

**Biography:** Dr. James E. Adaskaveg obtained his Ph.D. in Plant Pathology at the University of Arizona, he was a postdoctorate researcher and a Research Plant Pathologist at the University of California, Davis, and then became a Professor of Plant Pathology at the University of California, Riverside. He is a world-renown fruit and nut tree pathologist and has studied tree crop diseases throughout California as well as in other states and countries. He has helped identify and manage many of the flower, foliar, and fruit diseases using combinations of cultural, biological, and conventional approaches. He introduced most of the reduced-risk and biofungicides currently used on California tree crops, and he initiated research that led to the registration of new modes of action for managing many fungal, Phytophthora, and bacterial diseases. Dr. Adaskaveg has published over 100 research journal articles, over 40 book chapters, numerous proceeding articles for professional societies and grower magazines, and is an editor of his recent book “Postharvest Pathology of Fruit and Nut Crops”, published by APS Press. He is a fellow of the American Phytopathological Society (APS), he has received the Lee F. Hutchins Award for his research on almonds from APS, the Cherry Man of the Year award from the California Cherry Board, the Distinguish Almond Researcher award from the Almond Board of California, and the Albert G. Salter Award for his research benefiting the citrus industry of California. He has been recognized with a Lifetime Achievement Award from the APS Pacific Division and received awards from international societies for his discovery and development of new postharvest fungicides with unique modes of action that are currently used around the world in the international trade of fresh fruit commodities. His latest efforts include registering several new compounds for the management of avocado root rot in cooperation with IR-4.

**Presentation Summary:** Phytophthora diseases of avocado include root rot caused mostly by *Phytophthora cinnamomi* and trunk cankers that are caused by *P. menzei* (a new species in the *P. citricola* complex) and sometimes by *P. cinnamomi*. These organisms belong to the phylum Oomycota within the Kingdom Stramenopila and grow and cause plant diseases similar to members of the Kingdom Eumycota (true fungi). Because of this evolutionary distinctiveness from the true fungi, fungicides with distinct modes of action have to be developed for the management of Phytophthora diseases. Traditionally, two modes of action were available for use on avocado, the phenylamides metalaxyl and mefenoxam (Fungicide Resistance Action Committee - FRAC Code 4) and the phosphonates fosetyl-AI and phosphorous acid/salts (FRAC Code P07, 33). With the advent of new modes of action toxic against *Phytophthora* spp., we investigated these new compounds representing FRAC codes 22 (ethaboxam), 40 (mandipropamid), 43 (fluopicolide), and 49 (oxathiapiprolin) for managing Phytophthora diseases of tree crops including avocado. Results of this research on avocado done in collaboration with Dr. Manosalva at UCR and growers will be presented. He will also discuss the rationale for developing and simultaneously registering multiple compounds through the federal IR-4 program.