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In Memory of Professor Ebrahim Behdad

Javad Karimi^{1*} & Alireza Jalalizand²

1 Department of Plant protection, Faculty of Agriculture, Ferdowsi University of Mashhad, Mashhad, Iran. jkb@um.ac.ir

2 Islamic Azad University, Isfahan (Khorasgan) Branch, Isfahan, Iran. arjalalizand@gmail.com

ABSTRACT. Professor Ebrahim Behdad, emeritus professor of Agricultural Research, Education and Extension Organization (AREEO), Isfahan Center, and professor at Islamic Azad University, Khorasgan branch passed away at the age of 85 on March 2021. Despite administrative responsibilities, he is the author of several books which some are references mostly for undergraduate students. His key role in holding two rounds of the Iranian Plant Protection Congress is memorable. Also, he published some peer-reviewed scientific articles and a lot of extension booklets and was involved in teaching and supervision the postgraduate students, mainly at the Isfahan University of Technology.

Key words: Ebrahim Behdad, Entomology, Iranian Plant Protection Congress, Phytopathology, Isfahan

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On the first day of autumn, September 1992, the first author (JK) started the journey towards earning a BSc degree in plant protection. With a lot of enthusiasm and interest in improving my knowledge in the field, one of the first books I purchased for my small personal book shelf was "Pest of Fruit Trees in Iran". On the book cover there was an image of a larva of the codling moth, *Cydia pomonella* (Lep., Tortricidae), with typical mandibles. The book's foreword had a sorrowful statement of the author in memory of his late son who tragically lost his life in an automobile accident. The book and its first page profoundly influenced my thoughts and shaped my future career goal in plant protection. So, I was very much looking forward to an opportunity to meet with the author of the book and finally the day arrived and I was able to meet Professor Behdad during the 14th biennial meeting of the Iranian Plant Protection Congress held at the Isfahan University of Technology. A session of the congress had been dedicated to honor pioneers and prominent figures who had lovingly dedicated their lives to investigate plant protection in Iran. It was during this session that I witnessed Professor Behdad presenting a short acceptance speech for the award and a letter of commendation in recognition of his lifelong service. In his speech, he graciously and humbly downplayed his achievements and simply mentioned he just followed his passion in plant protection and put together the works of many investigators and students. The Author, Professor Ebrahim Behdad, was born on October 7, 1936, in the Bid Abad region, Isfahan and completed his primary education in Iran

Corresponding author: Javad Karimi, E-mail: jkb@um.ac.ir

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Elementary School, Isfahan and later completed his high school education at the Farhang School of Isfahan in 1958. The same year, he entered the Faculty of Agriculture, University of Tehran, Karaj, Iran, and received his BSc degree in plant protection in 1962 (Fig. 1). He then started working at the Department of Plant Protection, Isfahan Agricultural Research Center, which is affiliated with the Iranian Research Institute of Plant Protection (IRIPP).



Figure 1. Ebrahim Behdad **A.** Childhood; **B.** Youth; **C.** Enlisted in military service from 1962–1964; **D.** Postgraduate education time.

In 1969, he was awarded a scholarship to continue his studies abroad and he first joined the Goethe-Institut Munich to learn German language and after four months, he started conducting research at the Stuttgart Plant Protection Institute (Fig. 2). He then received a Ph.D. degree from the University of Hohenheim with a dissertation entitled, "Study on White Rot Roots of Fruit Trees in Iran". Following obtaining a doctorate degree in 1975, he returned to Iran and continued his work in Isfahan. He served as the dean of the Plant Protection Department of Isfahan Agricultural Research Center for 25 years. He also had other primary responsibilities, including Research Deputy Dean of Iranian Agricultural Research Organization, Dean of Isfahan Research Center and Dean of Isfahan Agricultural Organization. In 1989, the Iranian Plant Protection Congress (IPPC) held its 8th meeting with Dr. Behdad's efforts while serving as the dean of the congress. Dr. Behdad was also actively involved in organizing another IPPC congress in 1999 (Figs. 3, 4). One of the main achievements of Dr. Behdad was authoring several comprehensive text books in plant pathology and entomology. Many plant protection students, investigators, and academics in Iran have read and consulted his books, especially four books on pests of fruit trees of Iran, plant diseases of fruit trees, pests of crop plants and diseases of crop plants. These books provided detailed information on biology, ecology, as well as management strategies of plants pests and diseases with fluent writing, all as main study sources for graduate and postgraduate students. Among his notable other scholarly works, there is a four-volume set of encyclopedia of plant protection (Fig. 5). Dr. Behdad, also prepared several extension booklets on a number of important phytopathogens and insect pests. He had a strong involvement in educating students and advising their theses/dissertations, mainly at the Isfahan University of Technology. Teaching a course in mycology and advising graduate student theses in entomology and phytopathology were among his scholarly contributions to the Plant Protection Department, Isfahan University of Technology. After a fruitful career in Agricultural Research Organization, he retired as a Full Research Professor in 2000. He then joined the Islamic Azad University, Khorasgan Branch as a faculty member while he was serving as the research deputy of the university. Dr. Behdad was a member of several professional and academic associations. He served as the editor-in-chief for the Journal of Applied Entomology and Phytopathology of Iran and as the president of the Iranian Phytopathological Society for a period of time.

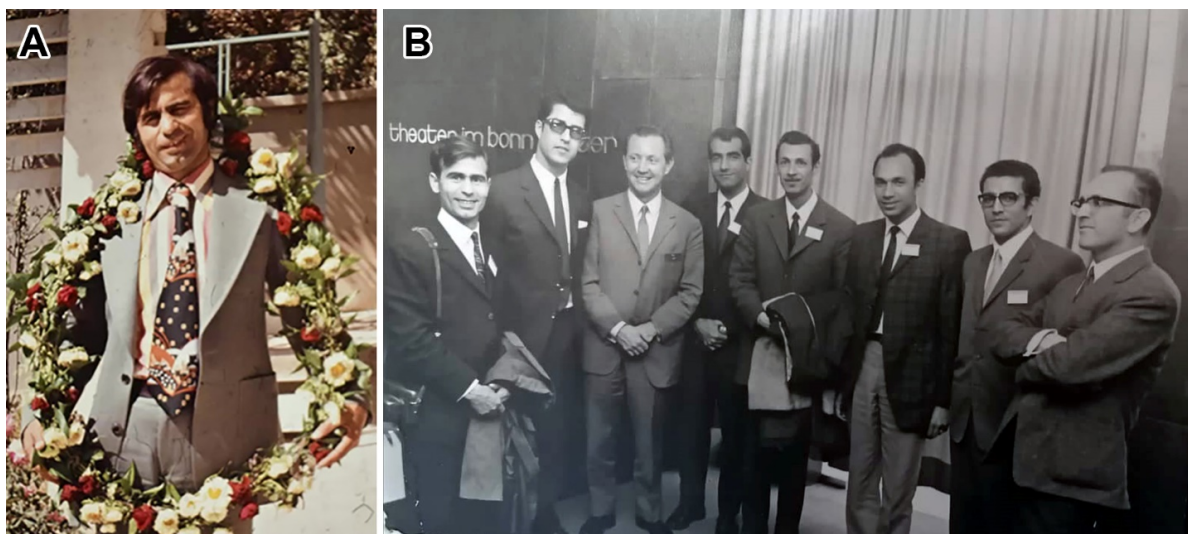


Figure 2. Ebrahim Behdad, when he successfully got his Ph.D. in during 1969–1975.



Figure 3. Prof. Ebrahim Behdad played a crucial role in 8th Iranian Plant Protection Congress.

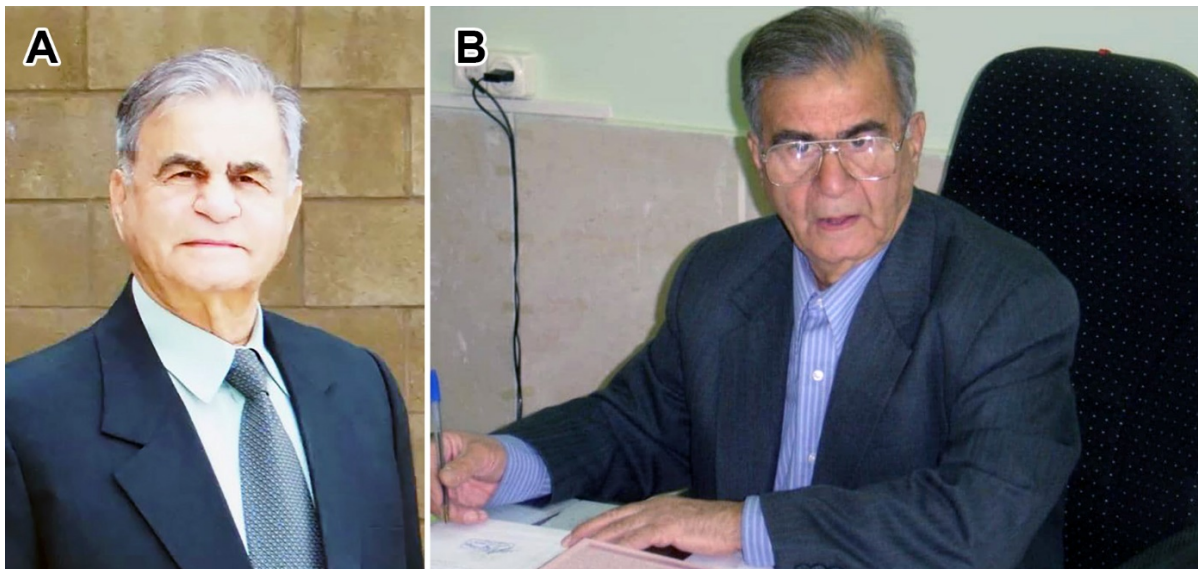


Figure 4. Prof. Ebrahim Behdad **A.** Prominent faculty member at the Isfahan Plant Protection Research Center, Iran Research Institute of Plant Protection (1974–2000); **B.** He served as a Professor in the Islamic Azad University for 20 years.

He was awarded a medal of honor as an Ever-Lasting Name by the Isfahan Provincial Government in 2007. After a blessed life with 57 years in career, Professor Ebrahim Behdad passed away at the age of 84 on March 9, 2021 (Fig. 6).

Prof. Keramatollah Izadpanah, a renowned professor of plant pathology at Shiraz University, wrote this note about Dr. Behdad: "Dr. Ebrahim Behdad was one of the most effective plant protection pioneers in Iran. In addition to several books which he edited or translated, he was one of the organizers of the Iranian Phytopathological Society. The first post-revolutionary Iranian Plant Protection Congress was held due to his efforts at the Isfahan University of Technology. This was in a situation where many congresses of this type were considered heretic. For this reason, the holding of the congress was stopped for several years. He became a source of valuable service to the country's agriculture, both in Isfahan and in the center of the Agricultural Research Organization. Dr. Behdad twice managed the Iranian Plant Protection Congress as dean in the best possible way. He also chaired the Iranian Phytopathological Society for a period. In addition to all this, Dr. Behdad was very kind and loving and always showed his good manners and Isfahani originality in conversations. His long illness and death were indeed a tragic loss to Iranian plant protection..."

He was interested in both conducting research and preparing publications in phytopathology and entomology, a unique combination of interests that was rare (Table 1). The list of his books is long, started with a book entitled, "Use of Atomic Energy in Agriculture" in 1964 and ended with the one entitled, "Stored Products Pests" in 2018. Dr. Behdad published numerous research articles in peer-reviewed journals and prepared a number of extension booklets, mainly about key plant pathogens, which were published by the Agricultural Research, Education and Extension Organization of Iran. Dr. Behdad was a man of character respected by all who knew him. He survived by his wife and two daughters, while he lost his 25-year-old son on April 21, 1990 after graduating from the Dentistry School of Isfahan University of Medical Science.

Table 1. The list of published books by Prof. Ebrahim Behdad.

| | | | |
|----|----------------------------------------------------------------|----|--------------------------------------------------------------------------------|
| 1 | Atomic Energy in Agriculture, 1964 | 2 | Principles of Mycology, 1972 |
| 3 | Principles of Plant Pathology, 1979 | 4 | Diseases of Fruit Trees in Iran, 1979 |
| 5 | Diseases of Field Crops of Iran, 1980 | 6 | Crop Pests of Iran, 1982 |
| 7 | Pests of Fruit Trees of Iran, 1984 | 8 | Pests and Diseases of Trees, Forest Shrubs and Ornamental Plants of Iran, 1988 |
| 9 | Encyclopedia of Iranian Plant Protection (four volumes), 1996 | 10 | Pathogens and Main Plant Diseases of Iran, 1998 |
| 11 | Preliminary Entomology and Important Plant Pests of Iran, 2002 | 12 | Phytopathology and Important Plant Diseases of Iran, 2009 |
| 13 | Vegetable Diseases, 2012 | 14 | Important Plant Nematodes in Agriculture, 2014 |
| 15 | Textbook of Plant Pathology, 2014 | 16 | Planting Designs in Landscape, 2014 |
| 17 | Pests, Diseases, and Disorders of Potato, 2015 | 18 | Biological Control in Plant Protection, 2016 |
| 19 | Stored Product Pests, 2018 | | |



Figure 5. Some of the key books authored by Professor Ebrahim Behdad.



Figure 6. Professor Dr Ebrahim Behdad, in the last years of his career in Islamic Azad University, before his illness.

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Conflict of Interests

The authors declare that there is no conflict of interest regarding the publication of this paper.

ORCID

Javad Karimi: <https://orcid.org/0000-0003-0199-0029>

Alireza Jalalizand: <http://orcid.org/0000-0002-5448-4237>

به یاد استاد ابراهیم بهداد

جواد کریمی^{۱*} و علیرضا جلالی زند^۲

۱ گروه گیاهپزشکی، دانشکده کشاورزی، دانشگاه فردوسی مشهد، مشهد، ایران.

۲ دانشگاه آزاد اسلامی، واحد (خوراسگان) اصفهان، اصفهان، ایران.

* پست الکترونیکی نویسنده مسئول مکاتبه: jkb@um.ac.ir

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چکیده: استاد ابراهیم بهداد، محقق، مدیر و استاد گیاهپزشکی دانشگاه، بعد عمری تلاش و کوشش، در اسفند ۱۳۹۹ از میان ما رفت. ایشان در طی دوران خدمت در مرکز تحقیقات کشاورزی اصفهان، علاوه بر امور پژوهشی در مناصب مهم اجرایی نیز منشأ اثر بودند. تألیف کتاب‌های مختلف که برخی از آنها از منابع دانشجویان و محققین به شمار می‌رود از جمله یادگارهای این پیشکسوت گیاهپزشکی کشور به شمار می‌رود. برگزاری دو دوره کنگره گیاهپزشکی در اصفهان، با همت ایشان میسر گردید. همچنین ایشان سال‌ها تدریس برای مقاطع مختلف تحصیلی و راهنمایی دانشجویان تحصیلات تکمیلی در دانشگاه صنعتی اصفهان و دانشگاه آزاد اسلامی واحد خوراسگان را عهده‌دار بودند. نام نیک آن معلم و محقق همراه با نیکی همراه خواهد بود.

واژگان کلیدی: ابراهیم بهداد، حشره‌شناسی، کنگره گیاهپزشکی ایران، بیماری‌شناسی گیاهی، اصفهان