## **Profile**

Designation : Principal Scientist (Soil Science)

Division: Soil Chemistry and Fertility

#### Dr. Narendra Kumar Lenka



### Research specialization:

Soil resilience and soil health issues, Climate change impacts on agriculture, restoration of degraded soils

Professional experience: Working as Scientist in ICAR since November, 2000

## **Awards and Recognitions:**

- USDA Norman E Borlaug fellowship
- Associate Fellowship of the National Academy of Agricultural Sciences (NAAS), New Delhi
- Fellow of the Indian Association of Soil and Water Conservationists, Dehradun
- Dr. JSP Yadav Memorial award for excellence in soil science of the Indian Society of Soil Science, New Delhi
- Golden Jubilee Commemoration Young Scientist award of the Indian Society of Soil Science, New Delhi
- Young Scientist award of the Indian Association of Soil and Water Conservationists, Dehradun

# **Top Ten publications:**

- 1. **Lenka NK**, S Lenka, P Mahapatra et al (2019) The fate of <sup>15</sup>N labeled urea in a soybean-wheat cropping sequence under elevated CO<sub>2</sub> and/or temperature. *Agriculture, Ecosystems and Environment*, 282, 23-29.
- 2. **Lenka NK**, S Lenka, KK Singh, Ajay Kumar et al (2019) Effect of elevated CO<sub>2</sub> on plant growth, nutrient partitioning and uptake of major plant nutrients in soybean

- under varied nitrogen application levels. *Journal of Plant Nutrition and Soil Science* 182, 509-514.
- 3. **Lenka NK**, S Lenka, JK Thakur et al (2017) Interactive effect of elevated carbon dioxide and elevated temperature on growth and yield of soybean. *Current Science* 113, 2305-2310.
- 4. **Lenka NK**, KK Satpathy, R Lal et al (2017) Weed strip management for minimizing soil erosion and enhancing productivity in the sloping lands of north-eastern India. *Soil & Tillage Research* 170, 104-113.
- 5. **Lenka, NK**, D Mandal and S Sudhishri (2014) Permissible soil loss limits for different physiographic regions of West Bengal. *Current Science*, 107, 665-670.
- Lenka, NK, S Sudhishri, Anchal Dass, PR Choudhury, Sangeeta Lenka and US Patnaik (2013) Soil carbon sequestration as affected by slope aspect under restoration treatments of a degraded alfisol in the Indian sub-tropics. *Geoderma*, 204, 102-110.
- 7. **Lenka, NK** and Rattan Lal (2013) Soil aggregation and greenhouse gas flux after 15 years of wheat straw and fertilizer management in a no-till system. *Soil and Tillage Research*, 126, 78-89.
- 8. **Lenka, N. K.** and Rattan Lal (2012) Soil related constraints to the CO<sub>2</sub> fertilization effect. *Critical Reviews in Plant Sciences*, 31, 342-357.
- 9. **Lenka, NK**, A Dass, S Sudhishri, PR Choudhury and US Patnaik (2012) Soil carbon sequestration and erosion control potential of hedgerows and grass filter strips in sloping agricultural lands of eastern India. *Agriculture, Ecosystems & Environment*, 158, 31-40.
- 10. Lenka, NK, PR Choudhury, S Sudhishri, A Dass and US Patnaik (2012) Soil aggregation, carbon build up and root zone soil moisture in degraded sloping lands under selected agroforestry based rehabilitation systems in eastern India, Agriculture, Ecosystems & Environment, 150, 54-62.