

2015

JIM KUHN LEADERSHIP AWARD

*California Alfalfa & Forage Association,
Representing the Forage Growers of California*

Mark McCaslin

President, Forage Genetics International, Minneapolis, MN

The Board of Directors of the California Alfalfa & Forage Association (CAFA) is pleased to select Dr. Mark McCaslin as the 2015 recipient of the Jim Kuhn Leadership Award.

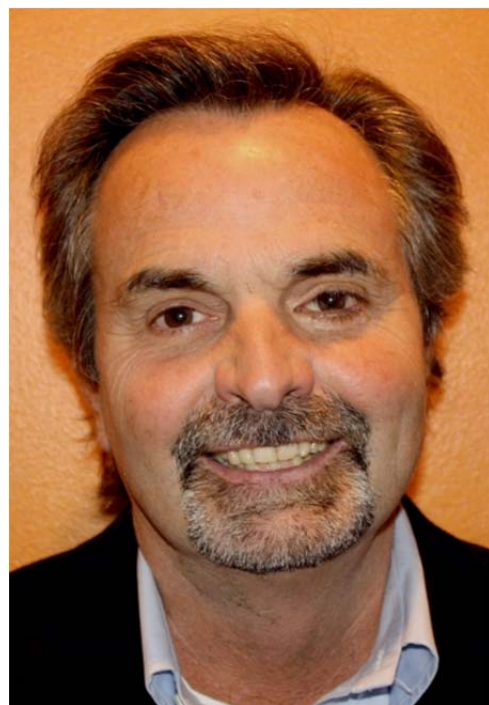
The Jim Kuhn Leadership Award is presented annually to a person or organization for their lasting contributions to the California alfalfa industry. The award was established in 2005 when Kuhn, an industry icon and forage innovator, was killed in a vehicle accident near his ranch in El Centro, CA. Nominees are judged on their knowledge of alfalfa, record of leadership and the extent and depth of their contributions to the California alfalfa industry.

A California native, Mark McCaslin attended the University of California at Davis, where he received B.S. and M.S. degrees in Agronomy. Mark earned a Ph.D. in Plant Breeding from Cornell University in 1981.

Mark has worked in alfalfa breeding for over 30 years and has been responsible for the development of over 250 alfalfa cultivars. He began his career in California working on plant breeding and genetics, and subsequently formed Forage Genetics International, which has become the largest genetic supplier of alfalfa varieties worldwide. Mark was a co-founder and currently serves as VP Research of Forage Genetics International. Forage Genetics International (a wholly owned subsidiary of Land O'Lakes, Inc.) is a global leader in alfalfa and corn silage biotechnology, breeding, seed production, sales and marketing.

He also led the teams that developed the Roundup Ready (RR) and HarvXtra traits in alfalfa. These are biotech traits which confer the ability to control weeds post-emergence in alfalfa with glyphosate (Roundup Ready), and which confer a reduced lignin characteristic to alfalfa to improve forage quality (HarvXtra). The former was finally fully released in 2011, and the latter was approved in 2014 and is likely to be more extensively commercialized in 2016-2017.

Mark's leadership is recognized for the development of new biotech traits especially in the development of the Roundup Ready alfalfa trait, which has been widely adapted by alfalfa growers across California and other western states. While it is recognized that many breeders



and seed companies have contributed to California's alfalfa production, this trait has enabled growers to develop significantly better weed management options and has really changed the way we do weed management – especially for those weeds which have proved to be very difficult to control historically. The trait has been adapted by a majority of the growers in non-restricted growing areas of California, so it has had a large impact on the way we grow alfalfa.

Although the RR trait has been widely adapted by farmers in western regions, there are a number of farmers who do not wish to grow RR alfalfa, or whose markets reject Genetically Engineered (GE) traits – particularly organic and export growers. Mark has also been active in promoting the interests of those growers. There is a need to assure that these farmers can continue to function as their neighbors are adapting these GE technologies. In the West, export growers are a major component of 'GE sensitive' growers. From 10-12% of western-grown alfalfa hay is exported, some to highly sensitive markets such as China that reject GE crops.

Of particular interest was Mark's participation on a panel of farmers, seed people and organic proponents to discuss 'coexistence' in a panel in the 2011 Western Alfalfa & Forage Symposium in Las Vegas Nevada, just as the Roundup Ready trait was being approved by USDA. Mark has led the effort to promote 'coexistence' of genetically engineered traits with non-GE growers in practice, working with leaders in other seed companies and seed growers to produce non-GE seed and hay for sensitive markets. These include the production of organic and non-detect (non-GE) seed as well as coexistence methods. He has co-authored a number of publications on this issue (see NAFA website and Alfalfa Symposium Proceedings). Discussions with Farm bureau and growers in the Imperial Valley led to the effort by growers there to restrict the production of RR alfalfa in the Imperial Valley, due to the risk of those seed and hay growers to their markets as the 2011 approval of RR alfalfa commenced. These efforts were fully supported by Mark. With local agricultural leaders, a consensus was reached as to the approach. More recently, Mark has worked with other major genetic suppliers and seed growers on testing methods to assure seed purity, a process that is still ongoing. Mark's cooperative approach and scientific expertise has been important in developing methods and coming to an agreement on these issues. These efforts were fully supported by farmers in the Imperial Valley, the National Alfalfa & Forage Alliance, CAFA and with coordinated efforts of growers, Farm Bureau, seed people, and agencies.

He has contributed many presentations to the California and Western Alfalfa & Forage Symposia over the years, contributing 14 proceedings papers since 1997 (see: <http://alfalfa.ucdavis.edu/+symposium/proceedings/search.aspx?q=McCaslin>). These contributions attest to his scientific expertise and reflect his commitment to a scientific approach, as well as openness in sharing his extensive knowledge and company information about alfalfa genetic improvement.

Mark and his wife Jessica live in Minneapolis, MN.

-- Philip Bowles, CAFA, Steve Orloff, Dan Putnam, University of California