

Percy Julian

1899 – 1975



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What did he discover?

Percy was an American research chemist born in 1899, Alabama. When he was growing up the education system was segregated and therefore, as an African American, he had less educational opportunities. He was enrolled into a school for African Americans, but science classes were not offered. Percy was determined to learn about science, so he taught himself by reading books. He faced many difficulties when trying to study chemistry at university. Percy was met with racial discrimination at every stage of his higher education, but with hard work and determination, he eventually became the third African American to ever achieve a PhD.

Percy Julian was the first chemist to synthesize physostigmine, which originally came from the rare Calabar bean from West Africa. This compound was known to treat glaucoma, a common eye condition which can cause loss of sight; Percy figured out that it would be more accessible if he was able to synthesize it. Later, he carried out research on soybeans and found many uses for the compounds produced from them, including a fire-retardant that was later used on US Warships in World War II. Many years later he started up his own chemical company and researched the natural products from the Mexican yam plant. He was able to produce many different successful medicines from this very accessible and cheap starting material. Percy was a real pioneer in the chemical synthesis of medicinal drugs from plants.

Something to think about...

Why is synthesis of chemical compounds important in the pharmaceutical industry?