

"IN MEMORIAM"
WŁADYSŁAW WĘGOREK
16.02.1918–16.07.2001

Prof. Dr. Władysław Węgorek dr.h.c. passed away on 16 July 2001. He was one of the most eminent Polish scientists in the field of agriculture for last fifty years. Prof. Dr. Władysław Węgorek dr.h.c. was the creator and former director of Plant Protection Institute, former Rector of Academy of Agriculture in Poznań and Doctor honoris causa of this academy, former President of Branch of Polish Academy of Sciences in Poznań, the man who played an important role in the trends and improvement of plant protection in Poland, a friend of young people, an educator of numerous scientists.

He was born on February 16th, 1918, at Nowoczerkask (presently on the territory of Russian Federation), and in the same year his family moved to central Poland and settled in Puławy – a town, where after Poland resumed independence, State Scientific Institute of Rural Economy, at that time a central agricultural Institute in Poland, began its activity.

In 1937, after completion of secondary school at Puławy W. Węgorek started university studies on the Faculty of Horticulture of Main School of Rural Economy in Warsaw. He completed his studies, interrupted by Second World Ware, in 1946.

In 1940 he started his work in the Institute at Puławy and it was the moment which played a prominent part in further ups and downs of the life of a young student. The connections and cooperation with the most eminent at that time Polish entomologists, such as Professor Ruszkowski, Professor Minkiewicz, Doctor Judenko, as well as the contacts with plant protection decided on the choice of specialization and further activity.

Very quickly his extraordinary intellectual powers and ability to scientific work became evident. On the background of results of research, obtained during his work in the Institute, in 1948, two years after completion of university studies, Ph.D. degree in zoological sciences was granted to him on the University of Maria Curie-Skłodowska in Lublin. The fauna of grubs (*Melolontha* spp.) was the subject of his dissertation.

The insect which considerably influenced further life of W. Węgorek was the Colorado potato beetle. This pest flocking from the West presented a particular risk for Polish agriculture, where potato belonged to very important crops, grown in that time on the area of above 2,2 millions hectares.

The Minister of Agriculture has appointed Doctor W. Wegorek to a post of his plenipotentiary for the control of Colorado potato beetle and has charged him with the task of organization in Poznań a scientific center, where the researches on this pest, new for Polish conditions, could be undertaken.

Dr. Władysław Węgorek started to built this center, assembling a group of efficient young scientists, organized and directed research work and as early as in 1959 published extensive monograph on Colorado potato beetle, the best and most complete publication on this pest all over the world, containing numerous original results obtained in Poznań, concerning among others the diapause and the role of photoperiod in Colorado potato beetle development.

At that time the reorganization of agricultural science took place in Poland and in 1951 Plant Protection Institute was brought into being. In 1956 Dr. W. Węgorek was appointed to the post of Director of Plant Protection Institute, and he fulfilled these duties for further 32 years, up to be retired in 1988.

In 1954 the degree of Assistant Professor was granted to Dr. Węgorek at the Main School of Rural Economy in Warsaw. In 1959 he was appointed Associate Professor, and in 1967 Full Professor in the same year he was appointed corresponding member, and in 1976 full member of Polish Academy of Sciences.

The characteristics of outline and output of a scientist having the achievements so important for the development of science requires certain systematization of data. There is why first scientific activity of Professor Węgorek will be presented, then his organizational

and didactic achievements, main duties performed by him, and certain prizes and honors awarded to him.

In the final part the list of more important publications will be presented.

# SCIENTIFIC ACTIVITY

Scientific activity of Professor W. Wegorek is connected with various branches of applied entomology and plant protection. First of all faunistic researches on insect groups insufficiently known, but important for plant protection, should be taken into consideration. Here the researches on soil fauna, mainly on *Melolonthinae* family, should be listed. Other researches concerned cutworms (*Agrotinae*). For the first time in Poland the fauna of this very important subfamily, to which belong numerous plant pests, has been elaborated. The occurrence of separate species has been presented as well as their appearance and numerousness. On the background of these researches the species most important for plant protection have been determined and regionalized.

The most attention was paid by W. Węgorek to Colorado potato beetle in Poland. In numerous publications he presented in details the biology and ecology of this pest, making scientific backgrounds for its control. In his researches he paid for the first time attention to the role of photoperiod in insect's development, determined life rhythm of the pest and explained physiological causes of Colorado potato beetle diapause. Biochemical researches made possible the elaboration of new methods of pest forecasting.

Basing on the model of this pest Dr. Wegorek elaborated modern backgrounds of forecasts of pest appearance as well as signalization of control treatments against pests and diseases, which are up to now the guidelines for plant protection service.

Dr. Wegorek elaborated the method of determining beetle migrations and their localization on the fields, which in high degree facilitates the use of plant protection products as well as complex programme of Colorado potato beetle control in Poland.

In the field of biological pest control W. Wegorek carried out the researches on a new for Poland predatory insect *Perillus bioculatus*. After elaboration of the methods of mass rearing of the predator, it was released in various regions of Poland, and, using labeled radioisotopes, the places of its hibernation and survival have been determined.

Very interesting and important from the point of view of plant virus transmission in the nature were the researches carried out by him on the role of insects in the dissemination of virus diseases. To particularly important scientific achievements on this field should be included the following ones: the determination of time of insect feeding, necessary to acquire the ability of separate virus transmission, then the studies on the retention of alfalfa mosaic virus and researches on the possibility of transmission two viruses at the same time by the aphids, for example pea enation mosaic virus and pea mosaic virus. Dr. Węgorek also developed researches on virus behaviour in insect's body.

Developing the researches on the control of virus vectors he started studies on the resistance to the pests. It is a very difficult branch of science and insufficiently represented in Polish bibliography. In the researches on papilionaceous plants he stated the occurrence of

differences in susceptibility of separate alfalfa and lupine varieties to the feeding of aphids. In these researches the author applied radioisotope technique and infiltration of alcaloids into the test plants.

Further, very important researches undertaken by Professor Węgorek, were the researches on the economy of plant protection products use, as well as researches on the circulation of these substances in the environment. As the result of world discussion on adverse effects of agrochemicals use in the agriculture, Professor Węgorek carried out many-sided researches on the effect of plant protection products on crop yields, on the contamination of soil and water as well as on various components of biocoenosis. First results of these researches, lasting at that time 14 years, he presented on International Plant Protection Congress in Moscow in 1975. These researches could be considered as unique in international scale because of their long duration and many-sidedness.

The whole of scientific output of Professor Dr. Wegorek comprises of more than 159 scientific publications, 123 scientific articles, 27 manuals and 102 other publications.

# ORGANIZATIONAL ACTIVITY

The first organizational achievement of Władysław Węgorek was the organization of Poznań Branch of Plant Protection Institute and undertaking of many-sided researches on Colorado potato beetle. It should be underlined that the organization of Branch means its creation, starting from the construction of first building and engaging of first staff.

Dynamic development of Poznań unit was the reason of, as it has been written earlier, that in 1956 the Minister of Agriculture has appointed Professor Dr. Węgorek to the post of Director of Plant Protection Institute, moving at the same time the headquarters of the Institute to Poznań. To Poznań were also moved the scientists from closed Branches in Bydgoszcz, Puławy Gorzów Wlkp., Reguły, and Wrocław. This time was used by Dr. Węgorek to organize modern and well-equipped scientific center, taking on the responsibilities of direction and coordination of plant protection research in Poland.

The authority of Professor Dr. Węgorek, his organizational ability and professional knowledge were the reason of charging Plant Protection Institute with a task of coordination and realization of the following scientific problems:

- 1967 Integration of biological and chemical methods of disease, pest and weed control
- 1971 Elaboration and implementation of modern plant protection methods, more effective and limiting adverse effect of plant protection products on human and animal health and the environment
- 1976 Improvement of plant protection methods with special regard to the limiting of adverse effect of plant protection products on human health and the environment
- 1981 Improvement of plant protection in order to increase yield quantity and quality with special regard to the limiting of adverse effects of applied methods on the environment
- 1986 Improvement of complex plant protection methods

At the beginning of the eighties, thanks to the support of FAO and UNDP, Węgorek organized the system of research on plant protection product residues in plant products, soil and water on the territory of the whole country, which works up to now and is treated as a model system.

The other achievement of Professor Dr. Węgorek, manifesting his intuition and good understanding of the needs of science and practice, was the organization of Scientific Conferences of Plant Protection Institute. These Conferences are organized up to now and they are the meetings unique in Poland, in which take part the representatives of science and practice.

In 1972–1987 Professor Dr. Wegorek managed the Comecon Center coordinating plant protection researches and integrating scientific circle of the countries of central and Eastern Europe.

In 1959–1965 he fulfilled the duties of Rector of the Academy of Agriculture (at that time High School of Agriculture) in Poznań, conducing to its development and success.

#### DIDACTIC ACTIVITY

Being worker of State Scientific Institute of Rural Economy in Puławy, Dr. Węgorek started his didactic activity as early as in 1950, first on the Faculty of Agriculture of Maria Curie-Skłodowska University in Lublin, and since 1952 on the Faculty of Horticulture of Main School of Rural Economy in Warsaw taking up the duties of head of newly organized Department of Applied Entomology.

After granting him in 1954 the degree of Assistant Professor, Professor Dr. Węgorek took up in 1956 the duties of head of newly organized Department of Entomology of High School of Agriculture in Poznań, and he fulfilled these duties up to 1969.

Managing of numerous scientific teams in Plant Protection Institute and didactic activities on High Agricultural Schools in Lublin, Warsaw and Poznań were the reason of rich output of Professor Dr. Węgorek in the duration of young scientists, expressed as 94 M.Sc. dissertations and 35 Ph.D. dissertations. It should be underlined, that numerous followers of Professor Wegorek are presently assistant professors and professors.

He played the important role in the education of older scientists, expressed as 58 applications for scientific titles of associate professors and full professors, 95 reviews of associate professor's dissertations and 49 reviews of Ph.D. dissertations.

Several aged-groups of students used 5 editions of manual "Plant Pests" and 3 editions of large modern manual of the same title, i.e. "Plant Pests", III<sup>rd</sup> edition of which appeared in 1972.

Professor Wegorek through his participation in the training and through the manuals he has written, played an important role in the improvement of professional knowledge of plant protection service. He is the author, co-author or co-translator of "Plant Protection (5 editions), "Plant Protection Handbook" (3 editions), "Plant Protection Encyclopaedia', "Plant Protection Agenda (2 editions), and "Entomology".

#### THE MORE IMPORTANT POSTS

- Director of Plant Protection Institute (1956–1988)
- Rector of High School of Agriculture (1959–1965)
- Member of the Presidium of Polish Academy of Sciences
- President of Poznań Branch of Polish Academy of Sciences
- President of Plant Protection Committee of Polish Academy of Sciences
- former member of Scientific Councils of several institutes
- many-year member of Scientific and Technical Council of the Minister of Agriculture
- member (since 1968) of Central Council of the Minister of High Education
- member of Executive Committee of European Plant Protection Organization (EPPO) in Paris, and member of editorial body of EPPO Bulletin
- editor-in-chief of "Annuals of Agricultural Sciences", series E
- editor-in-chief of Plant Protection Institute journals: "Researches of Plant Protection Institute", "Reports of Scientific Conferences of Plant Protection Institute", "Plant Protection Institute Recommendations"
- member of editorial body of "Archiv für Phytopathologie und Pflanzenzschutz"
- member of editorial body of "Agronomie" (France)
- honorary member of Polish Entomological Society
- honorary member of All-Union Entomological Society of Soviet Union
- member of Poznań Society of the Friends of Sciences
- member of Polish Zoological Society
- member of Polish Phytopathological Society
- member of the Council for Science Problems, appointed by the President L. Wałesa

## MORE IMPORTANT PRIZES AND AWARDS

- Doctor Honoris Causa of Academy of Agriculture in Poznań
- Award of the Prime Minister for the whole of scientific output
- State Award of II degree for the organization of the system of plant pest and disease registration and forecasting in Poland
- Awards of the Minister of Agriculture, Minister of Education and President of Polish Academy of Sciences for particular scientific achievements
- Golden Cross of Merit
- Commander's Cross of Polonia Restituta
- Order of the Banner of Labour, First and Second Class
- Oczapowski Memorial Medal
- Medal "Ad Perpetuam Rei Memoriam"
- Medal "L'Ordre du Merit Agricole"
- Medal "1000 years of Polish State"
- Medal "50 years of Plant Protection Institute"

# MILITARY AWARDS

- Cross of the Home Army
- Medal "Poland for its Defender"

On July 20<sup>th</sup> 2001 the funeral ceremonies for Prof. Dr. Władysław Węgorek were held in the Institute of Plant Protection and Junikowo Cemetery in Poznań. There were present the representatives from: Ministry of Agriculture and Rural Development, Plant Protection Inspection Service in Poland, Polish Academy of Science, University of Agriculture in Poznań and other institutions. The large gathering of his friends, former students and co-workers attended the services. He will stay in our memories as the remarkable scientist sharing his knowledge and stimulating many research projects and the patriot with a great honor. We will remember him as the excellent teacher and a good friend. He will be greatly missed by his family and his ex-colleagues to whom we send our sympathies.

PROF. DR STEFAN PRUSZYŃSKI DYRECTOR Instytute of Plant Protection, Poznań

# SELECTED MAJOR PUBLICATIONS

- 1949 Obserwacje biologiczne nad stonką ziemniaczaną (*Leptinotarsa decemlineata* Say). Rok 1948, Irena k. Dęblina. Pol. Pismo Entomol., 11(3–4): 208–212.
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- 1950 Organizarea protectiei plantaror in Republica Polona. Congresul International de Fitopatologia, Entomologia si de Protectia Plantelor, 2,. Bucuresti: 153–156.
- 1955 Analiza rozwoju stonki ziemniaczanej i walka z nią w Polsce Pol. Pismo Entomol.., supl. 2 29, 10: 157–177.
  - Badania nad wpływem długości dnia i jakości pożywienia na biologię stonki ziemniaczanej (*Leptinotarsa decemlineata* Say). Post. Nauk Roln., nr 7: 104–110.
- 1956 Badania nad wiosennymi rozlotami stonki ziemniaczanej (*Leptinotarsa decemlineata* Say) i możliwością koncentracji chrząszczy. Ekologia Polska, Seria A, 3: 247–277.
- 1957 Badania nad biologią i ekologią stonki ziemniaczanej (*Leptinotarsa decemlineata* Say). Rocz. Nauk Roln., Seria A, 74(2): 135–185.
- 1958 Poslednije itogi issledowatielskich rabot po kołoradskomu żuku (Leptinotarsa decemlineata Say). Materiały Mieżdunarodnej Sesii Akad. Nauk SSSR, Moskwa 1958.

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- 1959 The influence of the photoperiod on the Colorado beetle (*Leptinotarsa decemlineata* Say). The onthogeny of insects. Acta Spmoisii de Evolutione Insectorum. Praha: 231–236.
  - Biozenotische Fragen bei der chemischen Kartotfelkiiferbekiimpfung (Leptinotarsa decemlineata Say). Verhandlungen IV internationalen Pflanzenschutzkongress, Hamburg 1957 Ed I (Braunschweig 1959): 1003–1008.
  - The Colorado potato beetle (Leptinotarsa decemlineata Say). Translated from Polish. Published for the National Science Foundation and Dept. of Agriculture by Centralny Instytut Informacji Naukowo-Technicznej i Ekonomicznej. Warszawa 1959: 1–64.
  - Researches on the factors conditioning the life rhythm of the Colorado beetle (Leptinotarsa decemlineata Say). Omagin lui Train Savulescu en priżejul implinarii a 70 de ani. Editura Akademii Republici Populare Romine: 845–852.
- 1961 Wstępne badania nad możliwością zwalczania stonki ziemniaczanej (*Leptinotarsa decemlineata* Say) na zimowiskach przy pomocy aldrinu. Biuletyn Inst. Ochr. Roślin nr 13: 81–92 (współautorzy J. Syme, J. Narkiewicz-Jodko).
- 1962 Próby aklimatyzacji *Perillus bioculatus* Fabr. (Heteroptera Pentatomidae) w Polsce. Biuletyn Inst. Ochr. Roślin nr 17: 7–27 (współautor A Szmidt).
- 1964 Morfologia i anatomia odpornych i nieodpornych odmian łubinów na mszycę grochową (*Acyrthosiphon pisum* Harris). Biuletyn Inst. Ochr. Roślin nr 27: 1–15 (współautor L. Dunajska).
  - Wstępne badania nad odpornością różnych odmian łubinów na mszycę grochową (Acyrthosiphon pisum Harris). Biuletyn Inst. Ochr. Roślin nr 27: 17–26 (współautor E. Jasieńska-Obrębska).
  - Ökologische Grundlagen der Bekämpfung der auf den Rübenfeldern auftretenden Rüben-blattwanze (*Piesma sp.*). Tagungsberichte der AdL, 62: 187–195 (współautor J Narkiewicz-Jodko).
  - Das Licht als Ökologischer faktor im Leben der Insekten. Wiss Z Martin Luther Univ., 13(I): 91–93
  - Progress in seed treatment in Poland. Cereal and Seed Conference, Szwecja, 25-lecie Panogen, 3.02.64.
- 1965 Investigation on hibernation of *Perillus bioculatus* Fabr. tagged with 60 Co. Ekologia Polska, Seria A, 12: 451–462 (współautorzy K. Głogowski, E. Czaplicki).
  - Fauna szkodników obserwowanych na ziemniakach w Polsce. Konference o skudcich Okopanin. Praha 4–5.11.1965. Entomol Ustav. Ceskoslov. Akad. Ved Praha: 31–32 (współautor K. Piekarczyk).
  - Quantitative changes in populations of the more important hosts of sugarbeets (Betta vulgaris. L.) during 1959–1964 in Poland. Konference o Skudcich Okopanin. Praha 1965: 63–65 (współautor K. Piekarczyk).

- 1966 Rolnice (*Agrotinae*) krajobrazu rolniczego Polski. Prace Nauk. Inst. Ochr. Roślin 8(2): 5–69.
  - Integrated control of pea aphid on alfaalfa. Ecology of *Aphidophagous* insects.
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  - Die Ernährungslähigkeit der Erbsenblattlaus (Acyrthosiphon pisum Harris) auf den resistenten Abarten der Luzerne und Lupine Nachrichtenbl. Deutsch. Pflanzenschutzdienst 20: 22–25 (współautor E. Czaplicki).
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  - Integracja metod walki z chorobami, szkodnikami i chwastami jako nowoczesny kierunek działania ochrony roślin. Post. Nauk Roln., 1/97: 99–114.
- 1967 Insect vectors of virus diseases of various forage legumes (FG-Po-135-62). Institute of Plant Protection. Poznań: 1–178. figs. 98.
  - Populationsdynamische Wirkung von Perillus bioculatus (Fabr.). Het.
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  - Polowe próby biologicznego zwalczania stonki ziemniaczanej (*Leptinotarsa decemlineata Say*) na drodze introdukcji *Perillus bioculatus* (Fabr.). Biuletyn Inst. Ochr. Roślin nr 36: 47–54 (współautor A. Szmidt).
- 1968 Biochemiczne przyczyny odporności niektórych odmian łubinu na mszycę grochową (Acyrthosiphon pisum Harris). Prace Nauk. Inst. Ochr. Roślin 10(1): 7–30 (współautor J. Krzymańska).
  - Badania nad występowaniem i biologicznym zrożnicowaniem ras zielonej i czerwonej mszycy grochowej (Acyrthosiphon pisum Harris). Prace Nauk. Inst. Ochr. Roślin 10(2): 61–75 (współautor E. Hejna).
  - Primienie radioizotopov i jadernych izluczenij w issledowaniach, prowodimych Institutom Zaszczity Rastienij. Materialy k naucznom mietodiczeskom sowieszczaniju po problemie "Ispolzowanie izotopow i izłuczenij w issledowaniach po selskomu i lesnomu chozjaistwu". Leningrad: 132–141 (wpółautor K. Głogowski).
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- 1977 Wpływ stosowania pestycydów w rolnictwie na jakość produktów. Post. Nauk Roln., nr 3: 49–54.
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     W-wa 1977: 465–466 (współautor H. Trojanowski).
- 1979 Krążenie pestycydów w agrocenozie. Materiały 19. Sesji Nauk. Inst. Ochr. Roślin: 185–204.
  - Stan badań nad introdukcją do Polski wrogów naturalnych stonki ziemniaczanej (Leptinotarsa decemlineata Say). Post. Nauk Roln., nr 5: 61–73 (współautor S. Pruszyński).
  - Kierunki rozwoju ochrony roślin w nowoczesnym rolnictwie Zesz. Probl. Post. Nauk Roln., 228: 119–129.
- 1980 Circulation of pesticides in drain and surfance water in agricultural fields. Materiały 20. Sesji Nauk. Inst. Ochr. Roślin: 273–284.
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- 1993 The influence of the "Azot" plant emission in Puławy on the microflora of adjacent soils. Prace Nauk. Inst. Ochr. Roślin 33(1/2): 133–136 (współautorzy H. Kaszubiak, H. Trojanowski).
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