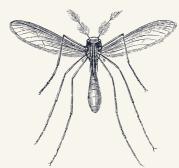


Medicines of the past in the present

There is continuity in the plants of historical medicine and modern uses. A study by Porras *et al.* (2021) found up to 95% of people in many areas of the world rely on plants as a primary source of medicine.

According to the Medicinal Plant Names Services (MPNS), 28,187 species are used in medicine, representing nearly 7.5% of all plant life on Earth. In some instances, we can see that certain plants were used across time and in various cultures. For example, in the fight against malaria plants of the species commonly known as wormwood (genus *Artemisia*) have been shown to be effective.

The chemist Tu Youyou won the Nobel Prize in Physiology or Medicine (2015) for her discovery of the antimalarial drug, Artemisinin, extracted from Sweet Wormwood, *Artemisia annua*, a herb used in traditional Chinese medicine. Tu's team searched 2000 recipes from traditional literature to identify a suitable plant and preparation method for their experiments. This work was developed into a powerful antimalarial drug. Wormwood is also



used in a remedy from a tenth-century English recipe book against fever. Malaria is a priority disease of the World Health Organization (WHO). As of 2016, they set a goal of reducing the global malaria burden by 90% over the next fifteen years. According to WHO, in 2020, Nigeria accounted for a high percentage of worldwide malarial deaths. A study (2021) by Alaribe *et al.*, researchers at the University of Lagos, investigated a decoction (an essence extracted by boiling) based on a traditional antimalarial drink (*Agbo Iba*) made of multiple plants and used in local medicine. Their

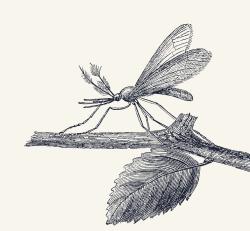
findings demonstrate that the combination of plants could be used in suppressing the malarial parasite in early stages of the condition. In combating malaria and many other conditions, traditional plant-based combinations continue to be an important part of fighting disease.







Photograph of Tu Youyou at the Nobel Prize Award Ceremony 2015, by Bengt Nyman, www.flickr.com/photos/ bnsd/, licenced under CC-BY 2.0.



Above and left: Illustrations of a mosquito (often referred to as a gnat) from *The insect world* by Louis Figuier (1869). Special Collection QL467.F4

Photograph of the Teaching and Medicinal Garden on the University of Nottingham's Sutton Bonington campus, to support students from the School of Biosciences. Vegetables are grown in the teaching kitchen garden and the medicinal garden showcases plants that have been used to treat various ailments such as colds and flu, and to improve sleep. Courtesy of sbgardens.co.uk

