



MARK CASADA, PE, research agricultural engineer, USDA Agricultural Research Service, Manhattan, Kansas, is being honored for superior contributions to science and education related to grain aeration, modeling, and storage.

Casada is a pioneering researcher in the fields of grain-based food and feed supply chains, which has resulted in innovative commercialized technologies and a strong influence on researchers around the world. Casada's work in improved storage and transportation methods for a variety of crops has led to reduction in post-harvest and shipping-related losses. Through his research, Casada has developed novel recommendations that prevent moisture and fungal issues during shipment of bulk peanuts and potatoes. Casada has led research on grain aeration management practices, monitoring methods, and system requirements to account for the effects of humid air on aeration of wheat. This research has determined engineering design and management requirements for effective use of aeration and these requirements have been adopted by extension engineers around the world. Casada has also created new management practices for insect control in empty grain bins, using propane heat treatment instead of a typical chemical disinfestation. This low-cost method allows the bins to be cleaned without the concerns or costs associated with other chemical methods.

While at the University of Idaho, Casada chaired the departmental curriculum committee, with which he was instrumental in developing the biological systems engineering curriculum, which was ABET accredited in 1996. He has mentored master and doctoral level graduate students and several postdoctoral research associates.

A 35 year member of ASABE, Casada has provided leadership on the Processing Systems Standards committee, the Processing Systems Publications committee, and the Processing Systems Grain and Feed Processing Storage committee. He has also served as an associate editor in the Processing Systems technical community.

Casada has authored or coauthored more than 150 technical publications and journal articles. Casada has been a member of the American Society of Mechanical Engineers for 35 years. He received the 2013 Andersons Cereals and Oilseeds Senior award of Excellence and the 2015 Member of the Year award from the Kansas Section. He has also received several ASABE paper awards and an outstanding reviewer award. Casada is a member of the Sigma Xi, Alpha Epsilon, and Pi Tau Sigma honor societies.