YOU ARE INVITED TO A SPECIAL BRIEFING ON:

THE TRUTH ABOUT CLIMATE CHANGE FOR AGRICULTURE
- What weather can farmers expect the next decade?
- Can the West expect more extreme heat & drought?
- What can be done to mitigate weather related crop stress?
- Can biological practices and carbon-based fertility help buffer stress?

MANAGING NUTRITION TO CONTROL PLANT DISEASES
- How do I implement the six principles for using nutrients to control disease?
  - Can trace minerals increase disease suppression?
- Can the right balanced fertilizer program reduce pesticide use?
- How does glyphosate affect nutrient uptake and soil health?

SOIL MICROBE – PLANT – PESTICIDE INTERACTIONS
- Do healthy soil microbial communities increase disease suppression?
  - How do fertilizer & pesticides affect soil microbes, plant physiology, & crop yields?
- What are the soil health consequences of your crop protection products?
- How can glyphosate and other herbicides affect orchard & vineyard plants?
- How management can limit negative impacts of pesticides while maintaining/improving soil health and crop productivity.

USDA – ARS Research Updates on Building Healthy Soils
- Why Soil Biology is Essential for Soil Health
- Why is soil biology related to nutrient availability?
- How do we have to manage our soils to promote soil health?
- What is soil health worth in terms of enhancing climate resilience?

DECEMBER 4, 2015
Registration 7:00 - 7:45 - Continental breakfast provided WELCOME AT 7:45 - 8:00
2 Morning Sessions: 8:00 -12:00 / Lunch provided / 2 Afternoon Sessions: 1:00 to 5:00
RED LION HOTEL (Richland, WA)
802 George Washington Way, Richland, Washington 99352
FREE admission but SEATING IS LIMITED - Reserve your seat NOW!

Please RSVP via email: dhorn@perfect-blend.com

OR: Text or call Dave Horn 509 713-3644

YOU DO NOT WANT TO MISS THIS VERY SPECIAL EVENT

SPEAKERS

**Dr. Jerry Hatfield** - Keynote Speaker
Director - USDA-ARS National Laboratory for Agriculture

Dr. Jerry Hatfield has served as the Laboratory Director of the USDA-ARS National Soil Tilth Laboratory in Ames, Iowa since 1989 and is considered one of the leading soil scientists in the world. He has turned his investigative attention to microbial activity and soil biodiversity and their links with the soil organic carbon pools in the soil, and how fertility programs utilizing biotic fertilizers affect the soil complex. His revolutionary findings have been incorporated into advanced thinking regarding new approaches to fertility and fertility programs in commercial agriculture.

**USDA ARS Biotic Fertilizer Research**

**Dr. Robert Kremer**
Professor of Soil Microbiology - University of Missouri

Dr. Robert Kremer is a Professor of Soil Microbiology at the University of Missouri and recently retired after a 32-year career as a microbiologist with U.S.D.A, Agricultural Research Service. Original research involves soil microbe-plant-pesticide interactions; soil health assessment; and impacts of genetically-modified crops on soil ecology and biology. He teaches soil microbiology, weed science, and sustainable agriculture; and has authored or co-authored 150 research articles, 15 book chapters, and co-authored a textbook. Dr. Kremer is a Certified Soil Scientist, a Fellow of the American Society of Agronomy and the Weed Science Society of America.

**Soil Microbe – Plant – Pesticide Interactions**

**Dr. Don M. Huber**
Botany & Plant Pathology Professor - Purdue University

Dr. Don M. Huber, Professor Emeritus of Plant Pathology at Purdue University, holds B.S. and M.S. degrees from the University of Idaho, and a PhD from Michigan State University. His agricultural research has focused on the epidemiology and control of soil-borne plant pathogens, and he is author or co-author of over 300 journal articles, three books, and 84 special invited publications. He is internationally recognized for his expertise in the development of nitrification inhibitors to improve the efficiency of N fertilizers, interactions of the form of nitrogen, manganese and other nutrients in disease, herbicide-nutrient-disease interactions, techniques for rapid microbial identification, and cultural control of plant diseases.

**Nutrition Influences on Plant Health**

**Dr. Jerry Hatfield**
Director - USDA-ARS National Laboratory for Agriculture

Dr. Hatfield served as the Lead author for Agriculture section in the Climate Change Assessment Program (CCSP) Report SAP4.3 on The Effects of Climate Change on Agriculture, Land Resources, Water Resources, and Biodiversity in the United States that was released in 2008. He also served as Lead Author on the Agriculture section of the CCSP State of Knowledge Report on Global Climate Change Impacts in the United States. His personal research program is focused on interactions of plants and the atmosphere which provide a basis for assessing cropping system resilience to climate change.

**Morning Session - Climate Impacts on Agriculture**