

extract of millefleurs, etc., all attributed to their power of producing ozone. Other plants, however, which do not produce essential oils, appear to have a similar power of preventing malarial diseases, or of rendering malarious districts healthy. In some parts of the well-known Campagna, near Rome, immense areas of thistles rendered the localities where they grew quite healthy, but upon their being destroyed, these districts became again unhealthy. In this country, in Holland, in the Mauritius, and other places, the planting and cultivation of the common sunflower has had remarkably beneficial effects in destroying malarial poison.

All odoriferous plants do not produce such effects in destroying the malarial germs in the atmosphere. There are some, such as the *Daphne mezereum*, the oleanther, the wall flower, the pride of China (*Melia azedarach*), and others, which are actually deleterious when planted in great numbers. Besides the plants supposed to produce or evolve ozone, and hence called ozoniferous plants, there are others which have powerful disinfectant qualities, but whether they are ozoniferous has not yet been determined. The plants we have already noticed as such give off their emanations into the atmosphere, and the malarial germs are destroyed by the oxidizing power of the ozone burning them up. The plants of which we are about to speak have the power of disinfecting water, or destroying the organisms or gases which are deleterious to health. Whether malarial diseases are produced by infinitesimally minute organisms or by gases, is a matter of dispute, but they are most probably produced

by germs which our microscopes have not yet been able to detect. This is becoming more and more the accepted theory. It is very probable that these water-purifying plants give off ozone by means of their leaves and roots, and thus destroy the germs in the water in which they grow. Very few, if any of them, produce essential oils or resins, but, as in the case of thistles and the sunflower, these do not appear to be indispensable in the formation of ozone. Among such plants are nearly all of our various pond weeds, such as float on the surface as well as those that are immersed, and some that are submerged. Many of our bog plants and some of those that grow on the borders of the stream also appear to have the same power. In India, the West Indies, and in Africa, there is a species of duckweed. *Pistia stratiotes*, which possesses this purifying power in a remarkable degree. It will, in a few days, sufficiently purify stagnant water to admit of fish living in it, but at the same time makes it unsuitable for drinking purposes, rendering it so acid as to produce intestinal fluxes.

Now that malarial diseases are so common and produce such a large amount of suffering and death, the mode or means of preventing the development of the germs which produce them should be carefully studied and investigated. If the planting of certain odoriferous plants about our houses, or the stocking of ponds, streams, and marshes with plants producing similar beneficial effects, will destroy them, it certainly ought to be tested in an intelligent way by careful experiment. That some plants will do it is certain; they