

PROFESSOR J. R. WATSON

First Pioneer Lecture Award, Honoree
Florida Entomological Society
Presented by Dr. W. G. Eden
August 6, 1996

Good morning, ladies and gentlemen. It is a pleasure and honor to be here. In fact, at my age it is a pleasure to be anywhere!

Today I have the very special honor of giving the first Pioneer Award Lecture to the Florida Entomological Society. Today we honor Professor J. R. Watson, a very special man in Florida entomology. I would not be surprised but that some of you here today, or certainly your parents, may have known this great pioneer in entomology in our State of Florida.

Four score and five years ago, in 1911, Professor J. R. Watson came to the University of Florida as Head of the Department of Entomology in the Agricultural Experiment Station. He served in that position until his death 35 years later in 1946. At that time, even you gray and/or bald entomologists, like myself, were just beginning your careers.

Professor Watson was born on August 1, 1874. He received his early training in the Berea schools in Madison County, Kentucky. For you geographers, Berea, Kentucky, is just north of Bear Mountain and just east of Paint Lick. He "escaped" from Kentucky and in 1897 earned the B. S. degree from Baldwin College of Ohio and the M. A. degree in 1889 from Western Reserve, Cleveland, Ohio. He attended several summer sessions at the University of Chicago between 1901 and 1912. He served as assistant and as instructor in biology at Adelbert College of Western Reserve from 1889 to 1901. In 1901 and 1902 he was an instructor of botany, physics, and chemistry in Berea College in Kentucky. He "escaped" from Kentucky again when he became head of the Department of Science at Rochester College in Indiana where he served from 1902 to 1905. He taught in the Manitowoc, Wisconsin, high school from 1906 to 1907. He was professor of biology at the University of New Mexico from 1907 to 1911. Then, he came to the University of Florida.

At 27 years of age, Professor "hit the ground running" when he arrived in Gainesville. His principal interest was applied entomology as it related to Florida agriculture. Interestingly, applied entomology seems quite a departure from his previous experiences; but, from his record in this State, applied entomology must have been on his mind and in his heart for a long time. He did extensive work on the biology and control of the velvetbean caterpillar and the eastern lubber grasshopper. I remember studying his work and using it as a reference when I did some work on the velvetbean caterpillar in Alabama in the late 1940's. Many insect pests of citrus and vegetable crops received his attention. He was instrumental in developing more effective methods of combating them. He quickly learned the importance of biological control procedures. He initiated the introduction of a number of parasites and predators of several crop pests. He was also an early worker with interest in insect ecology. His training in general biology served him in good stead. Also, his work on control of rootknot nematode earned him wide recognition.

Professor Watson was widely recognized for his interest and work in the systematics of the Thysanoptera. He described more than 30 new species of thrips. His slide collection of thrips, numbering nearly 25,000, is now housed in the Florida State Collection of Arthropods at the Division of Plant Industry in Gainesville. He published over 50 papers on thrips. His other entomological papers include several Experiment

Station bulletins and numerous papers in journals and magazines devoted to citrus and vegetable crops.

Farmers and other people interested in agriculture were well acquainted with Professor Watson through many of his Farm Hour radio talks originating from the campus of the University of Florida. He first began broadcasting in 1928 when Radio Station WRUF was operating. He averaged 30 talks per year for 16 years. As Jim Brogdon would say, "He would have been a fine extension entomologist".

Our honoree today played a prominent role in the founding of the Florida Entomological Society in 1916. He had a close association with the Society until his death. He was the first president and served in that capacity again in 1921. A year after the Society was formed, it published the first issue of the *Florida Buggist*, the official organ of the Society. Many of you probably never heard of or saw copies of the *Buggist*. Here's a xeroxed copy of Volume 1, Number 1, provided to me by Allen Selhime. Let me quickly read you the introductory paragraph:

On January 5, 1916, eleven men interested in entomology met at the University of Florida and formed the Florida Entomological Society. The Editor of the *Entomological News*, published in Philadelphia, in noting this event, stated that ours is the first entomological society to be formed in the South. The first officers were: President, J. R. Watson, Experiment Station; Vice-President, Wilmon Newell, Plant Commissioner; Secretary-Treasurer, R. N. Wilson, U.S. Bureau of Entomology; member of the Executive Committee, Dr. H. S. Davis, Department of Zoology, University of Florida.

After three volumes of the *Florida Buggist*, the name was changed to the *Florida Entomologist* with which you are all familiar. The Professor served as editor of the journal from 1916 until his death in 1947. Publishing a scientific journal in the depression years of the 1930's was tough to get done because of shortage of funds. But, the Professor was a determined, devoted man. He often persuaded the Pepper Printing Company of Gainesville to delay printing charges until membership dues of \$.50 per year were paid. On occasion, Professor Watson actually paid the printing charges when membership dues and advertisements did not cover the expenses. He should be remembered for his efforts and devotion that made the journal survive those adversities.

The Professor was a profound lover of Nature. When the opportunity permitted, he would go to some favored spot in the field or woods to observe and enjoy what Nature offered. He usually carried his insect net, of course, to capture insects that he liked so well. He loved the beauty that Nature offered and wanted others to share the joy and happiness that it provided for him.

He was a fellow of the American Association for the Advancement of Science, a fellow of the Entomological Society of America, a member of the American Ecological Society, Florida State Horticultural Society, Sigma Xi, Phi Kappa Phi, and a member and past president of the Athenaeum Club of the University of Florida. I thought it was interesting that Professor Watson was so active in the Athenaeum Club. Those of you who are familiar with it know that it is a rather sophisticated group that meets and discusses fine art, literature, and music. You don't find many red-necks like me in the Athenaeum Club! But, his interest and activity in it shows what a fine, cultured gentleman the Professor was.

Our honoree married Elizabeth Prout of Cleveland, Ohio. They had three daughters—Wilma, Mrs. Chester Allen, and Mrs. Clem Hailey. He had one brother, Charles, and one sister, Mrs. Will Indoe. They were blessed with four grandchildren: Priscilla and Susan Allen and Jerry and Patricia Hailey.

Professor Watson was a friendly, helpful, and sincere man. He was respected and admired by entomologists all over the country and by hundreds of people he related to in the field of agriculture.

The Professor was so serious and busy, so devoted to his work, that he apparently had little time or inclination for lighter moments in his busy life. I have searched diligently for some such occasion to tell you about. I finally learned about one such occasion, the source of which will be obvious as I relate it to you. The Professor was scheduled to give a lecture one day to a class in entomology. The lecture was about, as you might expect, how to collect and preserve thrips. As you recall, he was an ardent collector of that group of insects. On the way to class on a hot and muggy day he must have momentarily forgot about the lecture, so he stopped to dig into a decaying log for a rare specimen. There was no air conditioning in the University classrooms in those days, so when he did arrive for the lecture his shirt was sticking to his body. The bottom button on his shirt was lost or unfastened, revealing an extra large umbilicus. A young, devilish student, known to most of you now as Dr. Sylvester Blanton, was sitting in the front row by a beautiful, fun-loving lady, Mrs. A. P. Black, one of only five females enrolled at the University at that time. Dr. Blanton, self-described as a "fun-loving, showoff, shallow-brained idiot undergraduate," proceeded to sketch a vastly oversized navel with the heads of several thrips peeking over the edge. He passed the sketch to Mrs. Black who giggled loudly and passed it around in the class. Pandemonium ensued. Needless to say, Professor Watson, a rather strait-laced, all business, no foolishness person, did not find this caper amusing. As a result, Professor John Gray, who was head of the Department of Entomology in the College of Agriculture and for whom Blanton worked as a student assistant, not only ripped Blanton with a stirring lecture; he also assigned him 30 hours of extra duty for the caper.

There is no question but that Professor Watson was an unselfish, devoted, hard-working, highly successful scientist at the University of Florida. It is obvious why, and most appropriate, that the Society selected him as honoree for its first Pioneer Lecture Award. He should continue to be recognized for his work in the history and annals of entomology in Florida.

With your indulgence now, I would like to talk about some other items.

It has been over 20 years since I retired from the University of Florida. You can tell by looking at me that I wasn't born, as we red-necks say, "yistiddy." However, I still smoke my pipe—not all the time, just when I'm awake! I was walking along the street in downtown Birmingham last week, smoking my pipe. A good-looking, young, swarthy-skinned man with a red bandana tied around his head met me on the sidewalk. He said, "Hey, man, whatcha smokin' in that pipe?" I replied, "why, pipe tobacco, of course. Why do you ask?" "That stuff will kill you, man! Let me sell you some good, fresh maryjuwanna. It's good for you and will make you feel good, too." I declined. I suppose I thought I might inhale!

Seriously, my friends, I tell you, unhesitatingly, that my years at the University of Florida were the most rewarding time of my life. Like every entomology department in the country, we had a few faculty members that did not demonstrate Einstein qualities; however, for the most part, I have never known a finer, harder-working, well-qualified group of scientists. The same statement applies to those scientists with whom we worked with in the U.S. Department of Agriculture, the Division of Plant Industry of the Florida Department of Agriculture, the Florida Department of Health, the Pest Control Industry, representatives of commercial firms who produced and developed pesticides and equipment, and many others in the State of Florida. Speaking of the qualifications of scientists, I ought to know what I'm talking about. While at Florida I had the opportunity to serve on departmental review teams all over the

country. Our department, in connection with its research, teaching, and extension activities was not only one of the largest in the country; it was one of the best. Those were rewarding years!

Since retiring, I have been involved in professional entomology only on an occasional basis, primarily consulting and working with federal and international agencies. However, as one who we say was "bit by the bug" and spent his life in the profession, I try to keep up with what is going on in entomology.

Some interesting changes have occurred in insect pest management in the past 25 years. At one time we found the list of pesticidal chemicals so effective that managing pest populations with chemicals alone almost became a way of life. We almost forgot what we had been doing before the fabulous array of pesticidal chemicals came into use. We almost forgot about planting dates to avoid heavy pest populations, cultural procedures such as the destruction of crop residues after harvest, the importance of scouting for damaging populations as well as the presence of natural enemies associated with them, the use of trap crops, the significance of massive acreages of a single crop in an area, breeding for insect and disease resistance, and dozens of other techniques that we had known about for well over 50 years.

It is true that chemical technology provided us with better yields and higher quality of farm products, especially sweet corn, vegetables, peanuts, and many others as well as providing us with procedures for controlling household pests, termites, pests of medical importance, and many others. Chemicals also allowed us to control pests that were almost untouchable before, such as preventive measures for corn rootworm and other soil insects as well as massive mosquito control programs (which, incidentally, resulted in making Florida a haven for millions more people). The use of pesticides made it possible for many farmers to rescue thousands of crops and numerous animals from inevitable destruction, frequently almost overnight.

But, because we were so enamored with our successes with chemical pest management and were, naively, not particularly concerned with their effects on other parts of the environment, we found ourselves in trouble. Big trouble!

We entomologists are probably the poorest public relations people in the country, and certainly about the poorest politicians. We got clobbered by every group of environmentalists, the national news media, physicians, naturalists, book writers, movie producers, natural food faddists, and many governmental agencies as well as the U.S. Congress. For a few years, with so many compounds being banned by EPA, about the only thing an entomologist could safely recommend was aspirin!

I was talking to an entomologist friend recently who is noted for his satirical commentary. He wondered when we entomologists would be blamed for the "doom of Florida and Louisiana" in connection with the warming of the earth by the greenhouse effect. We read the recent story by Associated Press writer John Pacenti from Miami, quoting Timothy Wirth who had spoken at a Town Hall meeting on Climate Change and Florida's Future. Wirth noted that the earth will warm by six degrees in the next century, that sea levels had risen 14 inches in some places. If that occurs in Florida and Louisiana, much of the land mass will be inundated. There will be heat waves that will kill crops and wipe out tourists beaches. Yellow fever, dengue, malaria, etc., will thrive. My friend also questioned whether we entomologists will be blamed for the days getting longer because tidal forces are slowing down the rotation of the earth. He said, "Bill, if I were you, I would get out of Florida as soon as you give your lecture. You don't know what the hell is likely to happen to that beautiful state, and we entomologists will get the blame for it!" His satire demonstrates that pesticides are still targeted by society. I prefer to call it fear of the unknown.

Let me add another example. We have been using Deet, an excellent insect repellent, for many years. Millions of people, armed forces and civilians, have been using Deet for years with essentially no side effects when used according to directions. Yet, last month one youth, and I forget where he lived, had a serious reaction from what was obvious misuse. The story made the national press and TV—another story about those terrible pesticides. Yet, every day in our great country hundreds of people have serious reactions to pharmaceuticals prescribed by the physicians of America. Do you see national press coverage of these incidents. Why, less than a month ago, while being treated for an infection, my wife, Evelyn, had an unpleasant reaction to an antibiotic. Do you see these kinds of stories in the press?

I am pleased to say that I believe we are approaching a reasonable equilibrium with a pesticide-fearing nation. We are increasingly using combinations of short-lived pesticidal molecules, native and imported parasites and predators, effective scouting, cultural techniques, sophisticated plant and animal breeding for resistance, including gene implants and other concepts. It is important to remember, however, that we are now an urban nation and we are not fully trusted by many groups. For example, many naturalists are already raising questions about the wisdom of “piddling with gene implants” in plants and animals. I have not forgot, and I hope the profession does not, about what happened to another great concept—food radiation for not only pest control but for killing bacteria. Great research by USDA entomologists and others showed that radiation of food products killed insects, bacteria, etc., and that such products remained fresher longer, had longer shelf life, but contained no radioactivity. But, society was afraid of radiation, thought that eating radiated products would be toxic to their bodies, causing illness and death. So, the concept was never accepted by society. Our great nation is afraid of what it does not understand.

Finally, let me close with the concern expressed earlier. We are, in my opinion, far short in “tootin’ our own horns.” Why do I still see more negatives than positives? Haven’t we learned our lesson about the importance of public relations and political clout? Without appearing to be overly negative in this respect, I suggest that, particularly from the pesticide standpoint, that we are at least a generation away from what is now an “agricultural chemical fearing nation.” I say agricultural chemicals because we are certainly a chemical consuming society. We utilize chemicals in thousands of ways, of course. Ingenuously devised molecules are used routinely for headaches and other pains, cancer, birth control, human fertility, psychiatric treatments, household cleaners, gasoline additives, water purification, athlete’s foot, etc. I suggest that we become more aggressive in “tootin’ our own horns” about benefits derived not only from the use of pesticidal chemicals but by all elements that make up integrated control programs.

I would add another concern related to us entomologists and our public image. We probably lead all other groups of scientists in publicly squabbling with each other. The worst such fiasco, in my opinion, was the more than 25-year public battle between those who advocated the use of pesticidal chemicals and those who advocated biological control. Fortunately, however, that often fierce difference of opinion has appropriately resulted in a combination of efforts to develop pest management technology that combines the use of the two as well as many other concepts. Had we synchronized our efforts years ago, without so much publicly debated rancor, I feel like we would be one of the greatest, most publicly respected groups of scientists in the country. A cooperative spirit can do wonders!

Yet, we continue to get ourselves into hot water, if not among ourselves, then with other powerful groups. I shudder when I think about the current squabble between entomologists and highway beautification proponents. Roadside plantings of flower-

ing plants are loved by motorists all over the country, but they are discouraged by some entomologists who fear that speeding cars will lower the butterfly population. Couldn't we entomologists proffer some cooperative approaches with the beautification people rather than lambast them publicly? Surely, such concepts would put us in a better public light.

Once again, let me commend the Society for using the Pioneer Lecture Award as a way of honoring Professor J. R. Watson and his 35 years of service to our State. I think it was a wonderful and thoughtful endeavor. Further, I want to express my appreciation to the Committee for asking me here today and for its extensive help in providing information about the honoree. Also, several friends and former co-workers were most helpful for which I am grateful.

Thank you, my fellow entomologists, for inviting this "old has-been" here today. It has been an honor and a pleasure. I look forward to seeing you again.