Abstract: The Kochi Prefecture Japanese Cedar and Cypress Pollen Information System (P-Net Kochi) was established in 1991 on the initiative of the Pharmaceuticals and Sanitation Division to improve the quality of life of people in Kochi Prefecture, particularly patients with pollinosis. Kochi Prefecture has the highest forests percentage (84%) in Japan. In addition, 40% of the population of the prefecture is concentrated in Kochi City. The average pollen count at 10 observation points an one year was about 20,000/cm² during the observation period, but it exceeded 110,000/cm² in 1995, when it was also high nationwide. Kochi Prefecture organized a system to promote people’s understanding of pollinosis in connection with environmental problems, and to enlighten people on appropriate preventive measures. The system has been improved in the rapid and efficient transmission of information over the years with technological advances. The introduction of an automatic monitoring system not dependent on human labor and the support of the users proved to be indispensable for the maintenance of the system. J. Med. Invest. 48 : 198-209, 2001

Keywords: Japanese cedar, pollen, pollinosis, information system, Kochi Prefecture, QOL.

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2. System composition after 1998

To ensure the reliability and accuracy of the information system, a comprehensive system composition after 1998 was established. This composition was designed to facilitate the acquisition, processing, and distribution of pollen information. The system composition included several key components: the data acquisition module, the data processing module, the information distribution module, and the user interface module. Each module played a crucial role in ensuring the smooth operation of the system.

The data acquisition module collected pollen data from various sources, including field observations, laboratory analyses, and public records. The data processing module then processed this raw data using advanced algorithms to extract meaningful information. The information distribution module disseminated the processed information to various stakeholders, including researchers, policymakers, and the general public. Finally, the user interface module provided a user-friendly interface for accessing and interacting with the information system.

The system composition after 1998 was designed to be scalable and flexible, allowing for continuous improvement and expansion as new technologies and data sources became available. This approach ensured that the pollen information system remained relevant and effective in meeting the needs of its users.

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- Screen of former application -

- Present Web screen -
Flow of Pollen Information

Unbroken line 1998-
Dotted line 1991-1997
Ncname: P-Net Kochi
P: Pollen

10 public health centers and 2 medical institutions reported by telephone everyday* 
Input data on a form of the homepage by 10:30 a.m.

Pharmaceuticals and 
Sanitation Division 
add comments

Japanese weather organization 
Kochi branch

Weekly data

Weekly data

NTT F-NET* 
F-NET subscriber*

Residents of Kochi 
Prefecture

Dotted line and * currently used
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start

login

Each health center registers the measured pollen counts by using a browser

end

start

login

Control sector registers weather data

Control sector registers the evaluation comment

Control sector generates the voice text for CTI

Control sector registers temporary registered data as the public data

end

Text of CTI
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**Diagram:**

- **Start**
  - Select period for display
  - Select district for display
  - The data of the specific date concerned is extracted from the public data
  - The scale in the graph is calculated by the maximum pollen counts and the display period selected
  - The line chart is displayed based on the pollen counts

- **End**

**Text:**

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Diagram and text content related to the development of pollen information systems, focusing on selecting periods and districts for display, extracting specific data, calculating scales, and displaying line charts based on pollen counts.
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