Science for Society



## Science for Man Science in Thinking **BREAKTHROUGH SCIENCE SOCIETY**

All India Committee

8A Creek Lane, Kolkata 700014, WB, INDIA Tel: 8902388578, 9433369069, 9477514644

E-mail: breakthrough@ieee.org Web: www.breakthrough-india.org

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## A Voluntary Organization Committed to the Cause of Science, Culture and Scientific Outlook

## **Press Release**

20 April 2023

The country's scientific community is seriously dismayed to see that the theory of biological evolution, which was an integral part of the science syllabus at the 10th standard, has been dropped. It was first dropped as an interim measure for syllabus reduction during the Corona pandemic. But the NCERT document https://ncert.nic.in/pdf/BookletClass10.pdf states that it is dropped permanently as a step in 'content rationalization'!

The scientific community feels that students will remain seriously handicapped in their thought processes if deprived of exposure to this fundamental discovery of science. The fact that the biological world is constantly changing, that evolution is a law-governed process that does not require divine intervention, and that humans have evolved from some species of ape have been the cornerstones of rational thinking ever since Darwin proposed his theory of natural selection.

Expressing these concerns, the scientific community has issued an open letter signed by more than 1800 scientists, science teachers, educators, science popularisers and rational minded citizens condemning this directive by the NCERT. It demands that Darwin's theory of evolution should be taught with adequate importance in the 9th-10th standards.

For more information about the appeal, you may contact:

- Prof. Aniket Sule, Mumbai (9820273239)
- Prof. Soumitro Banerjee, Kolkata (9432598503)
- Dr. Amitabh Pandey, Delhi (8851019334)

To understand the importance of the teaching of evolution, you may contact following eminent life science researchers who have signed on the appeal:

- Prof. Ragavendra Gadagkar, Bengaluru ragh@iisc.ac.in
- Prof. L. S. Shashidhara, Bengaluru lsshashidhara@gmail.com
- Prof. Satyajeet Rath, Pune punurath@yahoo.com
- Prof. T. N. C. Vidya, Bengaluru tncvidya@gmail.com
- Prof. Vineeta Bal, Pune vineetabal@yahoo.com
- Prof. Anindita Bhadra, Kolkata abhadra7@gmail.com
- Prof. Amitabha Joshi, Bengaluru ajoshi@jncasr.ac.in
- Prof. Rahul Siddharthan, Chennai rsidd@imsc.res.in
- Prof. N. G. Prasad, Mohali ngprasa@gmail.com
- Prof. Sudha Rajmani, Pune srajamani@iiserpune.ac.in

## An Appeal Against Exclusion of Evolution from Curriculum

We, the undersigned, have learned that sweeping changes are being proposed in the CBSE curriculum in the secondary and senior secondary courses. These changes, first introduced as a temporary measure during the Corona pandemic, are being continued even when schooling has gone back to offline mode. In particular, we are concerned with the exclusion of the teaching of Darwinian evolution from the 10th standard curriculum, as seen in the information (see <a href="https://ncert.nic.in/pdf/BookletClass10.pdf">https://ncert.nic.in/pdf/BookletClass10.pdf</a>, page 21) available on the NCERT website.

In the current educational structure, only a small fraction of students choose the science stream in grade 11 or 12, and an even smaller fraction of those choose biology as one of the subjects of study. Thus, the exclusion of key concepts from the curriculum till grade 10 amounts to a vast majority of students missing a critical part of essential learning in this field.

Knowledge and understanding of evolutionary biology is important not just to any subfield of biology, but is also key to understanding the world around us. Evolutionary biology is an area of science with a huge impact on how we choose to deal with an array of problems we face as societies and nations from medicine and drug discovery, epidemiology, ecology and environment, to psychology, and it also addresses our understanding of humans and their place in the tapestry of life. Although many of us do not explicitly realise, the principles of natural selection help us understand how any pandemic progresses or why certain species go extinct, among many other critical issues..

An understanding of the process of evolution is also crucial in building a scientific temper and a rational worldview. The way Darwin's painstaking observations and his keen insights led him to the theory of natural selection educates students about the process of science and the importance of critical thinking. Depriving students, who do not go on to study biology after the 10th standard, of any exposure to this vitally important field is a travesty of education.

We, the undersigned scientists, science teachers, educators, science popularisers and concerned citizens disagree with such dangerous changes in school science education and demand to restore the theory of Darwinian evolution in secondary education.

Aniket Sule, Mumbai Ragavendra Gadagkar, Bengaluru Amitabha Joshi, Bengaluru L. S. Shashidhara, Bengaluru T. N. C. Vidya, Bengaluru Enakshi Bhattacharya, Chennai Rahul Siddharthan, Chennai D. Indumathi, Chennai Amitabha Pandey, Delhi Ram Ramswamy, Delhi T. V. Venkateswaran, Delhi Anindita Bhadra, Kolkata Soumitro Bannerjee, Kolkata S. Krishnaswamy, Madurai N. G. Prasad, Mohali Aurnab Ghose, Pune Satyajeet Rath, Pune Shraddha Kumbhojkar, Pune Sudha Rajamani, Pune Vineeta Bal, Pune and 1800 others