

**Training course on
“Prevention, control and management of invasive alien species”
for Indian Forest Service Officers**

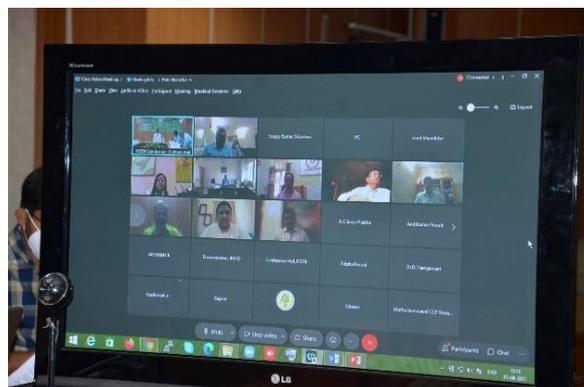
Institute of Forest Genetics and Tree Breeding, Coimbatore

Date: 05th & 06th August, 2021

Institute of Forest Genetics and Tree Breeding, Coimbatore organized a two days online Training course on ‘**Prevention, control and management of invasive alien species**’ for IFS officers sponsored by the Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi. A total of 32 IFS officers ranking from APCCF to DCF from different states participated in the training. The Training programme was inaugurated on 5th August 2021 and the inaugural function of the training programme started with an invocation. Dr. A. Rajasekaran, Training Co-ordinator, Forest Ecology and Climate Change Division, IFGTB, Coimbatore introduced the participants. Dr C. Kunhikannan, Director, IFGTB, welcomed the participants and the gathering. Dr. Sudhir Kumar, DDG (Extension), ICFRE inaugurated the training course and released the training manual. During inaugural speech, he highlighted the effect of Invasive Alien Species species on land-use pattern, forest vegetation, forest productivity and in agricultural sector as well. He also, informed that apart from *Lantana*, *Eupatorium* and *Parthenium*, more than 70 species have invaded, naturalized and altered the species composition of the forests. He further emphasised the requirement of in-depth understanding of Invasive Alien Species (IAS) for its successful management/eradication. Dr. A.Rajasekaran, Training Co-ordinator presented an overview of the two days training course in detail. Sh. Senthilkumar, IFS, Group Co-ordinator Research, IFGTB presented the research activities being carried out by IFGTB on Invasive alien species, which was followed by vote of thanks.



Inaugural Address by
DDG (Extension), ICFRE



Self-Introduction by the Participants



Address by Training Coordinator, IFGTB



Release of Training Manual

After the inaugural program, on 5th August 2021, Dr A. Rajasekaran, Scientist, IFGTB delivered a lecture on Invasive alien plants, risk assessment and their prevention. He discussed about important pathways of introduction, stages invasion, common characteristics of invasive alien species, various theories proposed for invasion success and listed some of the common invasive alien plant species found in India. He also briefed about the positive and negative impacts of invasive alien plant species, existing legislation related to prevention and management of invasive species. The need for weed risk assessment and various preventive measures are also discussed.

Dr. C.R. Babu, Emeritus Professor from Centre for Environmental Management of Degraded Ecosystems (CEMDE), University of Delhi gave a lecture on Management of Lantana in Forest Ecosystems and about the strategies for effective management. He discussed about the advantages and limitations of various physical, chemical and biological control of Lantana. He shared his experiences on “Cut Root Stock” method of Lantana removal. He briefed about the ecological restoration and critical steps involved and various biological inputs used in the restoration of Lantana invaded area.

Dr. T.K. Hrideek, Senior Scientist from State Medicinal Plant Board, Kerala in his lecture discussed about the management of tree invasions in Western Ghats by *Senna spectabilis*, *Maesopsis eminii* and *Acacia mearnsii* through a case study. He mentioned about various management strategies like cut-stump treatment, debarking, hand pulling, ring barking, hatch and squirt, uprooting seedlings etc. which were adopted in removal of invasive trees in Kerala.

Dr. N. Krishnakumar, PCCF (Retd.), Tamil Nadu State Forest Department shared his experiences on management of invasive alien plants in Tamil Nadu. He pointed out the various invasive species such as Giant African snail, *Leptocybe invasa*, pink bloom (*Cabomba furcata*), etc which are invading various ecosystems recently. He narrated the challenges encountered in removal of *Prosopis* from Tamil Nadu as local people are earning their livelihood by preparing charcoal from *Prosopis*.

During the video session, success stories on management of invasive alien species from different parts of the world such as “The Green Invasion - Destroying Livelihoods in Africa”, “Challenges and solutions to managing and controlling *Prosopis* in the Kalahari”, “Lantana Craft Centre – ATREE”, “Coppicing of Lantana After Fire” were screened. Walking Tall with Trees – a video of IFGTB was also screened during the video session.

On 6th August 2021, Dr. Sushil Kumar, Principal Scientist, (Entomology) & ICAR from Directorate of Weed Research (DWR), ICAR, Jabalpur delivered a lecture on Alien invasive weeds of forests in India and their management. He highlighted about the various threats of alien invasive weeds in affecting the health of humans and livestock, biodiversity. He discussed about the various management measures of invasive species including bio-control agents and utilization of the invasive species in composite and paper making.

Dr.N.S. Manoharan, Addl. Dir. of Animal Husbandry (Retd.) from Tamil Nadu gave a lecture on impact of invasive species on elephants. He briefed about the physiological parameters of elephants, biology and feeding habits of elephants. He discussed about the common invasive species and their toxicity in wild animals and he also shared his experiences in necropsy of elephants using videos. He also discussed about the impact of invasive species on the feeding habit, behavioural changes and other aspects of elephants.

Dr. Sharat Tiwari, Scientist from Institute Forest Productivity, Ranchi in his lecture on Modelling potential invasion Risk areas using Habitat Suitability Models discussed about Niche and its niche shifts. He mentioned about Risk Assessment of *L. camara* invasion in Jharkhand and its extent and predicted its increase from 13% as of today to 20-26% of geographical area by 2050. He highlighted the benefits of niche model in management of invasive species.

Dr. N. Senthilkumar, Scientist IFGTB gave a lecture on Biological management of Invasive Alien Species (IAS). He emphasized about the integrated approach and common interactive protocols for management of invasive weeds and understanding the ecological role and its impact on social and economic benefits.

A panel discussion on “Prevention, control and management of invasive alien species” was organized on 6th August 2021. Dr N. Krishnakumar, PCCF (Retd.), Tamil Nadu State Forest Department chaired the panel discussion and all the resource persons along with the participants interacted during the discussion. The training programme was concluded on 6th August 2021 with valedictory function.



A view of training course lecturesession



Experiences sharing session



Online interaction during the lecture



A view of Video session



A view of Panel discussion



A view of Valedictory session