

Short Bio of Shabtai 'Shep' Cohen

Shabtai 'Shep' Cohen is a research scientist, former director of the Institute of Soil, Water and Environmental Sciences at the Israeli Ministry of Agriculture's Volcani Center, and a lecturer at Hebrew University. Shep's an expert in crop water use and irrigation requirements; and the interactions between whole plants and their environment. This includes the physiology of the plant that relates to the environment, like water loss and carbon uptake in photosynthesis, and also the physics of the plants environment, like solar and thermal radiation distribution, wind, air movement, temperatures and humidity. Since agriculturalists are major clients for climate data which they need for irrigation scheduling, Shep has a good understanding of radiation measurements. This led him and a number of colleagues to the discovery and elucidation of 'global dimming', which is the name for large decreases in solar radiation reaching the earth's surface in the late 20th century. Scientists think that 'dimming' masked much of the global warming during that era. Shep's recent research has focused on plant hydraulic limits, irrigation water quality and crop water use in screen covered structures. Shep has published more than a hundred papers in scientific journals and books.