

**GOVERNMENT OF INDIA
MINISTRY OF AYUSH**

**LOK SABHA
UNSTARRED QUESTION NO. 673
ANSWERED ON 04th February, 2022**

NATIONAL MEDICINAL PLANT BOARD

673. SHRI HEMANT TUKARAM GODSE:

Will the Minister of AYUSH be pleased to state:

- (a) whether the National Medicinal Plant Board has started help groups for medicinal plants;
- (b) if so, the details thereof including the aims and objectives of these groups; and
- (c) the measures being taken by the Government to increase the yield of medicinal plants, State/UT-wise including Maharashtra?

ANSWER

**THE MINISTER OF AYUSH
(SHRI SARBANANDA SONOWAL)**

(a) & (b): Yes Sir, the National Medicinal Plant Board (NMPB) is presently implementing “Central Sector Scheme on Conservation, Development and Sustainable Management of Medicinal Plants” throughout the Country. In this scheme, there is a provision to support Joint Forest Management Committees (JFMCs)/ Panchayats/Van Panchayats/SHGs/BMCs for setting of local cluster for value addition, drying, warehousing and augmenting marketing infrastructure, etc.

The objectives of this provision is to need to channelize production and promote sustainable supply of medicinal plants, through capacity building of JFMCs/Van Panchayat/ Panchayats/ local SHGs/BMCs about the medicinal plants & aromatic species of medicinal value that are locally available for encouraging sustainable harvest, adoption of good collection practices, proper post-harvest handling, marketing and regeneration of NTFPs, etc.

(c): The National Medicinal Plants Bard (NMPB), Ministry of AYUSH, under its Central Sector Scheme on “Conservation, Development and Sustainable Management of Medicinal Plants” is also providing support to Research & Development projects on various aspects of medicinal plants to government as well as private universities/research institutions/organizations across the country. During last five year, NMPB has supported 10 projects in the context of improving the yield of medicinal plants. The State/UT-wise details of the projects are at **Annexure-I**.

2	R&D/K R- 02/201 7-18	<p>Identification of elite types, Molecular Characterization and Conservation of Highly-traded and threatened Medicinal Plants in the Central Western Ghats</p> <p>Dr. R. Vasudeva, Professor and Head-Forest Biology, College of Forestry, UAS Dharwad, SIRSI, Uttra Kannada, Karnataka – 581401</p> <p>Dr. G. Ravikanth, Fellow-2, Ashoka Trust for Research in Ecology and the Environment Conservation Genetics Lab, Royal Enclave Srirampura, Jakkur PO Bengaluru 560064</p>	26.714	<p>1. To assemble large number of lines /clones of prioritized species and to evaluate /validate the yield level.</p> <p>2. To standardize methods for intensive cultivation condition and to develop sustainable methods of extraction through coppice – based systems.</p> <p>3. To undertake field demonstration of the sustainable method of harvesting under different agro – forestry conditions.</p> <p>4. Chemical quantification of berberin, embilin, salacin and camphothecin from different populations and identification of high yielding and elite lines.</p> <p>5. Molecular characterization and DNA fingerprinting of elite and high yielding lines.</p> <p>Plant species: <i>Coscinium fenestratum,</i> <i>Embelia ribes,</i> <i>Salacia ablonga</i> <i>and Mappia foetida.</i></p>	Karnatak a
			28.968		

3	R&D/T L- 01/201 7-18	<p>"Production of Young roots for medicinal tree species using high density short term plantation scheme Submitted through: CEO, Telangana".</p> <p>Dr. I.V. Srinivasa Reddy, Principal Investigator, Assistant Professor & Head, Agricultural college, Aswaraopet, Khammam (District), Telangana-507301,</p>	21.00	<ol style="list-style-type: none"> 1. Standardization of seed germination of <i>Stereospermumsuaveolens</i>. 2. Standardization of Root induction in <i>Stereospermum suaveolens</i> by using different propagation techniques. 3. To study different effects and root yields of brihat panchamula tree species in Agro-Forestry High Density Short Term plantation Model. 4. To identify right mix of Agro-Forestry crops. 5. To develop package of practice for Brihat Panchmula. <p>Plants selected: <i>Aegle marmelos</i>, <i>Premna integrifolia</i>, <i>Oroxylum indicum</i>, <i>Gmelina arborea</i>, <i>Stereospermum suaveolens</i>.</p>	Telangan a
4	R&D/U P- 01/201 7-18	<p>Assessment of hazardous metals (As, Cd and Pb) translocation and accumulation in Kalmegh (<i>Andrographspaniculata</i>) : Implication of genotype selection for minimal risk to human health</p> <p>Dr. Puja Khare, Senior Scientist, Agronomy and Soil Science, CSIR- Central Institute of Medicinal and Aromatic Plants, Kukrail</p>	38.206	<ol style="list-style-type: none"> 1. Screening of Kalmegh germ plasm for low heavy metal content translocation and accumulation in the aerial biomass with high herb yield/metabolite content. 2. Evaluation of promising genotype of 	Uttar Pradesh

		Picnic Spot Road, Lucknow 226015		<p>kalmegh in different types of soil and fertilizer.</p> <p>Outcome: The outcome would provide a genotype of kalmegh with low heavy metal accumulation without affecting its quality and with minimal health hazard.</p> <p>Plant species:- <i>Andrographis paniculata</i></p>	
2018-19					
5	R&D/AS-01/2018-19	<p>Varietal development for high fruit yield and high solasodine content of <i>Solanum khasianum</i>, A high value medicinal plant of North-East India”</p> <p>Dr. Mohan Lal, Scientist, BSTD, Medicinal Aromatic and Economic Plants Group, CSIR-NIEST (RRL), Jorhat, PIN 785006</p>	49.868	<ol style="list-style-type: none"> 1. Germplasm collection, evaluation and characterization of the genetic diversity of different accessions of <i>Solanum khasianum</i>. 2. Study of heritability, genetic variability and genetic advancement for morphological and agronomic traits of <i>S. khasianum</i>. 3. Establishment of plant tissue culture and extraction of plant stem cells from suitable explants of <i>S. khasianum</i> followed by quantitative estimation of 	Assam

				<p>solasodine content using U-HPLC.</p> <p>4. Varietal selection of <i>S. khasianum</i> with high fruit size, fruit yield and high solasodine content and multi-location trails.</p> <p>Plant species: <i>Solanum khasianum</i></p>	
6	R&D/KR-01/2018-19	<p>"Collection, characterization and Genetic improvement of <i>Eclipta alba</i>"</p> <p>Dr. K. HimaBindu, Principal Scientist, Department of Floriculture and Medicinal crops, Institute of Horticultural Research (IIHR), Hessarghatta lake (PO), Bangalore-89</p>	38.269	<p>1. Collection of germplasm from secondary sources and hotspots.</p> <p>2. Multiplication and maintenance of the collected germplasm.</p> <p>3. Morphological, Biochemical and Molecular characterization of the germplasm.</p> <p>4. Evaluation of the germplasm for yield attributes and chemical profiling.</p> <p>5. Study of reproductive biology of the three species to understand their breeding behaviour.</p> <p>6. Identification of elite lines, morphotypes and</p>	Karnataka

				chemotypes. Plant species: <i>Eclipta alba.</i>	
7	UK-02/2018-19	In vitro mass propagation of <i>Angelica glauca</i> Edgew. Rootlet biomass for the production of bioactive phytocompound/s using bioreactor and bio-inoculation technology" Dr. Vipin Parkash, Scientist-E and PI, Forest Pathology Division, Forest Research Institute, Dehradun-248006	26.59	1. Survey and collection of soil and plant samples of <i>Angelica glauca</i> from Indian Himalayan region and to propagate it in green house/herbal garden. 2. Isolation, identification, inoculum production and mass multiplication of elite strains of Endomycorrhizae and Root fungal endophytes. 3. Inoculation and biotization of seedlings of the target plant species with selected bio-inoculants to see their effect on growth and development and to get quality seedlings. 4. Analysis of biotization effect on accumulation of some bioactive compound/s in the seedlings of the target plant species.	Uttarakhand

				5. In vitro production of bioactive compound/s by the interaction of root let biomass with root fungal endophytes through Bioreactor Technology. Plant selected: <i>Angelica glauca</i>	
2019-20					
8	AS-01/2019-20	Identification and Development of High Yielding Varieties of <i>Kaempferia galanga</i> : A High Value Endangered Medicinal Plant. Dr. Mohan Lal, Scientist Council of Scientific and Industrial Research (CSIR)- North East Institute of Science & Technology (NEIST) P.O. RRL Jorhat 785006	33.93	1. Collection, evaluation, characterization and assessing the genetic diversity of different accessions of <i>Kaempferia galanga</i> 2. To study the heritability, genetic variability and genetic advancement for morphological, oil yield, rhizome characters etc. 3. Selection of high rhizome high quality oil varieties of <i>Kaempferia galanga</i> and make a germ-plasm repository of the species. Plant species: <i>Kaempferia galanga</i>	Assam
9	HP-01/2019-20	Survey, Selection, Phyto-chemical Evaluation,	60.18	1. To select promising	Himachal Pradesh

		<p>Cytogenetical Characterization and Multi-location testing of Harar (<i>Terminalia chebula</i> Rets) in India</p> <p>Prof. Kamal Sharma, Principal Scientist (Agroforestry), Forestry and Environment, College of Horticulture and Forestry, Neri, Hamirpur (Dr. YS Parmar University of Horticulture and Forestry, Nauni, Solan-177001</p>		<p>genotypes from geographically diverse localities of India.</p> <p>2. To assess the genetic diversity through cytomorphological studies.</p> <p>3. To estimate bioactive ingredients of medicinal value particularly purgative principle.</p> <p>4. To propagate selected genotypes through vegetative means from multi-location testing and releasing site specific high yielding quality genotypes in future.</p> <p>Plant species: <i>Terminalia chebula</i> Rets</p>	
2020-21					
10	KE-03/2020-21	<p>Germplasm conservation and Phytochemical evaluation of <i>Adhatoda beddomei</i> C.B.Cl. (Cittaadalotakam).</p> <p>Dr. R. Rajalakshmi, Assistant Professor, Department of Botany, University of Kerala, Kariavattom, pin-695581, Thruvananthapur</p>	16.178	<p>1. Collection of superior genotype of <i>Adhatoda beddomei</i> from the available germplasm of <i>Adhatoda beddomei</i>.</p> <p>2. To standardize the vegetative propagation techniques for the</p>	Kerala

		am	<p>multiplication of plant in yield.</p> <p>3. To find out an in-vitro multiplication and conservation system for mass multiplication and short-term storage of germplasm.</p> <p>4. To find out active constituents for checking the quality of germplasm.</p> <p>Plant species: <i>Adhatoda beddomei</i></p>	
--	--	----	---	--