CLIMATE SMART PRECISION AGRICULTURE

**Washington, DC**—June 21, for Immediate Release – Climate Smart precision agriculture will be the subject of National C-FAR’s research seminar on Monday, June 27, at noon in 1300 Longworth House Office Building. The presenter is Dr. Raj Khosla, Montfort Professor of Precision Agriculture, Colorado State University.

"Understanding Nitrogen is complex. Globally only half of what is applied is taken by the plants, the rest leaks into the biosphere, says Khosla. " We do have solutions in our arsenal that could meet and exceed the goals of reducing gases from nitrogen losses into biosphere by 2025."

“This presentation provides an excellent example of the value of federally funded food and agricultural research, extension, and education in producing the scientific outcomes and outreach needed to meet 21st century challenges and opportunities,” says Andy LaVigne, President of the National Coalition for Food and Agricultural Research (National C-FAR).

**Highlights:** Nitrogen fertilizer is the most widely used nutrient on the planet and the most important contributor of nitrous oxide emissions from agricultural sources. With increasing pressure to produce more food globally, many economies have been increasing nitrogen consumption. The global nitrogen use efficiency estimates are in the proximity of 40%, which indicates that a lion's share of nitrogen applied to crops is lost in the biosphere every year. The 5-R nutrient stewardship is a major breakthrough in addressing the nitrogen challenge. It optimizes the input source, placement, amount, timing, and manner while maximizing output, efficiency, and profitability in a sustainable manner. Long-term research at Colorado State University since 1997 has developed and demonstrated site-specific management zones as an effective tool for climate smart agriculture. This research documented a reduction of up to 46% in nitrogen loadings without impairing grain yields. Coupling site-specific management zones with more recent innovations such as active proximal sensors enables the management of both, macro- and micro-variability in farm-fields and results in further improvement of nitrogen use efficiency and reductions in N loadings in the biosphere. Recent studies conducted under small scale farming systems in China, India, Malaysia, Zimbabwe, Mali, Niger and elsewhere have demonstrated that the benefits of such 5-R nutrient management techniques are scale independent.

The seminar is open to the public and the media.

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The National Coalition for Food and Agricultural Research (National C-FAR) is a nonprofit, nonpartisan, consensus-based, and customer-led coalition that brings food, agriculture, nutrition, conservation, and natural resource stakeholders together with the food and agriculture research and Extension community, serving as a forum and a unified voice in support of sustaining and increasing public investment at the national level in food and agricultural research, Extension, and education. National C-FAR’s Hill Seminar Series, now in its tenth year, regularly presents leading-edge researchers working to provide answers to pressing issues confronting the public and Congress. The Hill Seminar Series helps demonstrate the value of public investment in food and agricultural research—investment that returns 45 percent per year on average, and $20 in economic benefit from every $1 investment in food and ag research.

Go to [http://www.ncfar.org/Hill_Seminar_Series.asp](http://www.ncfar.org/Hill_Seminar_Series.asp) for more information about the seminar series and past topics. Interviews with National C-FAR President Andy LaVigne are available by request. For additional information, go to [www.ncfar.org](http://www.ncfar.org); or contact Tom Van Arsdall, Executive Director, at tom@vanarsdall.com or (703) 509-4746.