

125th birth anniversary of Edavalath Kakkat Janaki Ammal

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In news– 125th birth anniversary of Edavalath Kakkat Janaki Ammal, a pioneering botanist and the first Indian woman to be awarded a PhD in the botanical sciences was observed recently.

A brief note on EK Janaki Ammal-

- Janaki Ammal is known widely for her contributions to science – in the field of genetics, cytology, evolution, and more.
- Born in Thalassery in Kannur district of Kerala in 1897, Janaki Ammal moved to Madras (now Chennai) to obtain her Bachelors and Honors degrees at the Queen Mary's and Presidency College respectively.
- In 1925, at the University of Michigan in the USA where she did **research on plant cytology** (which focuses on the structure and function of cells), Janaki Ammal obtained a Master's degree.
- She also had **brief stints in teaching at the Women's Christian College (WCC) in Madras** as well as the Maharaja's College of Science in Thiruvananthapuram.
- Her work as a geneticist took her to the Sugarcane Breeding Institute at Coimbatore in Tamil Nadu from 1934 to 1939.
- According to scientist C V Subramanian's research piece 'Edavaleth Kakkat Janaki Ammal', she **worked on making several intergeneric and interspecific hybrids involving sugarcane and related grass species**.
- These works were highly significant, as she is believed to have been **responsible for creating sugarcane hybrids that yielded sweeter sugar**.
- She then left for **England and worked as Assistant Cytologist at the John Innes Horticultural Institution**

in London and as **Cytologist at the Royal Horticultural Society** at Wisley during 1945–51.

- Along with C.D. Darlington, **she authored 'The Chromosome Atlas of Cultivated Plants' in 1945** which contained her work on many species.
- To honour her work, the **Royal Horticultural Society named a variety of Magnolia blossoms after her – the Magnolia Kobus Janaki Ammal.**
- She returned to India in the 1950s. C V Subramanian's research piece also states that Janaki Ammal **was invited by the then Prime Minister Jawaharlal Nehru to reorganise the Botanical Survey of India** in 1951, which explores the plant resources of the country and identifies plant species with economic virtue.
- The range of roles she worked at included **servicing as the head of the Central Botanical Laboratory in Allahabad** and as an Officer of Special Duty at the Regional Research Laboratory in Jammu and Kashmir.
- **Her association with the Save the Silent Valley movement** – a campaign to stop a hydroelectric project from flooding the Silent Valley forest in Palakkad district of Kerala – was well-known.
- She **headed a chromosomal survey of the forest** to assess and preserve the botanical knowledge of the area.
- The movement was successful when the forest was declared a national park later and the project was abandoned.
- She also worked on the cytogenetics of a range of plants and co-authored the *Chromosome Atlas of Cultivated Plants* (1945) with C.D. Darlington. She took an interest in ethnobotany and plants of medicinal and economic value from the rain forests of Kerala, India.
- She was awarded Padma Shri by the then prime minister of India in 1977.