

University of Wisconsin, Madison, Wis.,
December 15, 1926.

Former Students and Friends of Professor L. R. Jones

Dear Friends:

You will be glad to know that the portrait of Professor Jones is now hanging in the Wisconsin "Hall of Fame" following the very successful Appreciation Dinner held at Ithaca during the International Congress of Plant Sciences on August 19, 1926.

Copies of the brochure are being mailed to all on the mailing list who were not in attendance at Ithaca. The report of the addresses is made possible through the very full notes taken by Dr. F. V. Rand, Associate Editor of Biological Abstracts, with the exception of the introductory remarks of Dr. Orton and the responses of Drs. Melhus, Keitt, and Erwin F. Smith which are from manuscript. A number of letters, telegrams, and cable messages from those not able to attend were read at the opening of the exercises.

Dr. Orton presiding: "This great international gathering of plant workers has provided an opportunity for the students of Dr. L. R. Jones in the University of Vermont (1890-1910) and the University of Wisconsin (1910-1926) to join with his other friends from many states and countries in expressing our respect and affection and in paying a tribute to our teacher, leader, and friend.

"It is a rare privilege that has been ours, to have had this association with a man whose influence has been so strong for good - a man who stands out a towering figure among the passing crowds that fill the world - one who has rendered such unusual service to the cause of progress in science.

"The ideal of service is to my mind the highest aim, the most worthy ambition in life. It is not wealth nor power nor pleasure that constitutes as effective an accounting for our talents as does some large and enduring service to the world.

"We are fortunate who succeed in leaving a record of one service that will be long remembered, but Dr. Jones has made an outstanding record in many fields -- as teacher, as architect in education, and builder as well, of a new profession of plant pathology, as investigator, leader, statesman of science, and -- to us not least, -- as our trusted friend.

"Once in earlier days a man appeared who had a vision of a great cathedral. He trained workmen to hew the stones and fit them together, he drew the plans and superintended the building, and lent his influence toward a wise and helpful use of it.

"That building in this case is our profession of plant pathology, and those on whom I am about to call will tell of the varied service."

Dr. A. G. Johnson. - THE TEACHER. Johnson referred to the fact that it is not common to attain eminence in more than one field of endeavor. This, however, Professor Jones has done. His is a many-sided attainment -- that of educator, general botanist, plant physiologist, bacteriologist, plant pathologist, scientific educator, administrator, counselor in research and in agricultural industries, and above all, TEACHER -- and teacher in many lines, including golf.

To express in a simple way what he has done, and is doing for us, is to say that he not only carries the torch but points the way; that he beckons onward to greater heights and at the same time gives us strength for the climbing; he teaches not only facts but foresight, clears our vision, stimulates our imagination, holds unselfish service as an ideal, inspires us in a way that is lasting, makes us all feel his deep personal interest. Furthermore, Mrs. Jones has been such an able helper that we have felt their home and fireside to be our home and fireside also. For all this we wish to voice our appreciation. May it long continue!

Dr. Orton: "It is a special talent and a worthy service to teach classes of students, but there is a broader work that some must do of organizing the subject matter that is to be taught and leading the teachers.

On the subject of "Contribution to Agricultural Education" I shall call on one of the great educators of America -- a great botanist who has, during a life time, instructed us in the botany of cultivated plants, built up a great University Department of Horticulture, stimulated -- as no one else ever has -- the interest of millions of people in horticulture, led in advancement of rural welfare, and still sets an example of industry and enthusiasm. President of the Botanical Society of America, President of this Congress, -- Dr. L. H. Bailey."

Dr. L. H. Bailey. - CONTRIBUTIONS TO AGRICULTURAL EDUCATION. Dr. Bailey stated that probably the only one present in the room not knowing what contributions L. R. Jones had made was Jones himself. Those who so lose themselves in their work that they forget themselves are those who contribute most to the world. The results are to them of paramount importance; the credit is left for someone else to voice. The first circumstance to interest the speaker in L. R. Jones occurred some years ago during the making of an encyclopedia. A contributor had written in, saying that L. R. Jones recommended timothy seed, ten pounds to the acre; alsike clover, six pounds; red top, four pounds; and fowl meadow grass, ten pounds to the acre. The speaker was much struck by these recommendations, not because he knew anything about them but because they came from a good authority. Here was a man who was not only a plant pathologist but who was also interested in folks and in their welfare. Often incidental things quite unconsciously become good indices of a man's worth and ability. This is characteristic of him whom we now honor. He spent about twenty years in Vermont as a teacher and research man. During the first seven years, in a small state and at a time when agricultural colleges were making a beginning, he had only seven students in agriculture. One of them was William Stuart. During the next seven years his plant pathological work began to be felt and goodly numbers came under his influence -- W. A. Orton, W. J. Morse, J. K. Shaw, Perley Spaulding, and others, -- fourteen or fifteen in all, men who have since made good. Sometimes one student of a poor teacher makes good, but seldom many from a poor teacher make good. There has been no accident here! There is need of no further proof of careful training! But Jones was not alone interested in these technical phases. He barnstormed up and down the State of Vermont at farmers' meetings. He was one of the first to exert an influence for scientific forestry, for adequate forest laws, and for a forestry association in Vermont. A man well-trained in one subject takes that same training and concentration into other fields. Jones was one of the first movers for nature study in Vermont, for courses in pedagogy, and for home economics -- now an established department at the University of Vermont. This means that he is a good teacher, it means that one may have influence on agricultural education without actually teaching agriculture. One can even conceive of a Greek or mathematics teacher influencing agricultural education. Jones unwittingly told something else earlier in the evening; both his ancestors and those of the speaker were Vermonters. Jones went as a relatively young man to Vermont, with the conviction that it was a wonderful

country, and that he wanted to make its people known and appreciated better. He gathered a little group of amateur botanists on Stratton Mountain and organized the Vermont Botanical Club. He had faith in men. As a result this club now meets twice a year and has considerably over one hundred members. It means many more centers of influence; it means that many more people are interested in higher things. Jones made a distinct impression on agriculture in Vermont and yet he is not a professor of agriculture. It is hoped that this example may inspire us all to those ideals. There are vast stores of mind yet untouched, human beings to be vitalized and straightened up to live as men! That is the contribution of the teacher. The greatest beauty in the world is the beauty of a human life well lived.

Dr. Orton: "The progress of the world is based on science, and science grows by research. Professor Jones has always been an investigator. He has made contributions to our knowledge. He has kept his instruction alive and up to date by contact with the sources of knowledge, and he has projected his influence far and wide by stimulating his students to do more research.

"We wish one of these students to speak on this subject who is now himself a teacher with a larger staff than there were pathologists in the country in 1892, -- Dr. I. E. Melhus of Iowa."

Dr. I. E. Melhus. - THE INVESTIGATOR. "The story of Jones the Investigator is a large and inseparable part of the growth and development of modern plant pathology in America. However, it is not my intent to narrate the growth of this new science. This must be left to the historian of some future generation, working at a longer range, with a bigger vision than mine can be. It is rather my purpose merely to mention one or two of the special attributes of the investigator. Faraday said the investigator should be a man who can listen to suggestion and gain from it a vision. If to this quality be added industry, he may indeed hope to walk within the veil of the temple of nature. It is significant that Faraday stresses being capable of listening to suggestion. He means not suggestion from mere man, but suggestion from the unknown. Few of us can sit by and listen well to suggestion and grasp its meaning even as a dim vision.

"To those few who can, the world has allotted the task of leadership. Faraday became Faraday the master because he saw in a suggestion from the unknown a dim vision. It grew through his labors into the electromagnetism of today. Pasteur became the teacher, scholar, and greatest son of France because he saw in nature's suggestion, first as a dim vision and later a demonstrated fact, the true role of microorganisms. Michael Pupin, the immigrant, became the master because he saw in a suggestion emanating from Rowland's distorted alternating currents a dim vision. This dim vision has developed into the resonators of the radio art of today.

"Was it not a similar dim vision from some suggestion that turned Jones' efforts to plant diseases in 1889 when he began his professional career at Vermont? Was it not that inwardly he saw for the blighted potato vines a panacea? The vision took form first through the hand sprinkler and Millardet's new bordeaux paste, and later it grew into high pressure spray and dilute bordeaux, backed with studies of epidemiology extending over a period of 20 years. Simple now, but intricate then. A dim vision was materialized that has reflected far and wide and had great influence on the growth of modern plant pathology.

"It was through another suggestion that a dim vision was borne, the importance of soil temperature in the epidemiology of cabbage yellows. The truth was won by patient observation and persistent inquiry. The answer, as with the

rich man of the parable, required long pleading before it would bestow its riches upon the suppliant at the temple. Every mite of knowledge had to be wrested from the organism, and it has taken many such contributions at his own hands and those of his students to formulate the principle, the paramount importance of temperature to the epidemiology of soil pathogens.

"And so I might go on and cite other cases, none of them new to you. But let us ask rather the worth of such vision, such patience, such industry. Charles Kingsley says:

"Investigators are the salt of the earth who keep the world of man from decaying back into barbarism. They are the children of light. They are the aristocracy of God, into which not many noble, not many rich, not many mighty, are called. Though their names be dead, their works live and grow and spread over ever fresh generations of youth, showing them fresh steps towards that temple of wisdom which is the knowledge of things as they are, the knowledge of those eternal laws by which God governs the heavens and the earth."

Dr. Orton: "Our colleges are now thronged with students, but above and beyond the teaching of students there is the service of teaching the teachers who are to teach the students. Many demands for research on urgent problems--preceding the work of research in science--must come the training of investigators. When Dr. Jones began his work there was no teaching of plant pathology. Research was slow because there were no trained specialists in this line.

"These things the world needed, and how they were provided by the development of a Graduate School in Plant Pathology will be told you by one of his students, now head of a research office of the United States Department of Agriculture, -- Dr. Howard A. Edson."

Dr. H. A. Edson. - THE DEVELOPMENT OF A GRADUATE SCHOOL IN PLANT PATHOLOGY.
"With the tremendous growth in scientific agriculture there was a continuous call for workers, and it became needful that researchers be trained. This need had to be met by the organization of new faculties for teaching. The careers of most men are determined by circumstances. A few, by the potential power of their will and determination, succeed in controlling their circumstances and become masters of their own destinies. Jones belongs to neither class but to a rarer and more select group. Neither like derelicts nor like dreadnaughts, that fraternity of mankind! They know that great potential forces dwell not in spectacular flame or earthquake, but in the still small voice of service. They are trusted and beloved and followed by their fellows as no great military commander or no great political potentate is followed; and especially in this group are the teachers of mankind, whose potentialities are multiplied in their students. They lay no claim to distinction; they modestly claim only to have been the teachers of the great. The speaker's first acquaintanceship with Jones came when, as a sophomore in the Department of Chemistry at Vermont, he enrolled in an elective course in general botany because of the counsel of recent graduates that one could not afford to go on without experiencing the tutelage of Jones. As an incident in this course, while becoming acquainted with plant structures, it was seen that certain tissues contained crystals -- to us as students a profound mystery. Being the amateur chemist of the class, the speaker was selected by Jones to determine the composition of these crystals. Using his characteristic pedagogical method, he gave the impression that this would be a distinct contribution to science and at the proper time gave hints as to the right course to pursue on this voyage of discovery! This was the speaker's first voyage in research! Later it was learned that this was one of Jones' characteristic tricks, and it is just this which explains why so many of his students go into research. The Adams Act, put through Congress about twenty years

ago for the purpose of pure research in the State Experiment Stations, suddenly opened up many new research positions and there came the consequent demand for increased numbers of workers. It was but natural that they turned to Jones for the training needed, and thus his call to Wisconsin for the founding of a graduate school of plant pathology. Many of us went there to study - to continue our training. That process will go on as long as we do."

Dr. Orton: "There is no end to service in this world. The effective performance of one duty brings a call to a larger field. The nation drafts into its service those who have done well in village, city, and state; so in this country there has been need for leadership in science, and in the field of Biology and Agriculture. Dr. Jones is one of the most trusted advisers of those in high places.

"On this point you will receive the assurance of one who is another of our great teachers, Dr. Robert A. Harper."

Dr. R. A. Harper. - LEADERSHIP IN BIOLOGY AND AGRICULTURE. Dr. Harper expressed his appreciation that the students of Jones had asked him to speak on this occasion. "The real distinction," he said, "is between difficult and easy problems; there is really no distinction between pure and applied science. All one needs to do is to point to L. R. Jones as evidence that there is no distinction between the two. He is equally at home in both. The subject of leadership interests all, both young and old. This great group of students is fortunate in having the epitome of leadership in their teacher. Leadership in plant pathology falls very largely to Jones for the United States and for the world. The American Phytopathological Society is not a decadent institution; it seems the perfectly natural thing to be. And yet those who were present at the early conferences well remember the discussion as to whether we ought to have or could have such a society, and realize that we did need someone like Jones who had no fears but believed in it and in its future. He has the inability to see anything as hard that needs to be done, and is always confident that men and women will be found to do what needs to be done. The journal, *Phytopathology*, we owe largely to his leadership and in large part to his own work. He has also held leadership in pure research, as witness his studies of oospores and overwintering in late blight of potatoes, long worked upon by so many others without result. He stuck to it and won. He has the instinct to grasp the best that is being done by others, and this is an indication of leadership. He saw the need for yellow-resistant cabbages and did not hesitate to use a method worked out by others - selection - and he attained the result desired. He has the willingness to see and the keenness to grasp all that is being done, and to make use of all in the solving of the problem at hand. He has the capacity of vision, the world-wide view point. After the end of the world war he expressed the conviction that one of the worst results was that young men were not now going abroad to study and would become provincial. Being warned from various sources as to a probable future shortage in forest products and food materials we turned toward the tropics and to Jones for leadership here also. This is where his vision has especially shown the character of his leadership. The highest factor is his ability to get this great number of young people all working together for one thing - the broad human sympathy of the man which is such a fundamental quality of his makeup."

Dr. Orton: "In the world are many nations, different in thought and language who should be coworkers in the advancement of knowledge. International understanding is a necessity and we, as plant pathologists, have for years sought to promote personal friendship and professional cooperation with our colleagues over seas. There are with us tonight some whom we have had the pleasure to welcome

before, whom we have visited in their own country. I call upon Dr. O. Appel of Berlin, a leader in biology in Europe, and Dr. E. J. Butler, head of mycology of the British Empire."

Dr. Appel speaking in German, said, in part, that he considered it a rare privilege to be invited to attend and take part in what was essentially a family party. Previous to the visit of Dr. Jones to Europe in 1904 he was known to them there as a world leader in plant pathology, but they know him then as a scientist only. "After his visit," he said, "we came to know and appreciate him as a man. There are two ways of knowing a man - mental knowledge and heart knowledge; that is, because of his intellect and for his soul. We are happy to have known L. R. Jones in both ways."

Dr. E. J. Butler of Kew, England, who was then called upon, said that twenty-four years ago when in southern Asia he had first noted and was influenced by the work of Jones, being struck with admiration for the work and for the man who appeared through his work. The speaker later returned to England and heard rumors of a great institution of plant pathology in the heart of America. In 1921, on visiting America and asking where he ought to go he was always told to go to Wisconsin. "I think," he said, "that if I had stated that I wanted to go to heaven and had asked the way the reply would have quickly come: 'Go to Wisconsin!'" The speaker met Jones first at Woods Hole. Later, on visiting Madison he found there a tradition that reminded him of the schools of long ago. There are three phases in the history of plant pathology: First, the period of deBary, in which the fungus held first place; second, the period in which the host received most attention; and finally the present period in which disease is considered as an interaction of both under the conditioning influence of the environment. The leader in this is Jones. The maps on display (showing locations of Jones' students) do not represent the truth in its fullness. His admirers in the British Empire would completely fill them up.

Dr. Orton in introducing the next speaker said, "Dr. Jones is all of these things - teacher, investigator, leader, and much more - our friend. The next speaker, representing the University of Michigan - Dr. Jones' graduate institution - is the Dean of our profession, persistent in research - internationally known as a specialist in plant bacteriology with closest connection between plant and medical bacteriology. We know him as a man sensitive to the finer feelings of friendship, honor, and high ideals as author and poet, and as such we ask him to speak of L. R. JONES THE MAN."

Dr. Erwin F. Smith -- THE MAN

1. Industry. In the first place Dr. Jones is a very industrious man, as any man must be who expects to get along and accomplish things in this modern time of hustle and bustle. I was much impressed by his industry many years ago when he came to work in my Laboratory. There he did a good year's work in six months.

2. Honesty. Second, he is an upright man, desiring always to see fair play and to deal justly with everyone. No man who is not honest and upright has any business to be in Science. Most who follow science are that, I believe. But some upright men I have known were mighty disagreeable, all their virtues having sharp angles. This brings me to my third point.

3. Lovable. The man we have met to honor tonight is a very friendly, lovable man. I think you will all agree with me on this point. And how much that means. To have a host of friends drawn and held by such a tie is worth more than great riches. You remember Robert Louis Stevenson's three desires when he was sick and poor and very much alone in the world: "1st, good health; 2nd, 500 a year

(or was it 300?) and 3rd, O, du lieber Gott! Friends!" Yes, they are best of all, and to have them one must deserve them.

4. Stimulator. Jones is a good teacher and tremendous stimulator of research in others. The number of enthusiastic and successful workers he has sent out is sufficient evidence of this. Ask any of Jones' students what they think of him as a teacher and the invariable answer is: "I never knew a better one nor one more interested in the after success of his students." Blessed is the memory of the good teacher!

5. Foresight. He is farsighted and wise in planning, and public spirited. His guiding hand in the early days of "Phytopathology", and his subsequent influence in the National Research Council and in the National Academy of Sciences are examples of this.

6. Investigator. He is a good investigator - first class, I should say. One may be a good teacher and a poor investigator, or a good investigator and a poor teacher. I have known each kind. He is both teacher and investigator par excellence and that is rarer!

7. Thoroughness. He is a thorough man, desiring both for himself and for his students to get the truth, the whole truth, and nothing but the truth at any cost of time and labor.

8. Caution. He is, I should say, also a cautious man, although once he was run into by an automobile, but that was in Washington where we have a saying that there are only two kinds of pedestrians - the quick and the dead - and where even the most circumspect man is not entirely safe. Senator Carter, whom I know very well, once said, "If the Republican party saws off that limb (alluding to free silver), you will not find your Uncle Thomas on it." Jones also has a good bump of discretion.

9. Modesty. Finally, as all great men should be and most are, he is a modest. St. Paul said, "Let no man think more highly of himself than he ought." I don't know to what extent our friend reads the Scriptures but certainly his life has been lived simply and quietly in the love of nature and of man, as if he had taken to heart the advice of the Great Apostle to the Gentiles."

Dr. Orton then made the formal presentation of the portrait saying in part that the students and friends of Dr. Jones had united to secure this portrait by an artist of Wisconsin, reared in the vicinity of the boyhood home of Dr. Jones, - Merton Grenhagen. He asked Dr. Keitt to convey to the University of Wisconsin this portrait of our teacher, leader, and friend, to stand in their halls as a permanent memorial to the part taken in botanical science by our distinguished investigator, wise advisor, and inspiring guide, and as a tribute of our deep affection.

Dr. G. W. Keitt. - "It is a pleasure and a privilege to bring you greetings from the University of Wisconsin, and, on behalf of the university, to accept this token of our affectionate appreciation of our friend and leader. It is a privilege, however, which I approach with much humility when I attempt to contemplate the true nature and significance of our university. What is the essential reality of the university which we so much love and honor? Is it the students and faculty, who come and go? Is it the alumni, whose lives are so much the measure of the worth and service of their alma mater? Is it our beautiful campus, with its lake and hills? Surely, it is comprised of all of these elements, but much more. Must we not realize that in her most essential nature our university is one of the great realities which defy analysis by our intellectual technique? May we not, then, without attempting to analyze or define, think very simply of her and of her sister universities the world over as products of the high aspirations and achievements of the race, in which the finest spirits and accomplishments of the past live on in ever renewing association with the best contributions of the present and of future generations? It is this aspect of the university that we have most in mind and nearest at heart tonight.

"The University of Wisconsin deeply appreciates the distinguished services which Professor Jones had rendered and will render. She appreciates his splendid contributions to learning and to the training and moulding of the students who have had the good fortune to come under his tutelage. She appreciates the breadth of culture and the qualities of leadership that have carried him beyond the limits of his chosen science to become a leader in broader fields. She appreciates most of all his humanity, and a spirit which she claims as her own. The University of Wisconsin, therefore, accepts your gracious gift with deep gratitude, and delights to join in honoring one who has contributed so much to her best ideals."

Dr. Orton then said, "Dr. Jones' personal contributions to science have been important. We place to his credit further the works he has inspired and in large part directed which have been published by the men and women he has trained. He was at Vermont from 1889 to 1910 and at his leaving for Wisconsin was presented with the published works of his students which filled seven volumes. There are now brought together from both groups of students from 1910 to the present 29 volumes, the works of 109 authors, 1000 titles in all, with one added volume of photographs. Many of the former students are now themselves at the head of University Departments or research workers and he is training each year more men. Who can measure the far reaching ultimate extent of this influence? Professor Jones, we ask you to accept these books as a token of our affection, regard, and esteem."

Dr. Jones then arose and expressed the deep appreciation of Mrs. Jones as well as himself for all that this event symbolized.

"Mrs. Jones," he said, "has been with me every step of the journey we are now reviewing, and I am especially happy that owing to her completed recovery in Hawaii from the unfortunate accident of last winter, she is able to be with us tonight. Thirty-six years have we journeyed thus happily together. Whatever has been accomplished during this time has been made possible by her cooperation and could not have been without it. During this time three major decisions have had to be made by us, in all of which there was ultimate agreement.

"First, was that most important question of all, as to partnership in the journey. There never was any question as to this on my part, and I am happy to add that she has never expressed regret since the initial question was settled.

"Second, was the basic question as to whether our professional journeyings should be in the field of human pathology or plant pathology. As an undergraduate student I prepared rather for the medical profession. The final choice was influenced in part by her expressed preferences, and in part by a happy incident. While still in doubt, during my last senior semester, I was privileged to attend as an eager listener the doctor's examination of him whom I have been privileged ever since to count as my professional exemplar and personal friend, Doctor Erwin F. Smith. This examination covered Smith's early work on the peach yellows disease. The glimpses thus given me of the significance of and opportunity for research in the field of plant pathology were most inspiring.* Finally, you should know that

*Doctor Jones wishes to record the further fact, not mentioned in his remarks, that combined with this was the influential coincidence that during this same semester he worked at the laboratory table beside Dr. J. A. Eycleshymer, who was there completing his studies on the club-root disease of cabbage published soon thereafter in the Journal of Mycology. ("Club root in the United States." Jour. Mycol. vol. 7: 79-88. 1892.)

this was the year that the Hatch Act became effective, establishing an Agricultural Experiment Station in each state. In conference with my wise and revered councillor, Professor Volney M. Spaulding, the decision to turn to plant pathology was promptly reached and never since regretted.

"The third question, involving a parting of open ways, concerned the transfer from the University of Vermont to the University of Wisconsin. Vermont had been the home of my ancestors but Wisconsin was the birthplace of both Mrs. Jones and myself. Fortunately again the decision was easy, since we could by returning to Wisconsin personally renew our early home associations and professionally meet the increasingly evident responsibility of opening thus, in a larger university peculiarly strong in botanical traditions and associations, opportunities for the training of you younger men and women beyond which had been possible to us of the older generation.*

"So, speaking for Mrs. Jones as well as myself, we are both happy and satisfied with each of the major choices in our life's journey.

"As one looks about tonight there should be no doubt as to the enduring satisfactions which reward the schoolmaster. Our guest, Doctor Bailey, once gave me the comforting advice that the best teacher is the one whose pupils farthest outstrip him. By this standard, there can be no question as to the evidence here present. Many here will recall with me the quiet enthusiasm of Dr. Cyrus G. Pringle, and will appreciate the spirit with which upon starting on one of his annual pilgrimages to Mexico he exclaimed, 'Oh, Jones, I wish you could go with me and share in the thrill of discovering another new plant!' I was content to tell him that maybe before he got back I could have the fun of finding another new boy. This really meant of course the simple and happy chance of helping another student, as Professor Spaulding had helped me, to find himself."

After referring, in lighter vein, to the hard work involved in "sitting for one's picture" as perhaps explaining in part the somewhat determined expression depicted in the facial lines of his portrait, Dr. Jones closed as follows:

"And now, while congratulating all of you of the younger generation, individually, on the opportunity which has come with your more adequate training for the increasingly specialized responsibilities in plant pathology, I wish to note one point of serious concern for your welfare as a group. I am not thinking of any one of you in the personal way, nor of the Vermont-Wisconsin group primarily, but of you all as an inseparable part of the rapidly increasing band of American workers in applied botany.

* Dr. Jones after the close of these remarks asked the privilege of expressing his personal appreciation, as supplementing any more general expression, for the characteristic cordiality of the Cornell boys on the present occasion. He was reminded by it of the happy reception he received when he stopped at Ithaca, en route from Vermont to Wisconsin in 1910. Not only did he then find a group of eager graduate students working in the sort of university relations he hoped to establish in Wisconsin, but he was generously supplied with the Cornell laboratory outlines and introduced to their methods at a time when this was especially helpful. This happy relation has continued one of the pleasant experiences of these later years.

"Watching the trend in modern scientific developments as I have, I wish to warn you of one of the subtlest dangers facing you collectively as well as individually. I refer to the danger of professionalism. If you understand my meaning I think you will agree that with the present outlook, and especially in a young, rapidly developing country like ours, it is impossible to escape this danger altogether. You Vermont boys need only to revision that great amateur botanist, Dr. Pringle, to understand what I mean by the spirit of amateurism as compared with professionalism--the devotion of one who is working for the love of science rather than for a living through science. And in Wisconsin we are happy in having another such in Dr. Davis. Unfortunately, the temptation to time-serving professionalism is stronger today than it was a generation ago, when, for example, in the entire membership of the Vermont Botanical Club I was perhaps the only one who was paid for studying plants.

"But, fortunately, on the other hand, the objectionable aspects of professionalism need not follow simply because one received a living wage as a botanist. Quite as fortunately, the dangers are in no wise proportioned to the size of the salary. It all depends upon one's attitude toward his work. I have no fear as to this if we can only continue in the spirit in which I am sure you all have begun,--the spirit of devoted scientific service. I like to think of those in state or federal positions in plant pathology as holders of honorary fellowships, as it were, for public service to society through creative work in the field of the plant sciences. In this way the best of that characteristic of the amateur spirit may be adequately perpetuated in our professional group, let it grow to any size and subdivide to any degree of specialization."

NEWS NOTES

From Former Students of the Department of Plant Pathology

A Toast!
(By one of the "multitude")

"Tribute fair I fain would pay
But what on earth is there to say?
You all know Dr. Jones!

Lord Chesterfield was hard to beat
In things polite, but - I repeat -
You all know Dr. Jones!

Like ripples widening from the shore,
His influence circles, for
The world knows Dr. Jones!

He's wise; he's just; he's sane; and he
Pours oil upon the troubled sea
Of differing opinion. We
All know Dr. Jones!

Diplomacy I need not name.
He's "managed" us, but just the same
We all love Dr. Jones!

H. W. Albertz is senior agronomist and director of the Alaska Experiment Stations with headquarters at Sitka.

Dimitri Atanasoff has resigned from the Dutch Experiment Station at Wageningen, and has become head of the Institute of Phytopathology, University of Sofia, Bulgaria.

Miss Mathilde Bensaude has resigned as the only plant pathologist of the Azores, and accepted a position in a privately endowed Research Institute at Lisbon where she will continue her research work on plant pathological problems.

Eubanks Carsner, pathologist concerned with sugar beet disease investigations at Riverside, California, is enthusiastic over his beet selections which show resistance to the virus disease "curly top."

S. P. Doolittle has been transferred from the Madison laboratory to Sanford, Florida for the winter months, where he is continuing his mosaic studies.

Theo. P. Dykstra is working with M. B. McKay of Corvallis, Oregon, on potato virus troubles.

Hurley Fellows, cereal pathologist, U. S. D. A., has been transferred from the Wisconsin laboratory to that located in cooperation with the Kansas Experiment Station at Manhattan.

A. C. Foster, pathologist of the U. S. D. A. stationed at Sanford, Florida, spent his vacation in Madison this year and did some reference work in our library.

N. J. Giddings is on a six months leave of absence from West Virginia and has been touring through the western states.

A. H. Gilbert, on leave of absence as Associate Plant Pathologist at Vermont, is studying at Wisconsin this year, especially interested in potato tuber necroses.

Miss Grace Gilchrist after spending two years studying in our laboratories has returned to the staff of the Department of Botany, University of Bristol, England.

G. H. Godfrey is now with Pineapple Cannery Association in Honolulu, studying primarily the relation of nematodes to root failure of pineapple.

H. H. Haymaker, on a year's leave of absence from Kansas, is studying the Fusarium wilt of the tomato in our laboratory.

E. E. Hubert is now Professor of Forest Products, University of Idaho, Moscow. He says they have twelve Wisconsin-trained men in the University which makes a nucleus for a good Wisconsin Club.

C. J. Humphrey has resigned from the Forest Products Laboratory at Madison and accepted a position with the Bureau of Science, Manila, P. I.

Geo. Janssen has accepted the position of Agronomist at the Arkansas Experiment Station, LaFayette, Indiana.

Ivar Jorstad writes from Oslo, Norway, January 1926, that he is still the only plant pathologist in his country without even an office assistant. He is conducting some spraying experiments with fruit trees and gooseberries and disinfection experiments with cereals. He is in charge of the potato wart control and the mycological work.

Benj. Koehler is Assistant Chief Crop Pathologist, University of Illinois. His major attention is focused on corn root rot.

H. H. McKinney is to take a trip to Europe and in a more extended way to Africa with Dr. David Fairchild, plant explorer, in order to make special observations on plant pathological problems, especially the virus diseases.

G. O. Ocfemia is Assistant Professor Plant Pathology at the University of the Philippines, Los Banos, reporting lots of problems in which he and his students are interested.

Otto A. Reinking is making a tour of the Orient searching for disease resistant bananas for the United Fruit Company.

Mr. and Mrs. Joyce Riker are spending a year in Europe studying bacterial diseases with present headquarters at the Imperial College of Science, London. They will later visit some of the outstanding plant pathological laboratories on the continent.

A. R. Saunders is lecturer in Botany at the School of Agriculture, Potchefstroom, University of South Africa.

C. H. Slagg is Tobacco Pathologist, Dominion of Canada.

N. G. Toodore is Acting Chief, Plant Pests Control Division of the Bureau of Agriculture, Philippine, Islands.

E. C. Tims is associated with Dr. Edgerton, University of Louisiana.

W. B. Tisdale, in charge of the Tobacco Experiment Station, Quincy, Florida is searching for a strain of tobacco that will be resistant to the Phytophthora mildew.

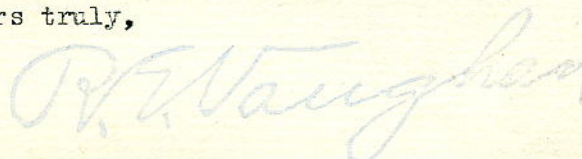
W. H. Tisdale is breaking his connections with the U. S. D. A. in December to become pathologist with the Dupont Chemical Company.

C. M. Tompkins taught at Carleton College, Minnesota, last year but is now with the U. S. D. A., Bureau of Plant Industry, located at Logan, Utah, studying sugar beet diseases.

E. F. Vestal has resigned at Des Moines College, Iowa, and accepted a teaching position at the University of South Carolina, Columbia, South Carolina.

A supplement to this letter includes vital statistics and the address list of present and former Wisconsin students which we have in our office. Any additions or corrections to these lists will be gladly received.

Yours truly,



R. E. Vaughan

Vital Statistics

We are short of up to date information on vital statistics. Professor Jones is much interested in your personal welfare as well as scientific advancement, so kindly send announcements.

MARRIAGES

William A. Kuntz to Florence Jefferies - September 3, 1925.
A. R. Saunders, married December 18, 1925. School of Agriculture,
Potchefstroom, South Africa.
Edgar F. Vestal to Grace E. Trestrail - August 26, 1925.
G. H. Godfrey to Lois K. Stewart - May 22, 1926.

BIRTHS

A daughter, Lois Jeanne, Mr. and Mrs. E. T. Bartholomew. Riverside, Calif.
" " , Mary Frances, Mr. and Mrs. Max W. Gardner - Dec. 29, 1923.
" " , Mr. and Mrs. J. C. Gilman - 1924.
" son , Wm. Jr. - Mr. and Mrs. Wm. A. Kuntz - May 5, 1926.
" " , Lawrence W. - Mr. and Mrs. A. G. Johnson, - August 14, 1924.
" daughter, Virginia Florence - Mr. and Mrs. E. A. Stokdyk - Aug. 8, 1924.
" son , Glenn Evan - Mr. and Mrs. W. H. Tisdale - July 4, 1924.
" daughter, Margaret Avis - Mr. and Mrs. W. G. Stover - Sept. 19, 1924.
" " , Alice Ruth - Mr. and Mrs. L. K. Jones - April 23, 1925.

We have heard indirectly of several more "future pathologists" but do not have the records.

DEATHS

The sad closing message concerns the death of Mrs. L. R. Jones, which occurred on the morning of September 22. Doctor and Mrs. Jones had returned but a few days previously from a week's outing in their summer cottage. She had been feeling somewhat tired from the summer's journeyings, including Hawaii and Ithaca, but neither she nor Professor Jones had any serious premonitions. She passed away peacefully and painlessly in her sleep, and was laid to rest in the family lot in the cemetery at Brandon, Wisconsin.

List of Present Graduate Students in Plant Pathology with
their Home Address.

Major:

Alexander, Leonard J.....Tallulah, Louisiana
Angell, Herbert R.....Holmsdale, Jamaica
Banfield, Walter M.....Little Falls, New Jersey
Blank, Lester M.....Topeka, Kansas
Caldwell, Ralph M.....Brookings, South Dakota
Fajardo, Tranquilino G.....Philippine Islands
Gilbert, Alfred H.....Burlington, Vermont
Hamilton, James M.....,Ontario, Canada
Harmon, Thomas C.....Ackerman, Mississippi
Haymaker, Herbert H.....Manhattan, Kansas
Hoggan, Isme.....Caterham, England
Hoppe, Paul E.....Platteville, Wisconsin
Linford, Maurice B.....Logan, Utah
Magee, Charles J.....Neutral Bay, Sydney, Australia
Miller, Paul W.....Tampa, Florida
Mogendorff, Nico.....Arnhem, Holland
Ogden, William B.....Edgerton, Wisconsin
Skoric, Dr. Vladimir.....Zagreb, Jugoslavia
Taylor, Thomas M.....Kelowna, Canada
Wellman, Frederick L.....Wichita, Kansas
Wilson, Edward E.....Burkesville, Kentucky
Zaumeier, William J.....Milwaukee, Wisconsin

Minor:

Beal, John M.....A & M College, Mississippi
Burnham, C. R.....Ft. Atkinson, Wisconsin
Jackson, Herbert S.....W. LaFayette, Indiana
Lohnis, Dr. M. P.....Scheveningen, Holland
Pearson, Norma.....Madison, Wisconsin

Vermont Alumni
Those especially trained by Professor Jones

Barrett, O. W. - Dept. Agr. and Lab., P. O. Box 1607, San Juan, P. R.
Bone, H. D. - Gardner, Mass.
Carpenter, C. W. - Honolulu, Hawaiian Islands.
Clark, Anna M. - 400 West 118th St., New York, N. Y.
Clark, C. F. - B. P. I., Washington, D. C.
Cummings, M. B. - U. V. M., Burlington, Vermont.
Eggleston, Mrs. W. W. (Alma Carpenter) - B. P. I., Washington, D. C.
Goss, W. L. - B. P. I., Washington, D. C.
Green, G. L. - Mt. Berry, Ga.
Grout, A. J. - Curtis High School, New Brighton, New York.
Harrington Geo. T. - 239 W. 70th Street, New York, N. Y.
Hasen, T. E. - Barnard College, Columbia Univ., New York, N. Y.
Helyar, F. G. - College of Agriculture, New Brunswick, New Jersey.
Hollister, F. M. - Brockton, Mass.
Howe, C. D. - Dean of Forestry, Toronto Univ., Toronto, Canada.
Howe, G. H. - Geneva Expt. Sta., Geneva, New York.
Howe, M. A. - N. Y. Botanical Gardens, New York, N. Y.
Kibby, Edward - Agric. School, Randolph Center, Vt.
Lombard, P. M. - B. P. I., Washington, D. C.
Orton, W. A. - Inst. Tropical Plant Res., Washington, D. C.
Perry, W. C. - Sandy Hook, Conn.
Pomeroy, C. S. - Riverside, Calif.
Rand, F. V. - Univ. of Penn., Philadelphia, Penn.
Shaw, J. K. - M. A. C., Amherst, Mass.
Smith, N. R. - B. P. I., Washington, D. C.
Spaulding, Perley - B. P. I., Washington, D. C.
Sprague, L. P. - Chateaugay, New York.
Stuart, Duncan - B. P. I., Washington, D. C.
Stuart, Wm. - B. P. I., Washington, D. C.
Tenney, H. W. - Brooklyn, New York.
Towle, Phoebe M. - Enosburg Falls, Vermont.
Udall, D. H. - Ithaca, N. Y.
Walsh, D. M. - 300 Park Ave., Baltimore, Md.
Woodcock, E. F. - Michigan State College, East Lansing, Michigan.

ALUMNI AND FORMER WISCONSIN STUDENTS

- Abbott, Roy L. - Zoology Dept., Iowa State Teachers' College, Cedar Rapids, Iowa.
Alberts, H. W. - Agricultural Experiment Station, Sitka, Alaska.
Ames, Mrs. Norton - Oregon, Wis. (Ruth Tillotson).
Atanasoff, Dimitr - University of Sofia, Sofia, Bulgaria.
Bachman, Freda M. - Stout Institute, Menomonie, Wis.
Bailey, Ernest E. - Bureau of Soils, U. S. D. A., Washington, D. C.
Bailey, Floyd D. - Corvallis, Oregon.
Baird, E. A. - North Dakota Agricultural College, Fargo, North Dakota.
Bartholomew, E. T. - Citrus Experiment Station, Riverside, Calif.
Baxter, Mrs. James - 15 Kilbourn Rd., Belmont, Mass. (Anna Strang).
Bennett, C. W. - University of Michigan, East Lansing, Michigan.
Bennett, J. P. - Pom. Div. University of Calif., Berkeley, Calif.
Bensaude, Mathilde - Inst. Roche Cabral, rue Philippe Herle, Lisbon, Portugal.
Berg, Anthony - University of West Virginia, Morgantown, West Virginia.
Binney, Morgan T. - c/o Market Inspection Service, Pa. Railroad, Phila., Pa.
Blodgett, F. M. - Cornell University, Ithaca, N. Y.
Boyle, Connell - University College, Cork, Ireland.
Boyle, L. W. - Box 22, Agricultural College, Fargo, N. Dak.
Bracher, Rose - The University, Bristol, England.
Bram, John W. - University of Wisconsin, Madison, Wis.
Brentzel, W. E. - Agr. Exp. Sta., Agricultural College, N. Dak.
Brooks, A. N. - Box 365, Plant City, Florida.
Brown, Mrs. Pembroke (Florence Coerper) Univ. of Ill., Urbana, Ill.
Browning, Harold W. - Botany Dept., Rhode Island State College, Providence, R. I.
Byars, Luther P. - Marion, South Carolina.
Carsner, Eubanks - Citrus Experiment Station, Riverside, Calif.
Clayton, E. E. - Long Island Vegetable Expt. Sta., Riverhead, N. Y.
Conant, Geo. H. - University of Wisconsin, Madison, Wis.
Dahl, C. Arnold - Kansas City University, Kansas City, Kansas. (1524 E. 4th St. Superior, Wis.).
Davis, Ray J. - Ricks College, Roxburg, Idaho.
Davis, Wm. H. - Botany Dept., Mass. Agr. College, Amherst, Mass.
Dickson, James G. - University of Wisconsin, Madison, Wis.
Doolittle, Scars P. - University of Wisconsin, Madison, Wis.
Drechsler, Charles - B. P. I., Washington, D. C.
Dungan, Geo. - Agricultural Experiment Station, Urbana, Illinois.
Dyc, H. W. - Niagara Sprayer Co., Middleport, N. Y.
Dijkstra, T. P. - Corvallis, Oregon (c/o M. B. McKay).
Edson, H. A. - B. P. I., Washington, D. C.
Elliott, Charlotte - B. P. I., Washington, D. C.
Essary, S. H. - University of Tennessee, Knoxville, Tenn.
Evans, Wm. G. - Ontario College of Agriculture, Guelph, Ontario.
Fellows, Hurley - Botany Dept., Agr. Expt. Sta., Manhattan, Kansas.
Fischer, Ruth B. - 128 Stuyvesant Pl., New Brighton, N. Y.
Fitch, C. L. - Iowa State College, Ames, Iowa.
Foster, Arthur C. - Sanford, Florida. Box 549.
Frey, Charles N. - 103 W. 183rd Street, New York, N. Y.
Fukushi, T. - Tottori Agric. College, Tottori, Japan.
Gardner, Max W. - Purdue University, Lafayette, Ind.
Gates, P. T. - University of Chicago, Chicago, Ill.
Gerry, Elpise - Forest Products Laboratory, Madison, Wis.
Giddings, N. J. - University of West Virginia, Morgantown, W. Va.
Gilbert, Edward M. - University of Wisconsin, Madison, Wis.
Gilbert, W. W. - B. P. I., Washington, D. C.

Gilchrist, Grace - Clifton Hill House, Bristol, England.
Gilman, Joseph C. - Box 84, Station A, Ames, Iowa.
Gloyer, W. O. - Geneva Experiment Station, Geneva, N. Y.
Godfrey, Geo. H. - Pineapple Experiment Station, Honolulu, Hawaii.
Godkin, James - Virginia Agricultural College, Blacksburg, Va.
Goss, R. W. - Plant Pathology Dept., University of Neb., Lincoln, Neb.
Gray, John - Gainesville, Florida.
Grosenbacher, J. G. - Apopka, Florida.
Hartman, Russell - Penn. State Dept. of Agr., City Hall, Hazleton, Penn.
Hommi, T. - Kyoto Imperial University, Kyoto, Japan.
Hills, T. E. - 336 Powers Bldg., Grand Rapids, Michigan.
Hubert, E. E. - University of Idaho, Moscow, Idaho.
Humphrey, C. J. - Bureau of Science, Manila, Philippine Islands.
Hungerford, C. W. - 514 East C. Street, Moscow, Idaho.
Jagger, Ivan C. - B. P. I., Washington, D. C.
Jansson, Geo. - Agronomy Dept., Arkansas Expt. Sta., Fayetteville, Ark.
Johann, H. - University of Wisconsin, Madison, Wis.
Johnson, A. G. - B. P. I., Washington, D. C.
Johnson, James - University of Wisconsin, Madison, Wis.
Jones, Fred R. - University of Wisconsin, Madison, Wis.
Jones, Mrs. Fred R. - (Edith K. Seymour) University of Wis., Madison, Wis.
Jones, L. K. - Agr. Expt. Sta., Geneva, N. Y.
Jones, Mrs. L. K. (Ruth Bitterman) - Agr. Expt. Sta., Geneva, N. Y.
Jorstad, Ivar - Botanical Museum, Kristiania University, Oslo, Norway.
Keitt, G. W. - University of Wisconsin, Madison, Wis.
Kempton, F. E. - B. P. I., Washington, D. C.
Kochler, Benjamin - Old Agricultural Hall, Urbana, Ill.
Kohl, E. J. - Purdue University, Lafayette, Ind.
Kuntz, Wm. - Citrus Experiment Station, Lake Alfred, Fla.
Leukel, R. W. - B. P. I., Washington, D. C.
Lewcock, H. K. - Plant Pathology Dept., Cornell University, Ithaca, N. Y.
Lindogren, C. C. - U. S. Bureau of Markets, Chicago, Ill.
Lounsbury, J. A. - Botany Dept., Marquette University, Milwaukee, Wis.
MacMillan, H. G. - Box 747, Greeley, Colorado.
Markin, Florence - 203 W. Lamm Street, Bozeman, Montana.
Marshall, R. P. - 257 Osborn Botanical Laboratory, Yale Univ., New Haven, Conn.
McClintock, Jas. A. - Agr. Expt. Sta., Knoxville, Tenn.
McFarland, Frank T. - Botany Dept., University of Kentucky, Lexington, Ky.
McKay, M. B. - Agricultural Expt. Sta., Corvallis, Oregon.
McKay, Mrs. M. B. - Agricultural Expt. Sta., Corvallis, Oregon.
McKinney, H. H. - Bureau of Plant Industry, Washington, D. C.
Melhus, I. E. - Iowa State College, Ames, Iowa.
Monteith, John Jr. - University of Wisconsin, Madison, Wis.
Moore, Emmeline - c/o Conservation Commission, Albany, N. Y.
Morris, H. E. - Agricultural Experiment Station, Bozeman, Montana.
Morse, W. J. - Agricultural Experiment Station, Orono, Maine.
Mulvania, Maurice - Southern College, Lakeland, Fla.
Nakata, K. - Plant Pathology Dept., University of Kuishi, Japan.
Ninman, H. J. - State Capitol Annex, Madison, Wis.
Nolen, R. E. - Agricultural Experiment Station, Gainesville, Florida.
Ocfemia, G. O. - Plant Pathology Dept., Univ. of Philippines, Los Banos, P. I.
Oldenburg, F. W. - Extension Agronomist, Univ. of Md., College Park, Md.
Oliver, Victor F. - Transvaal, South Africa, Kalkspruit via Lichtenburg.
Orton, C. R. - Boyce Thompson Institute, Yonkers, N. Y.
Peltier, G. L. - Plant Pathology Dept., Univ. of Neb., Lincoln, Neb.
Pugh, Mrs. Emerson (Grace Wineland) - 5655 Washington Blvd., Chicago, Ill.
Pritchard, F. J. - B. P. I., Washington, D. C.

- Rands, R. D. - B. P. I., Washington, D. C.
Rawlins, T. E. - Plant Pathology Dept., University of Calif., Berkeley, Calif.
Reddy, C. S. - B. P. I., Washington, D. C.
Reinking, Otto - c/o United Fruit Co., 1 Federal Street, Boston, Mass.
Richards, B. L. - Agricultural Experiment Station, Logan, Utah.
Richards, C. Audrey - Forest Products Laboratory, Madison, Wis.
Riker, A. J. - University of Wisconsin, Madison, Wis.
Robertson, L. A. - Box 102, New Concord, Ohio.
Rose, Jessie P. - 1101 Seventh Street, S. E., Minneapolis, Minn.
Rosen, H. R. - University of Arkansas, Fayetteville, Arkansas.
Sands, D. R. - Ontario Agricultural College, Guelph, Ontario.
Saunders, A. R. - School of Agriculture, Potchefstroom, S. Africa.
Schmidt, Mrs. David (Nevada Evans) 1413 Mound St., Madison, Wis.
Schultz, E. S. - B. P. I., Washington, D. C.
Schultz, E. R. - c/o Patten Cereal Co., Geneva, New York.
Sherwood, E. C. - Agr. Expt. Sta., Morgantown, W. Va.
Shapovalov, M. - Riverside, Calif.
Simmonds, P. M. - Laboratory of Plant Pathology, Univ. of Saskatchewan, Saskatoon, Sask., Canada.
Slagg, C. M. - Experimental Farms, Ottawa, Canada.
Smith, Gilbert M. - Botany Dept., Stanford University, Berkeley, Calif.
Smith, Rose - University of Wisconsin, Madison, Wis.
Snell, Walter H. - Botany Dept., Brown University, Providence, R. I.
Snow, Laetitia - Wellesley College, Wellesley, Mass.
Stokdyk, E. A. - Kansas Agricultural College, Manhattan, Kansas.
Stover, W. G. - Botany Department, University of Ohio, Columbus, Ohio.
Streets, R. B. - Plant Pathology Dept., University of Arizona, Tucson, Ariz.
Takahashi, T. - c/o Miye Agr. College, Tsu City, Japan.
Teodoro, N. G. - Bureau of Agriculture, Manila, P. I.
Thompson, Noel - 2292 Pierce Avenue, St. Paul, Minnesota.
Tims, E. C. - Agricultural Experiment Station, Baton Rouge, La.
Tisdale, W. B. - Tobacco Experiment Station, Quincy, Fla.
Tisdale, W. H. - Plant Pathologist, E. I. DuPont de Nemours & Co., Wilmington, Del.
Tompkins, C. M. - Sugar Plant Investigations, Logan, Utah.
Toole, Eben H. - B. P. I., Washington, D. C.
Vaughan, R. E. - University of Wisconsin, Madison, Wis.
Vestal, E. F. - University of South Carolina, Columbia, South Carolina.
Walker, J. C. - University of Wisconsin, Madison, Wis.
Walker, Marion N. - Box 124, Clemson College, South Carolina.
Walker, Wm. A. - Capitol Annex, Madison, Wis.
Weber, Geo. F. - Agricultural Experiment Station, Gainesville, Fla.
Webb, R. T. - B. P. I., Washington, D. C.
Welles, Colin G. - R. 2, Thiensville, Wis.
Wilcox, R. B. - Fruit Disease Investigations, Expt. Sta., Worchester, Ohio.
Williamson, Mrs. R. C. (Maude Miller) - 2237 Hollister Ave., Madison, Wis.
Wilkinson, Mrs. (Mina A. Willis) Louisiana State Univ., Baton Rouge, La.
Wilson, Orville T. - University of Cincinnati, Cincinnati, Ohio.
Winston, J. R. - B. P. I., Washington, D. C.
Woodworth, C. M. - Agronomy Dept., University of Illinois, Urbana, Ill.