

A new research call for botanical and traditional medicines for COVID-19



DEPARTMENT OF BIOTECHNOLOGY (DBT)
&
BIOTECHNOLOGY INDUSTRY RESEARCH ASSISTANCE COUNCIL (BIRAC)

Announces
CALL FOR PROPOSALS

**Anti- SARS-CoV-2 / nCoV-2 Virus Studies
using Botanical Ingredients and Traditional Formulations**

Companies, LLPs and Academic Institutes can apply either individually or jointly)*

Call closes on: 3rd July 2020 at 5:30 pm

CONTACT:

- Dr Prachi Kaushik, Manager (Investment), BIRAC: pkaushik.birac@nic.in
- Dr Sanjay Saxena, GM & Head (Investment), BIRAC: investment.birac@gov.in
- Dr. Manoj K. Modi, Scientist 'E' DBT: manoj.modi@nic.in

*For more information visit: www.birac.nic.in and <http://dbtindia.gov.in>

New Delhi, June 29: The ongoing COVID-19 pandemic is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). No specific therapeutics are still available and current management includes travel restrictions, lockdown, patient isolation, and supportive medical care.

The rapid increase in patients of COVID-19 during the last few weeks is posing a tremendous challenge for the healthcare systems across the world including India. Effective strategies for prophylaxis and holistic management are of paramount importance in curtailing the progress of the disease and reducing burden on hospitals. There is an urgent need for its management and prevention.

Some traditional medicines appear to be effective in treating the viral infection by enhancing the immunity of the body. Also, they could be a potential source of antiviral drugs and various bioactive compounds. Randomized clinical trials suggest the possibility to obtain natural products to treat viral infections and its complications from traditional medicinal plants.

Much effort is needed to isolate active principles from plants with a confirmed antiviral activity that leads to explore their mechanism of action and, lastly, to develop a conventional dosage form design that not only controls viral infections but also reduces the associated complications.

To manage COVID-19 pandemic through the application of medicinal and aromatic plants, the Department of Biotechnology and its public sector enterprise, Biotechnology Industry Research Assistance Council (DBT-BIRAC) has come out with a new call soliciting project proposals from industry/academia/ industry-academia in following research areas:

(a) Development of experimental models for evaluation of anti-viral activity of extracts, fractions and phytochemical constituents from medicinal and aromatic plants:

- (i) In vitro antiviral activity (nCoV2, non-infective, pseudo-RNA virus)
- (ii) Antiviral (anti-nCoV-2) efficacy in animal model
- (iii) MTT / PI / CCK8 assay for cell toxicity

(b) Screening of extracts, fractions, phytochemical constituents and traditional formulations from medicinal and aromatic plants:

- (i) Development of research leads/ candidates based on screening to move towards developing phytopharmaceuticals.
- (ii) Development of phytopharmaceuticals for prevention, co-administration and mainstay therapy
- (iii) Development of herbal products for prevention against COVID-19 – Proof-of efficacy, pre-clinical and clinical.

(c) Studies on extracts, fractions and phytochemical constituents from medicinal & aromatic plants:

- (i) Immunomodulatory and anti-inflammatory activity (PBMC, Neutrophils, Th1/Th2 driven T-cell responses, antigen presentation)
- (ii) Effect if any on obesity, diabetes, lung fibrosis
- (iii) Drug-drug interaction studies (CYP450 studies)
- (iv) Essential oils compounds inhibitory to SARS-COV-2 proteins & infections.

The call was announced on June 12, 2020 and the last date for submission of proposals is July 03, 2020.

Contact details: Communication team (DBT-BIRAC):

Dr Shirshendu Mukherjee mdpmubmgf@birac.nic.in

Dr Hafsa Ahmad nbm9@birac.nic.in

Ms Ginny bansal pmubmgf6@birac.nic.in

DBT-BIRAC website: <https://www.birac.nic.in/index.php>, Phone: + 91-11-24389600