

Medicine in the Forests



Western medicine owes a great debt to tropical rainforests. Many drugs in common usage have been derived from rainforest plants, or identified through indigenous peoples use of 'natural' medicines. These include plants such as Chinchona, which was used as a basis for treating malaria.

An estimated one in four of all purchases from pharmacies in countries such as Britain contain an active ingredient derived from a tropical forest species.

Products include anesthetics, contraceptives, enzymes, hormones, laxatives, cough mixtures, antibiotics and antiseptics. These have all been derived from rainforest species. Derivatives from rainforest plants are used to treat cancer, malaria, heart disease, bronchitis, hypertension, dysentery, and tuberculosis.

For example, Vincristine, a drug taken from the rosy periwinkle of Madagascar, has allowed an 80% remission rate for some forms of childhood leukemia. Curare, a poison used by Amazonian Indians on arrow tips, can be used as a muscle relaxant, helping people who suffer from multiple sclerosis and Parkinson's disease.

The destruction of rainforests and ensuing loss of wildlife potentially threatens new medical discoveries. The destruction of tribal societies may also mean that traditional knowledge of useful plants is also lost. Even though hundreds of rainforest plants are used in modern medicines and as food products, less than one per cent of all rainforest plants have been examined for their potential use to humans. Only a few hundred of around three million species of rainforest animal have been investigated.

Starting with twigs from a Malaysian gum tree, researchers in 1991 isolated a compound that blocked the spread of the AIDS virus in human cells. The team sent biologists racing back to Malaysia for more samples from the tree. But when they got to the swamp, the tree was gone, it had been cut down. And no tree found since has produced the same compound. No identical trees have been found in the immediate area and samples from the same species found elsewhere did not yield the same compound.

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