



CSIR IN MEDIA

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Coming Soon, seaweed extract boost to crop yields

CSIR-CSMCRI

AGRICULTURAL INNOVATION

Coming soon, seaweed extract boost to crop yields

It will be used as a fertiliser and bio-stimulant for various crops

Smitha R @dnaahmedabad

A technology patented and developed by CSIR-Central Salt and Marine Chemicals Research Institute (CSIR-CSMCRI), Bhavnagar hoping for a better use of bio-stimulants for agriculture. The institute, through a project has managed to make sap from seaweed (*Kappaphycus alvarezii*) which in turn is being used as a fertiliser and bio-stimulant for various crops, particularly pulses. The experiments have shown impressive rise in productivity after

the use of the bio-stimulant, not to mention the fact that the crops were also found to be more tolerant towards drought and could up-regulate plant defence-related genes in response to fungal infection.

CRK Reddy, chief scientist, division of marine biotechnology and ecology at CSIR-CSMCRI said the technology developed by the scientists of the institute has resulted in production of two products from the seaweed - sap that can be used as a low-cost organic fertiliser and the Kappa Carrageenan - a polysaccharide that is used as an emulsifying, gelling and thickening agent in several industries.

"Usually, seaweed is used for production of carrageenan but through the technology we also made sap out of it. What is more interesting is that

our technology uses fresh seaweed while everywhere else where carrageenan is extracted from seaweed, it has to be dried first," said Reddy.

Arup Ghosh, a senior scientist who worked on the project said the bio-stimulant derived from seaweed was used on nine types of crops including cereals, pulses and oil seeds. "There was an 11% to 36% growth in yield of crops. It was found to be particularly effective for pulses. The cost of this bio-stimulant is affordable for poor farmers," said Ghosh.

"Results were very good. But we found that when used in the 75:25 ratio, the bio-stimulant still gave good results. We also found that the crops tended to be drought tolerant and that yield improvement was with low carbon footprint," he added.



Contribution from Gujarat

The project had participation from 43 state agricultural universities across 20 states. In Gujarat, the Navsari Agricultural University and the Sardarkrushinagar Dantiwada Agricultural University participated in the project.

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CRK REDDY, chief scientist, CSIR-CSMCRI

DNA (Ahmedabad Edition), Page 3, Monday July 18, 2016

BMC to test new materials to fix potholes

CSIR-CRRI



The Brihanmumbai Municipal Corporation (BMC) intends to come up with new materials to fill potholes for better roads during the monsoon.

The steps are being considered after the high court told the BMC to stick to guidelines of the Central Road Research Institute (CRRI). The civic body has received complaints about 1,200 potholes in the city.

The BMC has identified five private companies, each of which will need to fill 50 square metres of potholes on various roads. They will be using their own technology on a trial basis. “The most effective technology will be considered,” said civic officials.

The civic body has been receiving complaints on shoddy pothole repairs and is looking to use the technology offered by each of these companies to tackle the issue because no standard operating procedure is followed at the local ward level. It is yet to finalise the roads on which the experiment is to be carried out. Officials said it will be done with the civic chief’s approval.

Sources said the five firms had given presentations in which a ready mix of powdered bitumen stored at normal temperature in 25kg bags could be directly poured on to the potholes. Using this mix, potholes can then be levelled quickly and roads thrown open to traffic in 20 minutes.

“While the contents of the mix are different for each company, the methodology is almost similar,” said a BMC official.

Another official said, “We are using the cold mix technology at present. It requires a long time to dry for effective results, but according to the companies, their materials will work on a wet surface too. The final decision has to be taken after checking the results.”

<p>DIFFERING LOSSES ₹352 CRORE Value of the contracts for 34 roads. The first phase of the civic body's inquiry into the road repairs scam involved these roads</p> <hr/> <p>₹27.17 CRORE Value of repairs already conducted, from which it incurred a loss of Rs14 crore because of sub-standard work, according to the BMC's inquiry report</p> <hr/> <p>₹11 CRORE Loss claimed by the civic body in its police complaint</p> <p>ROAD CONTRACTORS UNDER SCANNER Mahavir Infrastructure, RPS Infraprojects, J Kumar Infraprojects, Relkon Infraprojects, RK Madhani and KR Constructions.</p>	 <p>ANDHERI</p> <p>VEDYA SUBRAMANIAN/HT PHOTO</p>	 <p>JOGESHWARI</p> <p>VEDYA SUBRAMANIAN/HT PHOTO</p>
	 <p>BANDRA</p> <p>SATISH BATE/HT PHOTO</p>	 <p>SAKINAKA</p> <p>SATISH BATE/HT PHOTO</p>

Civic chief Ajoy Mehta on Monday conducted a meeting with the deputy municipal commissioners where he ordered them to take up pothole repairs on priority.

Potholes in figures

In Island city: 415

Western suburbs: 431

Eastern suburbs: 354

Top five wards with highest number of potholes

L ward (Kurla): 119

R central ward (Borivli): 96

M/west (Chembur): 81

A and R south wards: 75 each

Highest number of potholes pending in K west ward (Andheri): 14



New reforms for better roads

To promote fair competition among bidders BMC has changed the general contracts conditions (GCC) that govern various civil work tenders.

A study by a committee of civic officials suggested changes related to eligibility criteria, different rates of security deposits and defect liability period.

The civic body will come out with a detailed circular on the reforms next week.

The civic body will also frame deadlines to seek permissions for trenching to lay underground utilities, and plan a heavy penalty for those flouting the norms, said civic officials.

<http://www.hindustantimes.com/mumbai-news/bmc-to-test-new-materials-to-fix-potholes/story-vVHXtSarIL3K27QFpUI7NN.html>

Centre's attention drawn on tar balls on beaches

CSIR-NIO

Centre's attention drawn on tar balls on beaches

[Team Herald](#)

NEW DELHI: Shantaram Naik on Monday drew the Centre's attention to the menace of the tar balls spoiling the Goan beaches in the last three months.

Acknowledging the problem, Environment and Forests Minister Anil Madhav Dave told Naik in a written reply in the Rajya Sabha that the Goa State Pollution Control Board has formulated an oil spill contingency plan while the Tourism Department has a regular system to collect the tar balls from the beaches for disposal.

He said the NIO is collecting samples from these tar deposits to analyse and identify the sources. He said the tar balls deposited on the Goa sea beaches are "weathered product of oil spills." The minister said most of the South Goa beaches were hit by the tar balls in May while these balls were sighted along Utorda, Majorda and Khanawada beaches of South Goa in March and April.