



drishti

5th Edition of Global Drosophila Conference at Pune

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Why in News

The **fifth edition** of the **Asia Pacific Drosophila Research Conference (APDRC5)** commenced at **Pune** on **January 6** for a period of five days.

- The conference is being organised in the country for the first time by the **Indian Institute of Science Education and Research (IISER)**.
- The last **four editions** of this conference took place in **Taipei, Seoul, Beijing** and **Osaka**.

Key Points

- It is a **biennial conference** and it aims to **promote the interaction of Drosophila researchers** in the Asia-Pacific region with their peers in the rest of the world.
It brings together scientists from all over the world who use the **fruit fly, Drosophila**, as a **model organism to address basic and applied questions**.
- The event will have **foreign and Indian delegates. Two Nobel laureates**, professors **Eric Wieschaus** and **Michael Rosbash**, known for their seminal contribution to the field of **developmental biology** and **chronobiology** respectively, will also attend the conference.
 - **Prof. Wieschaus**, an American evolutionary developmental biologist, shared the Nobel Prize in **Physiology in 1995** with Edward B. Lewis and Christiane Nüsslein-Volhard for his work on the **genetic control of embryonic development**.
 - **Prof. Rosbash** shared the Nobel Prize in **2017 in Physiology** along with Michael Young and Jeffrey Hall for their discoveries of **molecular mechanisms controlling the circadian rhythm**.

- **Drosophila**



- Drosophila is derived from the **Greek word drósos** which means **dew loving**.
- These belong to the **Droso-philidae family** and are most frequently known as **fruit flies** or vinegar, wine or pomace flies.
- Their **main distinguishing character** is that they stay on **ripe or rotten fruits**. There is another related family **Tephritidae**, also called **true fruit flies** or fruit flies but these feed **primarily on unripe or ripe fruits**.
- Drosophila is one of the most widely-used and preferred model organisms in **biological research** across the world for the last 100 years. A lot of discoveries in biology have been made using this.
- Its **genome is entirely sequenced** and there is an enormous amount of information available about its biochemistry, physiology and behaviour.

Indian Institute of Science Education and Research System

- It is a **network of institutions** devoted to science education and research.
- These were set up on the recommendations of the **Scientific Advisory Council to the Prime Minister** under the chairmanship of **Professor C.N.R. Rao**.
 - In 2013, **Professor C.N.R. Rao** became the 3rd scientist after C.V. Raman and A.P.J. Abdul Kalam to receive Bharat Ratna.
- There are seven such institutes established in **Bhopal, Kolkata, Mohali, Pune, Thiruvananthapuram, Tirupati and Berhampur**.
- The vision of these institutes encompasses the creation of research centres of the highest calibre where teaching and education in the basic sciences are integrated with state-of-the-art research.
- These institutions are devoted to under-graduate and post-graduate teaching in the basic sciences in an intellectually vibrant atmosphere of research.
- IISER is **very strong in Drosophila research in India**.

Source: TH