



Thursday 5 November EU-India PARTNERING EVENT

PROFILE FORM

ORGANISATION DETAILS					
Organisation name National Botanical Research Institute (CSIR)					
Street * Rana Pratap Marg					
ZIP *	226001	City *	Lucknow	Country *	India
Phone * 91522-2297954			Fax 91522-2205839/2205836		
Email * dvamla@rediffmail.com			Web www.nbri-lko.org		
Employees	☐ 1-10	☐ 11-50	☐ 51 - 250	☒ 250 +	
Organisation type	☐ University	☒ Research Center	☐ Industry	☐ SME	☐ Other
Department	Molecular Biology & Genetic Engineering Division				
Short description of your company/organization	National Botanical Research Institute (NBRI) is a premier plant based national laboratory under CSIR New Delhi situated at Lucknow. The institute is focused to undertake multi-disciplinary R&D programmes in the area of conservation, prospecting and sustainable utilization of diverse plant genetic resources, other than agricultural crops, with the objectives of prospecting and developing value added plants and plant products in ecologically sound and economically sustainable, in the service of the society and the Nation. Institute is recognized as referral centre by Govt. of India and UN in the matters related to plant biodiversity and IPRs. Institute has developed excellent globally competitive state-of-art infrastructure facilities with high throughput ultra deep genome sequencing system FLX from 454, Mass array sequenom, MALDI-TOF-TOF, IRMS, Affimatrix microarray, ICPMS, LC-MS and GC-MS for functional genomic and metabolomic, studies. Institute currently having several mega projects on development of desired transgenic plants, gene mining for drought tolerance and water use efficiency, herbal technology and assessment of climatic changes on plant population from CSIR, DBT, DST and ICAR.				

PARTICIPANT			
Gender	☒ Mr	☐ Ms	Title Dr.
First name	DEVINDRA		
Last name	AMLA		
Position	Scientist-G		

PARTNERSHIP PROPOSAL	
<u>EU-India partnering event session participation:</u>	
☐ Sustainable production and management of biological resources from land, forest and aquatic environment ☐ Fork to farm: Food (including seafood), health and well being ☒ Life sciences, biotechnology and biochemistry for sustainable ☐ Health	
Areas of activity (<i>Free keywords</i>) Novel plant toxins against insect pests, transgenic plants, gene mining for drought tolerance, physiology of drought, water use efficiency.	

PROJECT DESCRIPTION	
Title of your research project in one sentence	Designing plants for insect-pest resistance and drought tolerance through biotechnological approaches
Short description of project	Institute has developed state-of-technology and leads in characterization of novel toxins particularly against sap sucking pests, chimeric insecticidal Bt-cry genes, novel promoters for tissue specific and tightly regulated expression, Agrobacterium-mediated transforamtion of recalcitrant crop plants like cotton, chickpea, tomato and groundnut, established promosing transgenic plants resistant to insect pests. Physiological parameters for drought in Jatropha and cotton have been documented and some leads molecules and genes for tolerance to drought amongst lower plants have been investigated. A synergic approach shall be followed under EU-India joint programme to develop the insect-pest resistant and drought tolerant plants of mutual interest to EU-India.
Description of expertise offered	Expertise are available in the institute for gene designing, gene synthesis, novel promoters for wound and tissue specific expression, plant genetic transformation, functional genomics, transcriptome sequencing and plant metabolomics.
Description of requested partner expertise	