Proceeding of one day Institute level seminar at TFRI, Jabalpur

As per the directives of ICFRE,3rd monthly seminar at the institute level was organized at TFRI,Jabalpur on 17.01.2018 on "**Promotion of Biofertilizers in Forestry**". The topic was elaborately presented by Dr. R.K.Verma, Scientist-G and Head Pathology Division. The seminar was conducted under the Chairmanship of ShriChaturbhujaBehra,IFS, Head of Office TFRI. All HODs,Scientists,ACTOS,TOs and all research scholars were present.

Dr. R K Verma, presented a detailedpower-point presentation on "Promotion of Biofertilizers in Forestry". He summed up the basic concept, types of bio-fertilizers as well as their practical application in forestry. He also discussed the ongoing work in Forest pathology division on practical application of Bio-fertilizers, wherein he informed the house that TFRI supplied the 755 kg of VAM as well as 600 packets each of *Rhizobium*, *Azospirillum*, *Azotobacter* PSB toNurseries of 11 Research and Extensioncircles of MP state forest Department.Dr.Verma also deliberated on future needs and road map of research on biofertilizers. He laid emphasis on the need of future research on transportation of biofertilizers to the field as they are temperature sensitive. Also, there is need of research on host-specific biofertilizers. He also suggested for networking of research options, collaboration amongst ICFRE institutes andmulti-locational trials.

During the course of discussion following queries were raised -

- Dr.P B Meshram, Scientist-G & Head Entomology Division appreciated the subject matter of presentation. He also informed the house about his meeting with Managing Director, Forest Development Corporation MP and intimated that MD desires VAM & other Bio-fertilizers be applied in all of the nurseries of FDC.
- Dr.Avinash Jain, Scientist-F& Head NWFP Division besides, appreciating the roadmap of future research, enquired about any future plan for bulk production of bio-fertilizers.
- Dr.S.Chakrabarti, Scientist-G & Head Ecology Division suggested to work out all details for setting-up mass production unit for production of bio-fertilizers as a means for revenue generation. He also suggested to explore possibility of transportation of biofertilizers to field in viable condition as being used in case of life-saving medicines.

- Dr. Yogeshwar Mishra, Scientist-F & Head Silviculture Division asked about the status of
 host specific biofertilizers. Dr. Verma replied that the host specific biofertilizers can be
 produced as per availability of the species in particular region or area.
- Shri Alfred Francis, Technical officer asked about the toxicity and adverse effect of application of biofertilizers.Dr.verma replied that no allelopathic or adverse effects has been reported so far.

Future needs and Road map of research

- There is a need of future research on transportation of biofertilizers to the field as they are very temperature sensitive.
- Research proposal should be formulated on host specific biofertilizers.
- Production unit ofbiofertilizersat the institute should be established for mass scale production with additional manpower.

Recommendations

Based on the future research need and road map, and in the light of presentation made by Dr. Verma, the house agreed upon the following recommendations:

- Networking/collaboration research project formulation within ICFRE institutes and other organizations.
- Research on multi-locational trials for suitability of the host specific biofertilizers.
- Production of sufficient host-specific biofertilizers to meet the demand of forest departments and other stakeholders.

At the end Chairman ShriChaturbhujaBehera ,IFS& Head of Office thankedDr.Verma for excellent presentation. He has suggested to standardized site specific technique for application of Biofertilizers and to give emphasis on revenue generation.Dr.S N Mishra,Scientist-B,Extension Division coordinated the Seminar andShri A J K Asaiya, Scientist-B Forest pathology division acted as rapporteur.