

CORRESPONDENCE

microbial-rich environment in pig excreta. Thus, the medicinal maggots surviving in pig excreta could be an alternative cheap, cost-effective and eco-friendly source to synthetic antibiotics. Presently, scientists are concerned about antimicrobial resistance (AMR) which is a major threat to the present-day antibiotics. Identification of maggot hemolymphs-derived antimicrobial activity will pave the way for the generation of a cheap, cost-effective and eco-friendly source of antibiotics.

In the present study, isolated hemolymphs from different types of piggery –

waste maggots were subjected to antimicrobial sensitivity testing. Results revealed that tailed maggot hemolymph can develop a clear zone of inhibition against *Salmonella typhimurium* (14 mm length) and *Escherichia coli* (18 mm length), providing evidence for their antimicrobial activity. To the best of our knowledge, there are no earlier reports on the antibacterial activity of hemolymphs of medicinal maggots surviving in pig excreta. Hence an Indian patent has been filed (application no. 202011052348).

Thus the results of the present study suggest that medicinal maggots surviving

in pig excreta show antimicrobial activity and can be exploited for commercial use as an alternate to synthetic antibiotics.

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NEWS

Prof. C. N. R. Rao receives the Eni International Award for Research in Energy Frontiers

Eni, a global energy company, has announced the names of the winning researchers and scientists at the 13th edition of Eni Award. The award aims to promote better use of energy sources and encourage new generations of researchers in their work. It bears witness to the importance that Eni places on scientific research and innovation. This is considered to be the Nobel Prize in Energy Research.

The *Energy Frontiers* award, for research into renewable energy sources and energy storage, was awarded to Chintamani Nagesa Ramachandra Rao, from

the International Centre for Materials Science, Bangalore, for his work on metal oxides, carbon nanotubes and other materials, as well as on two-dimensional systems, including graphene, boron–nitrogen–carbon hybrid materials and molybdenum sulfide (molybdenite – MoS₂) for energy applications and green hydrogen production. The latter can, in fact, be achieved through various processes including the photodissociation of water, thermal dissociation and electrolysis activated by electricity produced from solar or wind energy. Professor Rao has worked in all three areas and deve-

loped some highly innovative materials. These materials are shown to be well suited for energy storage systems, of importance in renewable energy sector.

The Eni Awards 2020 (www.eni.com) will be presented on 14 October 2021 during an official ceremony to be held at the Quirinal Palace in Rome, and attended by the President of the Italian Republic, Sergio Mattarella. The Energy Frontiers award includes a cash prize and a specially minted gold medal.

Rao is Linus Pauling Research Professor and Honorary President at the Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bengaluru, India and is the Director of ICMS. Over the decades, he has immensely contributed to several areas of research, developing and investigating novel functional materials and nanomaterials such as fullerenes, graphene and 2-D inorganic solids, diverse forms of transition metal oxides with interesting magnetic and electronic properties, phenomena such as superconductivity and colossal magneto resistance in rare-earth cuprates and manganates, and so on. Rao has authored over 1770 research papers, which have attracted a huge number of citations, crossing 125 thousand till date, with a high H-index of 160. He has authored 53 books. He has received honoris causa doctorate degrees from 83 Universities.



C. N. R. Rao