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CE 899344

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (MOU) is entered on Twenty Sixth day of March 2019 at Thiruvananthapuram

Between

Council of Scientific and Industrial Research, a Society registered under the Societies Registration Act (XXI of 1860), having its registered office at Anusandhan Bhavan, 2, Rafi Marg, New Delhi-110 001 acting through its National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram – 695 019 (hereinafter referred to as "CSIR-NIIST", which expression shall, unless it be repugnant to the context shall mean and include its successors and assigns) of the one part;

And

ICAR-Indian Institute of Spices Research, Marikunnu P.O., Kozhikode (Calicut), Kerala, 673012 (hereinafter referred to as ICAR-IISR which expression unless repugnant to the context shall mean and include its successors in interest, assigns etc.) represented by the Director of ICAR-IISR on the other part.

(Individually referred to as "the Party" and collectively referred to as "the Parties")

Issued to 26 3119

We Director CSR MUST. Pa

KR. Sugatua Kumari Thankacini

प्राक्ति निर्मल बाबू Dr. K. Nirmal Babu

Pडा.के. निर्मल बाबू Dr. K. Nirmal Babu

निदेशक Director

निदेशक Director

निदेशक Director

सिर्मल अनुमध्यस संस्थान

प्राक्ति प्राक्ति मसाला फसल अनुमध्यस संस्थान

ICAR-Indian Institute of Spices Research

मिर्मल पी.ओ. Marikumu Po, व्याप्य सार्वे Royhiko

मेरिनल पी.ओ. Marikumu Po, व्याप्य सार्वे Royhiko

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Whereas **CSIR-NIIST** is engaged in research and development in various multidisciplinary and cutting edge areas including traditional knowledge and plant and microbial based natural products;

And Whereas ICAR-IISR, with a mandate on basic, applied and strategic research on genetic resource management, crop improvement, crop production and protection technologies for enhanced production of safe spices, transfer of technology, capacity building and impact assessment of technologies, doordinated research and validation of technologies under All India Coordinated Research Project on Spices.

And Whereas **CSIR-NIIST** has decided to join hands with **ICAR-IISR** for detailed scientific analysis of phytochemicals of different spice plants, metabolites of microbials and their formulations which are used in health and wellness sector for preservation of health and treatment of various ailments, in agriculture for control of various pests and diseases and further for value addition on their products (Hereinafter referred as PROJECT); and endeavour to submit project proposals jointly to funding agencies like DST, DBT, CSIR, NMPB, AYUSH etc.

Now therefore in consideration of the premises and mutual covenants hereinafter contained, the parties hereto agree as follows:

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1. **DEFINITIONS**

As used in this MoU, capitalized terms have the meanings given them below or elsewhere in this MoU:

- 1.1. **Materials** mean those experimental materials and data, which one party may provide to the other in connection with the PROJECT.
- 1.2. **Invention** means any invention, discovery, information patentable or not including results of investigations, that is conceived, discovered and reduced to practice in performance of the PROJECT.
- 1.3. **Confidential Information** means scientific, business or financial data or other proprietary information owned by or belonging to **ICAR-IISR** and /or **CSIR-NIIST** including but not limited to Traditional Knowledge associated with the material and inventions/results of PROJECT investigations which are clearly marked as confidential in writing provided that such information:
 - 1.3.1 is not publicly known or available from other sources, which are not under a confidentiality obligation to the source of the information;
 - 1.3.2 has not been made available by its owners to others without a confidentiality obligation;
 - 1.3.3 is not already known by or available to the receiving party without a confidentiality obligation;
 - 1.3.4 is not independently developed by the receiving party;
 - 1.3.5 does not relate to potential hazards or cautionary warnings associated with the performance of the PROJECT or is not required to be disclosed under operation of law.

2) Responsibilities of ICAR-IISR

ICAR-IISR will share the material and associated knowledge of selected spices, microbials and their formulations for research by **CSIR-NIIST** after

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ICAR-Indian Institute of Spices Research
शित्व पी.ओ. Marikunnu Po

scrutiny of associated knowledge and the final selection of the plants, microbes and formulations will be made in consultation with CSIR-NIIST.

- a) Selection of spice/microbial extracts
- **b)** Screening of novel molecules for their anti-microbial, insecticidal and nematicidal properties.
- c) Exchange of knowledge in the current methods of standardisation

3) Responsibilities of CSIR-NIIST

- a) Phytochemical and microbial analysis: The selected extracts will be subjected to detailed phytochemical and microbial secondary metabolite analysis, starting from isolation and characterization of bioactive molecules and their synthetic modifications.
- b) Characterization of essential oils and their value addition: The essential oils from the selected spices will be characterized using extensive analysis with GC, GCMS etc and the potential use of these essential oils in health care will be evaluated.
- c) Generating a repository of genotype/location specific chemomarkers for spices cultivated
- d) **Biological evaluation**: The extracts isolated and characterized bioactive molecules and their derivatives will be subjected to *in vitro* evaluation for their biological activity.

4) <u>External funding for the PROJECT</u>

During the tenure of the PROJECT, **CSIR-NIIST** and **ICAR-IISR** will submit joint proposals for funding from external funding agencies for strengthening the activities under the PROJECT.

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5) Sharing of Material and Results and Investigations

- a) The materials or the scientific knowledge attributed on such materials will not be distributed or shared to any other party without getting written permission from **ICAR-IISR**
- b) Inventions/results of investigations under the PROJECT, published or unpublished that is generated using the materials supplied by **ICAR-IISR** will be shared with the researchers at **ICAR-IISR** with an understanding that this information will not be shared or transmitted to anyone without the knowledge of **CSIR-NIIST**.

6) Publications

- a) Researchers of **ICAR-IISR** and **CSIR-NIIST** shall consult with each other for publications based on the inventions/results of PROJECT investigations and the papers shall be jointly authored.
- b) **ICAR-IISR** and **CSIR-NIIST** shall share the credit of all publications under the PROJECT subject to guidelines from external funding agencies.

7) CONFIDENTIALITY

7.1 During the course of discussions, and/or during the normal course of business between the parties, either party may disclose to the other certain information which it deems proprietary or confidential, and may include, but is not limited to, discoveries, ideas, concepts, know-how, techniques, designs, specifications, drawings, blueprints, diagrams, flow charts, data, costs, prices, customer lists, marketing plans, goals, sales figures, revenue profits, and other technical, financial or business information respecting existing or planned products to be developed, manufactured, or marketed by either party. Such Information shall be deemed confidential and

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proprietary and subject to restricted use and limited distribution as provided herein if plainly marked "confidential" or "proprietary" or with language of similar meaning, or otherwise disclosed under circumstances which reasonably suggest the confidential nature of the Information, whether provided in written, encoded, graphic or other tangible form, including any electronic or magnetic form. Information provided orally shall also be deemed confidential and proprietary if identified as being confidential and proprietary at the time of disclosure and confirmed in writing to be so by the disclosing party (Discloser) to the receiving party (Recipient) at the time of disclosure or within thirty (30) days of disclosure.

- Each party's obligation of confidence detailed under L.7.1 shall be 7.2 fulfilled by using at least the same degree of care with the other party's confidential information as it uses to protect its own confidential information. This obligation shall exist while this agreement is in force and for a period of five years thereafter
- ICAR-IISR and CSIR/NIIST shall require its scientists, officers, 7.4 employees, not to, at any time, directly or indirectly during the term of this agreement and after its termination, divulge to any person, firm or corporation any information furnished by either of the parties or otherwise acquired by the parties during the tenure of this agreement so that the interest of ICAR-IISR and CSIR-NIIST are in no way affected.

8. INTELLECTUAL PROPERTY RIGHTS

Inventions conceived, discovered and reduced to practice solely by 8.1 ICAR-IISR, or its employees, agents will be owned by ICAR-IISR. CSIR-NIIST shall not make any claim to the sole invention by ICAR-IISR.

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भाकुअनुप-भारतीय मसाला फसल अनुसंधान संस्थान ICAR-Indian Institute of Spices Research मेरिकुन्नु पी.ओ.Marikunnu PO, कोणिदकोड Kozhikode पिन Pin-673 012 केरल Kerala, भारत India

- 8.2 Inventions conceived, discovered and reduced to practice by solely **CSIR-NIIST**, or its employees, or agents, will be owned by **CSIR-NIIST**. **ICAR-IISR** shall not make any claim to the sole invention by **CSIR-NIIST**.
- 8.3 Inventions conceived, discovered and reduced to practice jointly by scientists/employees of **ICAR-IISR** and **CSIR-NIIST** will be owned by **ICAR-IISR** and **CSIR-NIIST** and the extent of ownership will be decided by mutual consensus between **ICAR-IISR** and **CSIR-NIIST** ("Joint Inventions"). **ICAR-IISR** and **CSIR-NIIST** will have an undivided share on Joint Inventions, so that both the parties cannot transact independently the rights on Joint Inventions.
- 8.4 In case of any product(s) developed based on traditional knowledge and commercialised, access and benefit sharing with the concerned individual/community should be ensured following the guidelines put forwarded by the National Biodiversity Authority of India.
- 8.5 **Patent Prosecution and Expenses.** Unless the parties agree in writing otherwise, the filing, prosecution, defence and maintenance of all Patents for Joint Inventions will be conducted jointly in the name of both parties and controlled by them jointly, acting reasonably and in good faith.
- 8.6 **Licensing.** Each party reserves the right to license its interest in its Sole Inventions, and neither party shall have any right to compensation in connection with any such license granted by the other. However, in the case of Joint Inventions, the parties cannot license independently.

9. DISPUTE RESOLUTION

In case of any disputes, both the parties agree to resolve it by mutual discussions.

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10. TERM AND TERMINATION

- 9.1. This MoU will remain in effect for five (5) Years from the date first written above unless terminated sooner or extended in writing signed by the parties in accordance with this MoU.
- 9.2. **Termination.** Either party may terminate this MoU upon Thirty (30) days written notice

11. GENERAL

- 11.1 <u>Assignment</u>. Neither party may assign or delegate its rights or obligations under this MoU without the express written consent of the other party.
- Entire MoU. This MoU constitutes the entire MoU between the parties relating to the Research Program, and any and all prior or contemporaneous negotiations, representations, MoUs and understandings are superseded hereby. No amendment or change to this MoU may be made except by means of a written document signed by duly authorized representatives of the parties.
- 11.3 <u>Notices</u>. Any notice or communication required or permitted to be given hereunder will be in writing and, except as otherwise expressly provided in this MoU, will be deemed given and effective (i) when delivered personally or by fax or (ii) when received if sent by email, overnight courier, or mail:

To ICAR-IISR: director@spices.res.in
To CSIR-NIIST: director@niist.res.in

- 10.5 <u>Applicable Law</u>. This MoU will be construed and enforced in accordance with the laws of India.
- 10.6 <u>Headings</u>. Headings included herein are for convenience only, and will not be used to construe this MoU.
- 10.7. Relationship of Parties. For the purposes of this MoU and all services to be provided hereunder, each party will be, and will be deemed to be, an independent Page 9 of 11

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निर्शक Director
अनुसंधान संस्थान
अनुसंधान संसाम

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party and not an agent or employee of the other party. Neither party will have authority to make any statements, representations or commitments of any kind, or to take any action that is binding on the other parties, except as explicitly provided for herein or authorized in writing.

10.8. <u>Severability</u>. If any provision of this MoU will be found by a court of competent jurisdiction to be void, invalid or unenforceable, the same will either be reformed to comply with applicable law or stricken if not so conformable, so as not to affect the validity or enforceability of this MoU.

10.9 Force Majeure. Neither party will be liable for any failure to perform as required by this MoU, if the failure to perform is caused by circumstances reasonably beyond such party's control, such as labour disturbances or labour disputes of any kind, accidents, failure of any governmental approval required for full performance, civil disorders or commotions, acts of aggression, acts of God, energy or other conservation measures, explosions, failure of utilities, mechanical breakdowns, material shortages, disease, thefts, or other such occurrences.

जा के निर्मल बाबू Dr. K. Nirmal Babu

वाक अनुसंस्थान संस्थान

निर्मल बाबू Dr. K. Nirmal Babu

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SEAL OF PARTIES

IN WITNESS WHEREOF, the parties have caused this MoU to be executed in two originals by their duly authorized representatives as of the date first written above, one of these has been retained by CSIR-NIIST and the other by ICAR-IISR

For and on behalf

For and on behalf of

CSIR-NIIST

- National Institute for Interdisciplinary Science and Technology (NIIST), Govt. of India तिरुवनन्तपुरम / Thiruvananthapuram-695 019

Witnesses: (Name & Address)

1. Dr. K.V. Radhakrishnan Principal Scientist, CSIR-NIIST

ICAR-IISR

Dr. K. Nirmal Babu डा.के.मिवल जानू Dr. K. Nirmal Babu

निदेशक Director

भाकृअनुप-भारतीय मसाला फसल अनुसंधान संस्थान ICAR-Indian Institute of Spices Research मेरिकुन्नु पी.ओ.Marikunnu PO.कोषिक्कोड Kozhikode पिन Pin-573 017 हे राज ४० व्हांत,भारत India

Witnesses (Name & Address)

Santhosh J Eapen, 1. Principal Scientist & Head, Div. of Crop Protection

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Dr. E. Jayasree Principal Scientist Member Secretary, HRD

Date



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