

CSIR IN MEDIA



CSIR

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Airborne or not: CSIR to conduct study on transmission of Covid-19

CSIR



With the World Health Organisation (WHO) formally acknowledging the possibility that the novel coronavirus can remain in the air in crowded indoor spaces, where “short-range aerosol transmission cannot be ruled out”, India is also set to conduct a study to ascertain if the transmission is possible via droplets from one place to another. “To assess the possibility of the spread of the virus through the air, we have planned a study in which the samples of air will be taken from two centres, to see if the presence of the virus can be detected or not,” Dr Shekhar C. Mande, Director General of the Council of Scientific and Industrial Research (CSIR) said.

15th July, 2020

Explaining the rationale behind the spread of the virus in crowded and closed spaces, Dr Mande said the smaller particles of the water droplets from an infected patient tend to stay in the air for some time. “The larger particles of aerosol get settled easily on the surfaces but the finer particles can still remain in the air for some time and at a crowded place without proper ventilation, there is a potential threat of spread through the droplets,” he added. The study will be conducted in two places; the Centre for Cellular & Molecular Biology (CCMB) in Hyderabad and the Institute of Microbial Technology in Chandigarh and will be taking approximately 15 days to be completed. “The estimated time period is of about 15-16 days; the planning is in the nascent stage. In about one month, around August 15, we can be in a position to tell if the virus can spread through the air or not,” the CSIR DG said. The WHO had last week acknowledged ‘evidence emerging’ of the airborne spread of coronavirus after a group of 239 scientists in 32 countries outlined evidence saying that floating virus particles can infect people who breathe them in.

“We have been talking about the possibility of airborne transmission and aerosol transmission as one of the modes of transmission of Covid-19,” said Maria Van Kerkhove, technical lead on the Covid-19 pandemic at the WHO.

Published in:

[Times Now News](#)

Coronavirus | CSIR-CCMB awaits ICMR approval to scale up COVID-19 testing three-fold with dry swabs

CSIR-CCMB

14th July, 2020

A shift towards dry swab testing will immediately entail a saving of up to ₹75 crore a day

CSIR-Centre for Cellular and Molecular Biology (CCMB) has asserted that the the current testing capacity of two lakh tests a day across the country can be quickly scaled to six lakh tests a day by collecting dry swabs from patients for safer, cheaper and faster COVID-19 testing.

"This method has been validated and tested by two other institutions - Centre for DNA Fingerprinting and Diagnostics (CDFD) here and Indian Institute of Science Education & Research (IISER), Berhampur, Odisha. We had approached the Indian Council of Medical Research (ICMR) for approval in June first week and an appropriate advisory is expected soon which will help in getting more tests done at much lower costs giving us a better chance at managing the pandemic ," said Director Rakesh Mishra on Tuesday.

In an exclusive interaction, he said that a shift towards dry swab testing will immediately entail a saving of upto ₹75 crore a day! The Director explained that the current methods of RT-qPCR testing are done in the form of swabs from samples received in Viral Transport Medium (VTM) followed by RNA extraction and RT-qPCR.

Instead of this, scientists of CSIR-CCMB have generated a simplified protocol for this test where dry swabs are collected and directly used for RT-qPCR. "This method has been established to have no loss of sensitivity and is on par with the current gold standard of testing," he affirmed. Dry swabs will also enable the collection and transport process to be simpler and safer as there is no liquid sample handling and leakage and fear of contamination for the persons handling the sample in highly secure BSL-3 lab facilities. "It is also faster by about five hours as there is no RNA

extraction and VTM containing tube handling. Further, it is cheaper too as there is no RNA extraction and no VTM, correspondingly less manpower is needed", said Dr. Mishra. A major bottleneck for testing is the process of RNA extraction because of the time involved and trained manpower constraints. Removal of this step can improve the capacity of testing by about threefold, without any additional inputs.

Dr. Mishra pointed out that as per the current situation, the country could well be testing upto two lakh people per day for the next six months and it could cost upto ₹5,400 crore, however, the dry swab method will allow testing of more than six lakh people per day at a cost of ₹3,740 crore for the same six month period.

"Importantly, we need not spend any extra resources in training or equipment. A quick approval will save a lot of resources," he reiterated. Rates have been calculated at ₹1,100-2,250 per test by the current RT-qPCR method which takes 15-24 hours whereas the simplified CSIR-CCMB method, taking five-six hours only, will cost ₹350 in comparison, saving anywhere between ₹750-₹1,900 a test.

Published in:
[The Hindu](#)

Faster coronavirus testing method can scale up testing capacity by three-fold: CSIR-CCMB Director

CSIR-CCMB



Current methods of RT-qPCR (Real-time polymerase quantitative chain reaction) testing are done in the form of swabs from samples received in Viral Transport Medium (VTM) followed by RNA extraction and RT-qPCR. Now, CSIR-CCMB (Council of Scientific and Industrial Research-Centre for Cellular and Molecular Biology) has generated a simplified protocol for this test where dry swabs are collected and directly used for RT-qPCR. This method has been established to have no loss of sensitivity and is at par with the current gold standard of testing. Given this simplification, the method becomes safer as there is no liquid sample handling and leakage and fear of contamination for the

13th July, 2020
persons handling the sample in BSL-3 (Biosafety Level) facilities, says Dr Rakesh Mishra, director of CSIR-CCMB (Council of Scientific and Industrial Research-Centre for Cellular and Molecular Biology). "It is also faster by about 5 hours as there is no RNA extraction and VTM containing tube handling. Further, it is cheaper too as there is no RNA extraction and no VTM, correspondingly less manpower is needed," he said. In addition to this, the major bottleneck in testing today is the process of RNA extraction, because of time and manpower constraints, said Dr Mishra. Removal of this step can improve the capacity of testing by about threefold, without any additional inputs. This method, Dry Swab Direct RT-qPCR, is under consideration with ICMR and appropriate advisory is expected soon which will help in getting more tests done at much lower costs and give us a better chance at managing the pandemic. "India is doing 2 lakh tests per day as more than that will require extra funds, setup of test labs and, more importantly trained manpower, which is not there. If our method is used, we can triple that capacity within (and less than) currently

used resources (manpower, labs, and even the money)," said Dr Mishra. This means India can do more than 6 lakh tests per day, which translates to more testing with less cost-savings of Rs 150 crore per day - compared to the current status, he said. "Considering that we are expected to use these tests for the next six months, we estimate a financial gain of about Rs 12420 crores by this intervention For the next 6 months with the current situation, we will be testing 12 lakh people at the recurring cost of Rs 5400 crore. Dry swab method will allow testing of more than 36 lakh people with recurring cost of Rs. 3740 crores. Our method does not need any new reagent, equipment or training. What it says is: do differently, in a simpler manner, and skip a few items and steps," said Dr Mishra.

He added that this method is the need of the day and a quick approval would save valuable resources at this crucial time and tests can be made available without having to spend any extra effort/resources.

Published in:
[India Today](#)

Aftermath of Baghjan inferno: Tremors continue to jolt people in Doomdooma

CSIR-NEIST



The tremor that started in the aftermath of the Baghjan inferno on June 9, continues to engulf more and more areas with every passing day and things have now come to such a pass that it has almost touched the periphery of Doomdooma town, about 20 km away from the place of accident. The houses in Rupban and Daimukhia near Doomdooma town on one hand and Bishnu Nagar and Milan Tirtha in Rupaisiding on the other were jolted continuously for last couple of days, thus making people panic. They ascribed this to the Baghjan re because according to them when the sound of the blaze increases correspondingly, there is increase in the intensity of the jolt

12th July, 2020

Mrigen Saikia, a retired teacher and a resident of Milantirtha, Rupaisiding, said, "We have been feeling the jolt for past few days. It shakes our houses and a clear sound of vibration can be heard on the roof as well as in the window panes of my house. The vibration becomes more during morning time, especially when it rains. Again the intensity of it increases the moment we hear increase in the blowout sound coming from Baghjan side." Almost similar experiences were narrated by former president of Daimukhia Gaon Panchayat, Abhay Khataniar and teacher Subrata Chakraborty who live in Rupban, 2 nights for the last couple of days as their minds were constantly haunted by fear of tremor and the sound of the Baghjan blaze. Just after the inferno took place on June 9 after spewing of gas at BGR No. 5 OIL well at Baghjan on May 27, the people of Natungaon, Natun Rongajan and some other places on Guinan side in the vicinity of the aforesaid gas well had to be shifted to relief camps as they experienced continuous tremor in their villages. To ascertain the cause of this tremor, Oil India Limited (OIL) has engaged CSIR-NEIST, Jorhat. Already CSIR-NEIST has set up ve sensors and one accelerometer for seismological study in the vicinity of Baghjan-5 well. But nal inference of that is yet to come out.

Published in:

[The Sentinel Assam](#)

कोविड-19 परीक्षण में हिमाचल की मदद कर रहा है आईएचबीटी

CSIR-IHBT



11th July, 2020

इन उत्पादों का उत्पादन करके लोगों तक उपलब्ध कराया जा रहा है, जो इस महामारी के दौर में एक सराहनीय कार्य है। इस अवसर पर जयराम ठाकुर ने आईएचबीटी में प्रोटीन प्रसंस्करण केंद्र का उद्घाटन वर्चुअल रूप से किया है। इसके साथ ही, एक टिशू कल्चर प्रयोगशाला एवं अत्याधुनिक बांस पौधशाला का शिलान्यास भी किया गया है। इस मौके पर 'हींग फोल्डर', 'सीएसआईआर-आईएचबीटी की बांस संपदा' तथा 'सीएसआईआर-आईएचबीटी के चाय जर्म-प्लाजम' पुस्तिका का विमोचन भी किया गया है। जयराम ठाकुर ने कहा है कि आईएचबीटी द्वारा शुरू की गई हींग और केसर की खेती से विकास के नये द्वार खुल सकते हैं। उन्होंने बताया कि हिमालय के बांस संसाधनों के उपयोग से लकड़ी के बोर्ड, फाइबर यार्न, लकड़ी का कोयला और अन्य औद्योगिक उत्पादों के निर्माण के लिए तकनीकें विकसित की जा रही हैं, जिससे रोजगार के नये अवसर उभर सकते हैं। उन्होंने कहा कि महामारी के कारण वापस आए लोगों की आजीविका सुनिश्चित करने में संस्थान द्वारा विकसित ऐसी प्रौद्योगिकियां सहायक हो सकती हैं। वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद (सीएसआईआर) की पालमपुर स्थित घटक प्रयोगशाला आईएचबीटी के निदेशक

कोविड-19 परीक्षण करने में हिमालय जैव-संपदा प्रौद्योगिकी संस्थान (आईएचबीटी) हिमाचल प्रदेश की मदद कर रहा है। राज्य के टांडा, चंबा और हमीरपुर मेडिकल कॉलेजों को परीक्षण के लिए आवश्यक उपकरण और लॉजिस्टिक सहायता प्रदान करने में आईएचबीटी सहयोग कर रहा है। हिमाचल प्रदेश के मुख्यमंत्री जयराम ठाकुर ने ये बातें कही हैं। वह आईएचबीटी के 38^{वें} स्थापना दिवस पर एक ऑनलाइन कार्यक्रम को संबोधित कर रहे थे। मुख्यमंत्री ने कहा है कि संस्थान ने विश्व स्वास्थ्य संगठन (डब्ल्यूएचओ) के दिशा-निर्देशों के अनुसार अल्कोहल आधारित हैंड सैनिटाइजर एवं हर्बल साबुन की तकनीक विकसित की है। आईएचबीटी की पहल पर स्थानीय उद्यमियों के माध्यम से व्यापक स्तर पर

डॉ संजय कुमार ने बताया कि संस्थान द्वारा सुगंधित फसलों की खेती; विशेषकर जंगली गेंदे के उत्पादन एवं प्रसंस्करण को प्रोत्साहित किया जा रहा है। उन्होंने बताया कि प्रशिक्षण कार्यक्रमों के जरिये किसानों, युवाओं एवं उद्यमियों में क्षमता निर्माण संस्थान के कार्यों का एक महत्वपूर्ण आयाम रहा है। आईएचबीटी विटामिन-डी से समृद्ध शिटाके मशरूम और प्राकृतिक रंगों एवं रंजक विकसित करने की दिशा में भी कार्य कर रहा है। शहद उत्पादन को लोकप्रिय बनाने के लिए संस्थान द्वारा विकसित फ्लो-हाइव को ग्रामीण अर्थव्यवस्था के लिए महत्वपूर्ण बताया जा रहा है। फलों एवं सब्जियों की फसलोपरांत हानि एक गंभीर राष्ट्रीय समस्या है। संस्थान ने रेडी-टू-ईट क्रिस्पी फ्रूट और सब्जियों को अधिक समय तक ताजा रखने तथा पोषकता बनाए रखने की तकनीक विकसित की है।

जैव प्रौद्योगिकी विभाग की पहल भारतीय जैवसंपदा सूचना नेटवर्क के तहत आईएचबीटी को पश्चिमी हिमालय के पुष्प संसाधनों के लिए 'जैवसंपदा सूचना केंद्र' के रूप में मान्यता दी गई है। संस्थान को हिमालयी क्षेत्र में संकटग्रस्त प्रजातियों को संरक्षित करने के लिए एक परियोजना के समन्वय की जिम्मेदारी भी सौंपी गई है। आईएचबीटी 'भारतीय हिमालयन सेंटरल यूनिवर्सिटीज कंसोर्टियम' का सदस्य भी बना है। डॉ कुमार ने बताया कि आईएचबीटी ने कुपोषण से निपटने के लिए एनर्जी बार, प्रोटीन मिक्स, आयरन से भरपूर कैंडी इत्यादि खाद्य उत्पादों की एक श्रृंखला विकसित की है। उन्होंने बताया कि अपशिष्ट प्रबंधन की दिशा में कार्य करते हुए संस्थान ने मंदिर के अपशिष्ट फूलों से अगरबत्ती बनाने की पहल की है, जिससे नदियों में फूलों के बहाए जाने से होने वाले प्रदूषण से बचा जा सकता है।

Published in:

[INA News](#)

CECRI develops cost-effective green tech to make disinfectant

CSIR-CECRI

11th July, 2020

The Central Electrochemical Research Institute (CECRI) in Karaikudi has developed a cost-effective and eco-friendly alternative technology under the Council of Scientific and Industrial Research (CSIR) to produce sodium hypochlorite solution (a disinfecting agent), which is in high demand in the current Covid-19 crisis. Speaking to TOI, director of CECRI, M Kalaiselvi, said that sodium hypochlorite, commonly known as house bleach, is a widely-used disinfectant.

The conventional method of manufacturing is by passing chlorine gas through water. But, as the gas is highly corrosive and makes the iron and tin covering of materials of the production equipment at the manufacturing units rusty. People working in hypochlorite manufacturing units also suffer from irritation in the nose and throat due to the effects of the gas.

The World Health Organisation (WHO) has said that the appropriate concentration of the solution for disinfecting liquid biological waste is 5,000ppm (parts per million) and for biological waste containing high organic load (eg blood, proteins or lipids) it is 10,000 ppm.

CECRI has developed a zero-emission, cost-effective and scalable electrochemical technology through which sodium hypochlorite (5,000-10,000ppm) could be produced depending on the density and duration of electrolysis, using direct oxidation of 3% aqueous sodium chloride (common sea salt). They have developed an electrochemical unit with the capacity of 100 litres per day and provide disinfectant in desired quality. This on-site electrochemical production of sodium hypochlorite helps to avoid both hazardous handling and transportation of chlorine gas. A smaller unit for 10 liters capacity, which can be used in hospitals, has also been designed and developed by them.

Their invention would provide a lucrative job opportunity for the MSME sector for an investment of Rs 3-5 lakh and minimal manpower can generate 100 l/day in a 100 sq.ft space. The production cost is also just Rs 3/litre.

Published in:

[The Times of India](#)

सीएसआईआर संस्थान औषधीय, सगंध, खाद्य, पुष्प, माइक्रोव के क्षेत्र में कार्य कर रहा: बंडारू दत्तात्रेय

● सीएसआईआर-आईएचबीटी स्थापना सप्ताह समापन समारोह में राज्यपाल ने संस्थान के स्टाफ को संबोधित किया

पालमपुर 9 जुलाई (जसवंत कठियाल) : प्रदेश राज्यपाल बंडारू दत्तात्रेय 9 जुलाई 2020 को सीएसआईआर-हिमालय जैवसंपदा प्रौद्योगिकी संस्थान स्थापना सप्ताह समारोह में एमएस टीम के माध्यम से संस्थान के स्टाफ को संबोधित किया। उन्होंने 38 वें स्थापना सप्ताह समारोह पर संस्थान को अपनी शुभकामनाएं दीं तथा शोध कार्य और उद्यमशीलता और स्टार्ट-अप स्थापित करके जन समुदाय की आजीविका के साधनों को बढ़ाने के लिए बधाई दी। अपने संबोधन में राज्यपाल ने वैश्विक महामारी कोविड-19 के परीक्षण एवं प्रदेश के मेडिकल कालेजों में सुविधाएं जुटाने में सीएसआईआर-आईएचबीटी द्वारा किए जा रहे योगदान के लिए आभार

राज्यपाल ने पुष्प संपदा व मोक फ्रूट का किया विमोचन

इस अवसर पर राज्यपाल ने ह्यसीएसआईआर-आईएचबीटी की पुष्प संपदा ह्यसीएसआईआर-आईएचबीटी की सगंध फसल संपदा,

का विमोचन तथा प्रो. एस.एस. हांडा ने ह्यसीएसआईआर-आईएचबीटी में स्टीविया जर्मप्लाजमहू तथा ह्यमोक फ्रूट पर प्रकाशनों का विमोचन किया।

व्यक्त किया। संस्थान द्वारा हैंड सैनिटाइजर, हर्बल साबुन की तकनीक विकसित करने स्थानीय उद्यमियों के माध्यम से व्यापक स्तर पर इसका उत्पादन करके लोगों तक उपलब्ध कराने के लिए उन्होंने संस्थान के प्रयासों की सराहना की।

लाहौल में लिलियम की खेती, सगंध फसलों, हींग और केसर की खेती से प्रदेश के दूरदराज के इन क्षेत्रों में विकास के नए द्वार खुल रहे हैं। राज्यपाल ने संस्थान द्वारा इसी प्रकार

संस्थान हिमालय के विशाल बांस संसाधन के उपयोग के अभिनव उपाय विकसित कर रहा है। उन्होंने संस्थान से जुड़े किसानों और उद्यमियों को बहुत उज्वल भविष्य के लिए शुभकामनाएं दी तथा आशा व्यक्त की कि संस्थान भारत के माननीय प्रधानमंत्री के आत्मनिर्भर भारत तथा ह्यवोकल फॉर लोकल में अपना महत्वपूर्ण योगदान देगा। राज्यपाल महोदय ने संस्थान के वैज्ञानिकों से आह्वान किया कि वे शोध को जन-जन तक तक पहुंचाए तभी

इसकी सार्थकता होगी। साथ ही अनुसंधान करने के लिए राज्य सरकार की ओर से पूर्ण सहयोग प्रदान करने का आश्वासन भी दिया। इससे पूर्व संस्थान के निदेशक डा. संजय कुमार ने राज्यपाल एवं अन्य अतिथियों का स्वागत करते हुए संस्थान की प्रमुख उपलब्धियों एवं गतिविधियों पर प्रस्तुतिकरण किया। उन्होंने अपने प्रस्तुतिकरण में बताया कि संस्थान औषधीय, सगंध, खाद्य, पुष्प, माइक्रोव के क्षेत्र में कार्य कर रहा है तथा जैवआर्थिकी को बढ़ाने के लिए प्रौद्योगिकियों को विकसित कर रहा है। संस्थान द्वारा किसानों को सुगंधित फसलें विशेषकर जंगली गेंदे को उगाने एवं प्रसंस्करण के लिए अलग-अलग राज्यों आसवन इकाइयां स्थापित की गईं।

किसानों की आर्थिकी मजबूत बनाने में सीएसआईआर की भूमिका अहम: राज्यपाल

CSIR-IHBT

10th July, 2020

राज्यपाल बंडारू दत्तात्रेय ने कहा कि सीएसआईआर-हिमालय जैवसंपदा प्रौद्योगिकी संस्थान, पालमपुर का हिमालय क्षेत्र में मौजूद औषधीय पौधों व जड़ी-बूटियों पर शोध व विकसित तकनीकों व उत्पादों से हिमाचल प्रदेश को बहुत लाभ हुआ है। राज्यपाल सीएसआईआर-आईएचबीटी के 38वें स्थापना सप्ताह के अवसर पर राजभवन में वीडियो कांफ्रेंसिंग के माध्यम से बतौर मुख्य अतिथि पालमपुर स्थित संस्थान के वैज्ञानिकों को संबोधित कर रहे थे।

एससीआई मेगो इंटरनेशनल की रैंकिंग में सीएसआईआर के 38 संस्थानों में इस संस्थान को 9वां स्थान प्राप्त होने और हिमाचल प्रदेश के शोध संस्थानों में प्रथम स्थान पर होने पर प्रसन्नता व्यक्त करते हुए राज्यपाल ने कहा कि यह संस्थान अपनी तकनीकों से प्रदेश व देश में उद्यमिता को बढ़ावा दे रहा है।

Published in:

[Dainik Bhaskar](#)

CSIR-IHBT organizes 38th Foundation Week

CSIR-IHBT



Governor Bandaru Dattatraya said that Himachal Pradesh has benefited immensely through research, technology developed and products produced through available medicinal plants and herbs in the Himalayan area by CSIR-Institute of Himalayan Bioresource Technology (IHBT), Palampur. The institute has also made its valuable contribution in the battle against COVID-19. The Governor was addressing the scientists of CSIR-IHBT Palampur as Chief Guest through video conferencing from Raj Bhavan on the occasion of CSIR-IHBT's 38th Foundation Week today. While expressing happiness on 9th ranking of CSIR by SCI MEGO

9th July, 2020

International among 38 institutes and first rank among research institutes of Himachal Pradesh, Governor said that this institute was promoting entrepreneurship with its technologies through MSMEs in the state and country. He said that the institute has not only set up testing labs for COVID-19 and is doing more than 500 COVID tests daily, but also providing equipment, consumable items and training required to the staff of medical colleges in Tanda, Chamba and Hamirpur in the state. He also expressed happiness that the institute had prepared alcohol-based hand sanitizer and herbal soap technology and had also produced it extensively through local entrepreneurs. He also commended the efforts of the institution for preparing packaged food for migrant labourers and corona warriors and for working in coordination with the local administration for its distribution. He assured the institution of cooperation by the State Government in the research work on COVID-19. Shri Dattatraya said that the institution has played an important role in making Himachal Pradesh a leading state in the production of aromatic oils under 'Aroma Mission' in the field of aromatic plants. The annual production of aromatic oil from wild marigold is around 6.5 tonnes and has earned Rs. 5.19 crore, benefitting 861 families

He expressed happiness that the institute started growing asafoetida crop for the first time in the country, which will prove to be a game changer. He said that Liliium cultivation started in Lahaul would give farmers an income 3-5 times more than traditional cash crops. He said that the hydroponic and aeroponic technology by the institute would strengthen agriculture sector. He also expressed happiness over developing innovative ways of using bamboo wood. Besides this, he also congratulated the institute for developing vitamin D-enriched shiitake mushrooms, flow-hive for popularizing honey production and developing techniques to keep vegetables fresh and nutritional for longer duration. On this occasion, the Governor also released four publications of the institute. Earlier, Dr. Sanjay Kumar, Director, CSIR-IHBT welcomed the Governor and apprised him of the activities of the Institute. Former Director of CSIR-IIIM Jammu, Prof. S.S. Handa the keynote speaker expressed his views on the Phytopharmaceutical Drug Development - New Regulations. Dr. Anil Khush, President of Research Council of IHBT, Vice-Chancellor of Agricultural University Prof. Ashok Saryal and other scientists were also part of this video conferencing. Secretary to the Governor Rakesh Kanwar was also present on the occasion.

Published in:

[5 Dariya News](#)

MH12: Pune's own N95 face masks by Venture Centre

CSIR-NCL

7th July, 2020



After delivering over **one lakh face shields to police** and medical personnel in Pune and other cities since the [Covid-19](#) pandemic broke out, Pune's Venture Centre has now come up with its own variant of N-95 face masks. Called MH12, the concept, design, and manufacture was completed within two months and the team is now gearing up to donate these masks to government hospitals and police, on priority. The name N95 is given to the mask as it is able to filter up to 95 percent of the harmful particles, aerosols or droplets in the air. As per international standards, the Particle Filtration Efficiency (PFE) of such a mask is at least 95 per cent. However, in India, the PFE is fixed at 94

per cent. The MH12 masks have a PFE of 99 per cent, Venture Centre said. "There were two mask designs that were top contenders — one with a PFE of 96 – 97 per cent and another with 99 per cent. The latter was finalised for manufacturing purpose," said Pravin Chavan, member of the Pune Masks Action Group at the Centre, who led the group making MH12. He also said the present manufacturing capacity of 5,000 MH12 masks can be scaled up if there is more demand. Extensive research went into this making of this mask during the lockdown period. As many as 56 mask designs for their fitting, filtration capacity and checked for leakages before finalising a variant, Venture Centre, an incubation centre operating under the aegis of CSIR-National Chemical Laboratory said. The name reflects the Pune origins of the mask as well as the commitment and gratitude of the people of Pune to the commitment of the frontline COVID fighters, the team said. After successful testing masks with users at hospitals, Venture Centre began manufacturing on Tuesday. V Premnath the director at Venture Centre said the company's efforts are towards delivering the benefits of

science and technology to the common people. Lockdown posed serious challenges to the mask making team and among these included procurement of raw materials and Ultrasonic machines. “Unlike a cloth-based mask which can be stitched using a sewing machine or by hand, an N95 can be manufactured with the help of an ultrasonic machine. These machines are not commonly available in India. Those available are of Chinese makes, which added to our many challenges in developing MH12. We not only developed masks but also developed machines needed to manufacture these N95 masks,” added Chavan.

Along with Venture Centre, Tata Institute of Fundamental Research (TIFR), Baba Atomic Research Centre (BARC) and Gwalior-based Defence Research and Development Organisation (DRDO) supported with research for developing this mask. Ultra Autosonic India has partnered with the Centre to manufacture and market these masks. The Centre, under its Project Gratitude, plans to raise Rs 35 lakh which will be dedicated towards providing MH12 masks to government hospitals in the coming months.

Published in:
[Indian Express](#)

हिवताप लवकरच 'ऑल आउट'

डासांच्या दंशातील परजीवींना रोखणारे औषध तयार

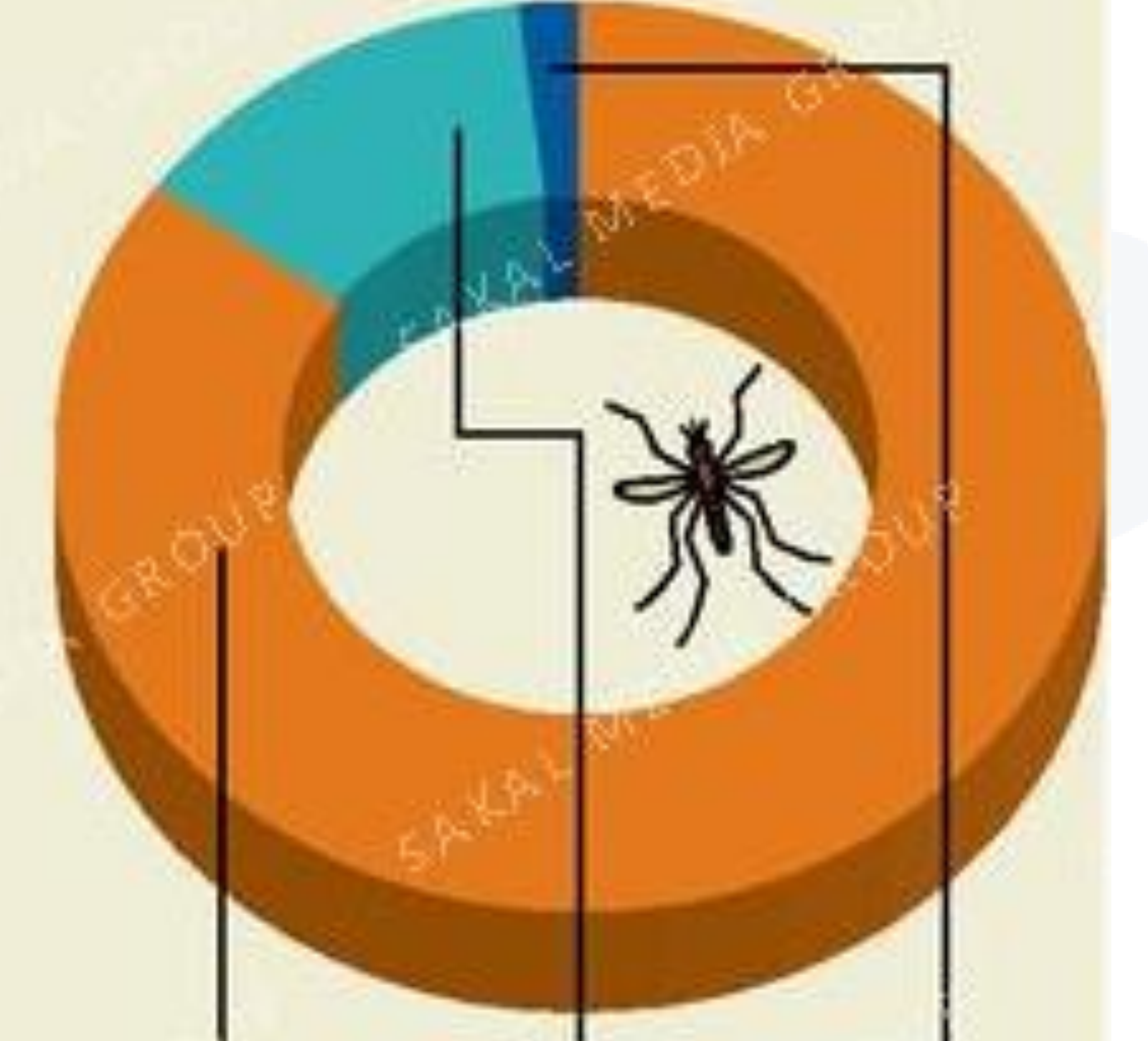
२०१८ मधील
हिवतापाचे रुग्ण

सम्राट कदम : सकाळ वृत्तसेवा

पुणे, ता. ३० : हिवताप अर्थात मलेरिया! डासांमुळे होणाऱ्या या रोगावर बाजारपेठेत अनेक औषधे उपलब्ध असली तरीदेखील तो दरवर्षी जगभरात लाखो लोकांचे जीव घेतो. औषधांनाही पुरून उरण्याची शक्ती डासातील डंखात आढळणाऱ्या परजीवींमध्ये विकसित होते. त्यामुळे गेली अनेक वर्षे ही बाब वैद्यकीय क्षेत्रात चिंतेचा विषय ठरली होती. आता यावरदेखील रामबाण औषध शोधण्यात संशोधकांना यश

असे झाले संशोधन

- सध्याच्या क्लोरोक्विन, प्रायमाक्विन, विवनाईन या औषधांविरुद्ध परजीवींनी प्रतिकारशक्ती विकसित केली आहे.
- आर्टिमिसीया (स्वीट वर्मवूड) या औषधी वनस्पतीपासून आर्टिमिनिसिनिया रेणूचे पृथक्करण
- पेप्टाडाइल व्हिनाईल फोस्फोनेटसोबत संकरित रेणू विकसित करण्यात आला
- अॅनाफिलस डासांच्या दंशातील परजीवी 'प्लाझ्मोडिअम'चे विलगीकरण आणि रेणूसोबत अभिक्रिया



आले. पुण्यातील राष्ट्रीय रासायनिक प्रयोगशाळा (एनसीएल) आणि दिल्लीतील आंतरराष्ट्रीय जनुक

अभियांत्रिकी व जैवतंत्रज्ञान केंद्राच्या (आयसीजीइबी) शास्त्रज्ञांनी यावर नवीन औषध तयार केले आहे.

'एनसीएल'च्या सेंद्रिय रसायनशास्त्र विभागाचे शास्त्रज्ञ पान ५ वर »

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