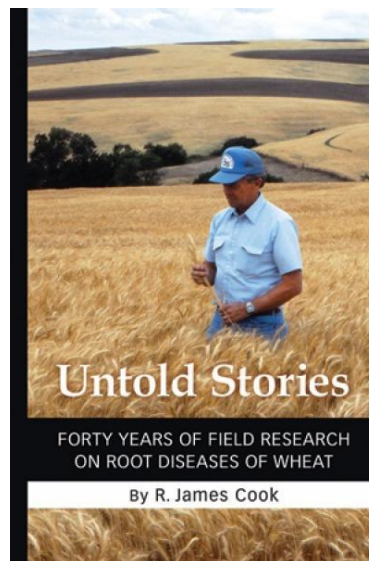


# Veteran Scientist Shares Wisdom, Experiences, Crop Management Tactics in New Book

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*IMAGE: Untold Stories: Forty Years of Field Research on Root Diseases of Wheat now available from APS PRESS.*

Dr. R. James (Jim) Cook, a retired research plant pathologist, U.S. Department of Agriculture Agricultural Research Service (USDA ARS), and emeritus professor of plant pathology, Washington State University (WSU), has built a storied career over the past 40 years, one that has profoundly impacted his scientific discipline and the farmers who benefitted from his breakthrough research on wheat.

Dr. Cook's exceptional new book, titled *Untold Stories: Forty Years of Field Research on Root Diseases of Wheat*, chronicles many of his insightful experiences—and imparts his philosophy, wisdom, and practical guidance for the benefit of researchers, students, agriculture professionals, and farmers.

“*Untold Stories* is more than just a memoir. It is a story of discovery and how seemingly insignificant findings can be harnessed into practical solutions for growers,” said Dr. Tim Paulitz, research plant pathologist at USDA’s ARS and Adjunct Professor at WSU. “Jim intuitively how to convert observations into scientific theories based on the biology of the pathogens, and

then translates them into management practices for growers. This book is a model of how to integrate applied field work with basic lab discoveries.”

Throughout the compelling stories and personal experiences shared in this book, readers can find practical crop management techniques and other beneficial information that can be used in the field and the lab. It reports unique experiences and knowledge for budding and veteran scientists alike and serves up ‘bushels’ of knowledge that growers and crop consultants can use to make more informed and successful decisions in the field.

“This book puts in one place, and in chronological order, the key results of my field research on root diseases of wheat — much of it published here for the first time — and the stories behind the scores of projects,” said Dr. Cook. “Most of the fundamental discoveries summarized in this book could only have been made in experiments conducted in the field, some requiring three years and longer.”

### **Woven among the compelling stories and personal experiences, readers will find:**

- A comprehensive account of the four most common root diseases of wheat known to science, and the agronomic and seed-treatment options for their management, with a focus on direct-seed (no-till), cereal-intensive cropping systems.
- Detailed experiences with root diseases of wheat and their management, encompassing 40 years of field research across all precipitation zones in the U.S. Pacific Northwest.
- Fundamental discoveries that could only have been made in the field, such as the 15-20% difference in grain yield when comparing the presence and absence of Pythium root rot achieved using soil fumigation as a research tool.
- Examples of Dr. Cook’s unique research philosophy: test hypotheses in the field first, then research more deeply in the laboratory or greenhouse.

“One of my goals in writing this book is for scientists and growers to gain a new appreciation for the enormous economic and environmental cost of root diseases — and seek ways through the latest tools and innovation to place root disease control on a level equal to what is already achieved with foliar diseases,” said Cook.

In addition, the stories told and the realities shared in this book will help guide next-generation research, such as that in the new field of phytobiomes, inspiring a new generation of scientists to apply one of Dr. Cook’s longstanding principles in conducting research on plant disease control: “Until it is done or confirmed in the field — and in practice — it is not done.”

### **About the Author**

Cook has a BSc in agriculture from North Dakota State University (NDSU); an MSc in plant pathology from NDSU; and a PhD in plant pathology from the University of California, Berkeley. After a one-year fellowship at the Waite Agricultural Research Institute in Adelaide, Australia, he joined the U.S. Department of Agriculture Agricultural Research Service in 1965 stationed at Washington State University (WSU), where he spent 33 years as a research plant pathologist. Cook then spent 7 years as the R. James Cook Endowed Chair in Wheat Research, a position endowed with a \$1.5 million gift to WSU from the Washington wheat growers. His

seven years on the WSU faculty included two years as interim dean of the College of Agricultural, Human, and Natural Resource Sciences before he retired in 2005. Cook was elected to the U.S. National Academy of Sciences in 1993 and was co-winner of the 2011 Wolf Prize in Agriculture awarded in Israel. In addition to Untold Stories and 200 peer-reviewed journal articles and book chapters, he has co-authored two books on biological control of plant pathogens and one on wheat health management.

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