

No. BT/PR25747/NER/95/1298/2017

GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
DEPARTMENT OF BIOTECHNOLOGY

Block 2, 6-8th Floors
CGO Complex, Lodhi Road,
New Delhi- 110 003
Dated: 09/09/2019

ORDER

Sanction of the President is hereby accorded, under Rule 18 of the Delegation of Financial Powers Rules, 1978, for the implementation of the project entitled: "**Standardization of Indigenous Probiotic based Formulation for Immunity, Glucose and Lipid metabolism**" for a period of 3 Year 0 Month at a total cost of Rs. **6757360** (Rupees Sixty Seven Lakhs Fifty Seven Thousand Three Hundred and Sixty Only) on the terms and conditions detailed here under:-

2 The Project :

2.1 Title : "**Standardization of Indigenous Probiotic based Formulation for Immunity, Glucose and Lipid metabolism**"

2.2 Details of the Investigators:

Project Coordinator

Dr. Manabendra Mandal

Professor
Molecular Biology and Biotechnology
Tezpur University
MBBT department
Tezpur University, Tezpur, Assam, 784028

Principal Investigators:

Dr. Manabendra Mandal

Professor
Molecular Biology and
Biotechnology
Tezpur University
MBBT department

Dr. Anirban Pal

Scientist
Molecular Bioprospection
Central Institute of Medicinal And
Aromatic Plants
PO CIMAP, Near Kukrail Picnic

CO-PI:

Dr. Dipankar Kalita

Technical Officer
Department of Food
Engineering and
Technology
Tezpur University
Department of Food
Engineering and
Technology, Tezpur
University, Napaam,
Tezpur-784028,
Assam, India, Tezpur -
784028, Assam

Dr. Dayanandan Mani
Senior Scientist
Herbal & Medicinal Products
Central Institute of Medicinal And Aromatic Plants
Central Institute of Medicinal and Aromatic Plants, Near Kukrail Picnic Spot, Lucknow, Uttar Pradesh, Lucknow - 226015, Uttar Pradesh

2.3 Objectives:

Overall Objectives:

1. Sequence based identification of previous isolates (around 900), assessment of in vitro cholesterol lowering properties of selected indigenous probiotic isolates from each phylogenetic clade and comparison with Yakult and Sun Pharma probiotic products
2. Evaluation of immunomodulatory properties of probiotic strains in in vitro model systems
3. Validation of immune stimulatory property of the pro-biotic strains in mice model of infection with Salmonella typhimurium.
4. Validation of the lipid and glucose metabolizing capability of pro-biotic strains in-vivo.
5. Optimization of the leads for formulation development through safety, efficacy and characterization
6. Incorporation of probiotic culture in the milk and fruit juice based beverages

Institute wise Objectives:

Central Institute of Medicinal And Aromatic Plants

1. Validation of immune stimulatory property of the pro-biotic strains in mice model of infection with Salmonella typhimurium.
2. Validation of the lipid and glucose metabolizing capability of pro-biotic strains in-vivo.
3. Optimization of the leads for formulation development through safety, efficacy and characterization.

Tezpur University

1. Sequence based identification of previous isolates (around 900), assessment of in vitro cholesterol lowering properties of selected indigenous probiotic isolates from each phylogenetic clade and comparison with Yakult and Sun Pharma probiotic products
2. Evaluation of immunomodulatory properties of probiotic strains in in vitro model systems.
3. Incorporation of probiotic culture in the milk and fruit juice based beverages

2.4 Time Schedule:

The duration of the project is 3 Year 0 Month from the date of this sanction order.

2.5 Project Cost:

The total cost of the project is Rs. **6757360/-** (Rupees Sixty Seven Lakhs Fifty Seven Thousand Three Hundred and Sixty Only) as per details given below :

Institute	Year I	Year II	Year III	Total Cost(Rs.)
1. Central Institute of Medicinal And Aromatic Plants	1311520	721520	667200	2700240
2. Tezpur University	2201760	1001760	853600	4057120
Total (Rs.)	3513280	1723280	1520800	6757360

Institute wise details are:

Budget Head	Year I	Year II	Year III	Total(Rs.)
1. Tezpur University				
Equipment	1200000.00			1200000.00
Manpower	401760.00	401760.00	453600.00	1257120.00
Overhead	100000.00	100000.00	100000.00	300000.00
Travel	50000.00	50000.00	50000.00	150000.00
Consumables	400000.00	400000.00	200000.00	1000000.00
Contingency	50000.00	50000.00	50000.00	150000.00
Total (Rs.)	2201760.00	1001760.00	853600.00	4057120.00
2. Central Institute of Medicinal And Aromatic Plants				
Equipment	500000.00			500000.00
Manpower	431520.00	431520.00	487200.00	1350240.00
Overhead	25000.00	25000.00	25000.00	75000.00
Travel	30000.00	40000.00	30000.00	100000.00
Consumables	300000.00	200000.00	100000.00	600000.00
Contingency	25000.00	25000.00	25000.00	75000.00
Total (Rs.)	1311520.00	721520.00	667200.00	2700240.00

2.6 Equipment:

The details of the equipment sanctioned for the implementation of the project at

Annexure-I

2.7 Manpower:

The details of the manpower sanctioned for the implementation of the project at

Annexure-II

3. Head of Account:

The Non-Recurring expenditure involved is debitable to:

Demand No. 87	Department of Biotechnology
3425	Other Scientific Research 2019-2020
3425.60	Others (Sub Major Head)
3425.60.200	Assistance to other Scientific Bodies (Minor Head)
3425.60.200.29	Biotechnology Research and Development
3425.60.200.29.17	Assistance for Research and Development
3425.60.200.29.17.35	Grants for creation of capital assets

Expenditure (SoE), utilization certificates (UC), Assets Certificates, Manpower staffing & expenditure details in prescribed DBT formats to DBT in respect of grants released in this project from time to time.

7. PI's of DBT sponsored projects can consider appointment of JRF from Category-II merit list of DBT-BET exam so that candidates can be paid fellowships at par with NET/GATE/BET qualified candidates as per DST OM No. A.SR/S9/Z-09/2012 dated on 21 Oct 2014. However, there is no compulsion on PI's to select candidates for JRF in their projects from Category-II of DBT-BET.
8. As per Rule 236 (1) of GFR 2017, the accounts of all Grantee Institutions or Organisations shall be open to inspection by the sanctioning authority and audit, both by the Comptroller and Auditor General of India under the provision of CAG(DPC) Act 1971 and internal audit by the Principal Accounts Office of the Ministry or Department, whenever the Institution or Organisation is called upon to do so.
9. If the Research Project involves biological resources, the obligations under the Biological Diversity Act 2002 as applicable shall be complied with by the Project Investigator, the details of such obligations can be accessed at www.nbaindia.org
10. If this project works requires any Statutory Clearance (such as Ethical Committee Clearance, Informed Consent, Animal Ethics Committee Clearance, Institutional Bio-safety Committee Clearance, National Biodiversity Authority approval etc.), Project investigator(s) and Host Institution(s) shall compulsorily comply the same before undertaking such activities.
11. This issues under the power delegated to this Department and with the concurrence of IFD vide their SAN No. **102/IFD/SAN/1628/2019-2020** dated **September, 06 2019**.
12. This sanction order has been noted at serial no. _____ in the Register of Grants.

(Dr. Vaishali Panjabi)
Scientist 'E'

To,
The Pay & Accounts Officer,
Department of Biotechnology,
New Delhi - 110 003.

Copy to:

- 1 The Principal Director of Audit (Scientific Departments), DACR Building, New Delhi- 110 002.
- 2 Dr. Manabendra Mandal (Project Co-ordinator), Department of Molecular Biology and Biotechnology, Napaam, Tezpur- 784028, Assam
- 3 The Director, Central Institute of Medicinal And Aromatic Plants, P.O. - CIMAP, Near Kukrail Picnic Spot, Lucknow - 226015, Uttar Pradesh
- 4 The Registrar, Tezpur University, Tezpur University Napaam, Tezpur Sonitpur, Tezpur - 784028, Assam
- 5 Dr. Anirban Pal, Scientist, Molecular Bioprospection, Central Institute of Medicinal And Aromatic Plants, PO CIMAP, Near Kukrail Picnic Spot, Lucknow, Uttar Pradesh, Lucknow - 226015, Uttar Pradesh
- 6 Dr. Dayanandan Mani, Senior Scientist, Herbal & Medicinal Products, Central Institute of Medicinal And Aromatic Plants, Central Institute of Medicinal and Aromatic Plants, Near Kukrail Picnic Spot, Lucknow, Uttar Pradesh, Lucknow - 226015, Uttar Pradesh
- 7 Dr. Dipankar Kalita, Technical Officer, Department of Food Engineering and Technology, Tezpur University, Department of Food Engineering and Technology, Tezpur University, Napaam, Tezpur-784028, Assam, India, Tezpur - 784028, Assam
- 8 Dr. Manabendra Mandal, Professor, Molecular Biology and Biotechnology, Tezpur University, MBBT department Tezpur University, Tezpur - 784028, Assam