OSU
Corvallis, Oregon 97330

Louis Whitendale 14899 Ave. 296 Visalia, California 93277

Fred Leon Whiting Jr.
Department of Vegetable Crops
Riverside, California 92507

J. Wayne Whitworth
P. O. Box 3Z, NMSU
Las Cruces, New Mexico 88001

Carroll F. Wilcomb 1450 So. 22nd East Salt Lake City, Utah 84108

James A. Wilkerson 2929 N. E. Dekum St. Portland, Oregon 97211

M. Coburn Williams Botany Department Utah State University Logan, Utah 84321

Clyde L. Wilson 1530 Lynkirk Lane St Louis, Missouri 63122

W. E. Wimble Jr.
Atlas Chemical Industry, Inc.
Wilmington, Deleware 19899

James A. Young 600 Akard Circle Reno, Nevada 89503

Warren H. Zick PPG Industries Inc. One Gateway Center – 20 E. Pittsburgh, Pennsylvania 15222

Vic Zabala 1033 Madison Ave. Los Banos, California 93635

Robert L. Zimdahl Weed Research Lab Colorado State University Ft. Collins, Colorado 80521

Dudley Zoller P. O. Box 389 Las Veags, Nevada 89101

Phillip D. Olson Department of Farm Crops Oregon State University Corvallis, Oregon 97331