



Alfred Ursprung



Basel, Switzerland, 22 Dec. 1876 - Fribourg, Germany, 21 Apr. 1952

Title Professor of Botany, University of Fribourg, Germany

Nomination 25 June 1941

He studied mathematics and physics in Basel and Strasbourg (beginning in 1895), and obtained his doctorate in Basel with Wilhelm Schimper with a thesis on the formation of annual rings in the wood of tropical plants (1900). In 1902 he became the assistant of Max Westermaier, a botanist in Freiburg, and performed research with Simon Schwendener in Berlin, where he studied the opening mechanism of the sporangia of ferns. This work qualified him as a professor in Freiburg (1903). After Westermaier's death he became extraordinary professor (in 1903) and then ordinary professor (1907-52) in Freiburg (three times dean). His combination of physics and botany led him to study experimental plant physiology. He became famous internationally thanks to his work on the water balance of plant cells and his physiological studies on the transport of water through the lymph vessels of plants. In 1916 he formulated the equation for the calculation of water potential. He refused assignments in Basel (1912) and Prague (1921). A new institute with a botanical garden was built according to his project in 1936-37. Member of the German Academy of Natural Sciences Leopoldina and of the Pontifical Academy of Sciences, in 1947 he was awarded a PhD *hc* by Laval University in Quebec.