Division of Land and Water Management



Personal Details

Ajay Kumar PhD(IITR), Principal Scientist (LWME)

Address: ICAR Research Complex for Eastern Region, P.O. Bihar Veterinary College, Patna 800014 (Bihar)

Email-ID: ajay.kumar@icar.gov.in, ajaykumar1001@gmail.com

Research Interest

Land and Water Management Engineering

Research Highlights

Irrigation water management, micro irrigation, soil and water conservation engineering

Memberships / Fellowships

- Indian Association of Soil & Water Conservationists
- Society for Upliftment of Rural Economy (SURE)

Technology Developed

Design, development and demonstration of Modified LEWA irrigation system; Enhancement of crop and water productivity in SRI and SWI through micro-irrigation; Fertigation and planting geometry technology for enhancing water productivity in broccoli, tomato, sweet corn and chilli, developed process of scour around pier in cohesive sediment

Publication Details

Kumar, **A**, Singh, S K, Kaushal K K, Purushottam .2015. Effect of micro-irrigation on water productivity in system of rice (*Oryza sativa*)and wheat (*Triticum aestivum*) intensification. *Indian J. of Agri. Science*, 85(10):1342-48

Kothyari, U C, **Kumar**, **A** and Jain, R K. 2014. Influence of cohesion on river bed scour in wake region of piers. *Journal of Hydraulic Engineering*, ASCE, 140(1):1-13

Panday, S C Singh, R D, Saha, S, Singh, K P Ved Prakash, **Kumar**, **A**, Kumar, M and Srivastava, A K. 2008. <u>Effect of tillage and irrigation on yield, profitability, water productivity and soil health in rice (*Oryza sativa*)-wheat (Triticum aestivum) cropping system in north-west Himalayas. *Indian J. of Agril. Sciences*, 78(12):1018-22</u>

Singh, S.K.; **Kumar, A**. and Manibhushan. 2015. Productivity and economics of menthe (*Mentha arvensis*) okra-potato cropping system as influenced by irrigation and fertility levels under drip irrigation. *International Journal of Applied Agricultural & Horticultural*

Sciences, Green Farming. 6(1): 114-116.

Mali, S S, Jha, B K, Naik, S K, Singh, A K, **Kumar, A**. 2016. Effect of fertigation pattern and planting geometry on growth, yield and water productivity of tomato, *Indian J. of Agril. Sciences*.

Pandey, A K, Singh, A K and **Kumar A** and Singh S K. 2013. Effect of drip irrigation, spacing and nitrogen fertigation on productivity of chilli (*Capsicum annuum* L.). *Environment & Ecology* 31 (1): 139-142.

Kumar, A., Jain, R. K. and Kothyari, U.C. 2014. Turbulence statistics in wake zone of pier founded in clay-gravel cohesive sediment, *International J. Scientific Engineering and Technology*, issue special, pp 288-292

Kumar, M., **Kumar A.** and Srivastva, A. K.2009. Low and medium cost greenhouses in hill and mountain agro-ecosystem of north-west Himalya. Indian J. of Agri. Sciences, 79(7):497-500

Kumar, A., Jain R.K. and Kothyari, U.C. 2011. Flow characteristics in wake zone of a pier founded in clay-sand-gravel mixture. 34th IAHR World Congress Balance and Uncertainity, In:IAHR (Eds.)pp 3574-3581; ISBN:978-0-85825-868-6 Brisbane, Australia

Kumar, A. Kaushal K.K. and Singh. R.D.2007. Prediction of annual maximum daily rainfall of Almora based on probability analysis. Indian J. Soil Cons. 35(1): 82-83.

Book chapters

Kumar, A., Jain R.K. and Kothyari, U.C. 2011. Flow characteristics at a pier in scoured bed of clay-gravel sediment . In Hydraulics and Water resources, Patel PL, Manekar, VL, Yadav, SM and Timbadiya, PV (Eds), Elite Pub. House, ISBN:81-88901-47-0

Jain, R.K., Kothyari, U.C. and **Kumar, A**. (2012) "Characteristics of pier scour in cohesive sediments." Chapter 177, In River Flow 2012–Murillo Munoz R.E.(Ed.), ISBN 978-0-415-62129-8, CRC Press, London, pp 1331-1335.

Pandey, A. K., Singh, A. K., **Kumar, A.** and Singh S. K. 2014. Sustainable micro irrigation and fertigation practices in chilli (*Capsicum annum*) Chapter 13, In: Management, Performance, and Applications of Micro Irrigation Systems, Megh R. Goyal (Ed.), Hard ISBN: 9781771880695, Apple Academic Press, Canada, pp 161-168